

MYP Humanities / Geography – Grade 6

MYP Level 1

I. Course Description:

The goal of MYP Humanities is to foster the development of open-minded global citizens with a broad understanding of the geographical and historical perspectives of the human experience. The Humanities programme seeks to develop the 21st century skills of inquiry, communication, analysis and reflection to facilitate further study.

II. Colorado Model Content Standards and MYP Aims and Objectives

STATE / DISTRICT CONTENT STANDARDS:	MYP AIMS & OBJECTIVES:
<p>History 1. Analyze and interpret historical sources to ask and research historical questions 2. The historical eras, individuals, groups, ideas and themes in regions of the Western Hemisphere and their relationships with one another</p> <p>Geography 1. Use geographic tools to solve problems 2. Human and physical systems vary and interact</p> <p>Economics 1. Identify and analyze different economic systems 2. Saving and investing are key contributors to financial well being</p> <p>Civics 1. Analyze the interconnected nature of the United States to other nations 2. Compare multiple systems of governments</p>	<p>The aims of the teaching and study of humanities are to encourage and enable the student to develop:</p> <ul style="list-style-type: none"> • An inquiring mind • The skills necessary for the effective study of humanities • A sense of time and place • A respect for and understanding of others' perspectives, values, and attitudes • Awareness and understanding of people, cultures and events in a variety of places at different times • An understanding of the interactions and interdependence of individuals, societies, and their environments • An understanding of the causes and consequences of change through physical and human actions and processes • An understanding of contemporary humanities issues • A sense of internationalism and a desire to be proactive as a responsible global citizen • An awareness of the connections with other subjects • A lifelong interest in and enjoyment of humanities <p>Objectives: A Knowledge: Knowledge is fundamental to studying humanities, and forms the base from which to explore concepts and develop skills. B Concepts: Concepts are powerful ideas that have relevance within and across the disciplines. Students should be able to develop an understanding of the following key humanities concepts over the course at increasing levels of sophistication:</p> <ul style="list-style-type: none"> • Time • Place and space • Change • Systems • Global Awareness <p>C Skills: The development of skills in humanities is critical in enabling the student to undertake research and demonstrate their understanding of knowledge and concepts. Students should be able to demonstrate the following skills during the humanities course to an increasing level of sophistication:</p> <ul style="list-style-type: none"> • Technical skills • Analytical skills • Decision-making skills • Investigative skills <p>D Organization and Presentation: Students should be comfortable using a variety of formats to organize and present their work, and using a variety of media and technologies. They should understand that their presentation is creating a new perspective on humanities.</p>

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will explore both geographic and human history. Throughout the course, students will experience different Areas of Interaction that provide a lens for them to view content knowledge and encourage reflection in that unit.

The area of interaction **Approaches to Learning** is interwoven through all the units and provides opportunities for students' development of skills and attitudes towards learning. ATL skills enable students to become competent in identifying their own personal learning styles and strengths, as well monitoring their own development and fostering a lifelong enjoyment of learning.

Unit	Concept/Enduring Understandings	Area of Interaction	Essential/ Content Question
Tools of Geography	<ul style="list-style-type: none"> Perspective: information and knowledge can change an individual's perspective. Technology: people use technology to better understand their world 	Environment- Students will research a current global environmental issue. They will create a map showcasing the physical areas and human populations affected by the problem and create either A) an education campaign that educates others about the issue and suggests ways they can have a positive impact on it – Or - B) a solution for the environmental issue. Present a physical or conceptual model of the solution.	Essential Question: How do we study our world? Content Specific Question: What tools of geography help us better understand our world?
Canada	<ul style="list-style-type: none"> Adaptation: Where we live impacts how we live. Humans adapt to environments in many ways Diversity: Diversity impacts our choices 	Human Ingenuity- Students will research an example of human ingenuity and demonstrate of how people have used ingenuity to successfully adapt to their physical environment. Their findings will be presented in a multi-media format.	Guiding Question: How does our environment influence our choices? Content Specific Question: How have Canadians past and present adapted to their environment?
Mexico, Central America and the Caribbean	<ul style="list-style-type: none"> Connections: Understanding the past can help us understand the present Evolution: Communities change over time 	Community and Service- Students will examine the hallmarks of a successful community and identify factors that lead to the decline of communities. In the context of the Aztec civilization, they will prepare and deliver a report to Emperor Montezuma, identifying both the internal and external threats to the community and suggestions for service that will allow the community to prosper and adapt to changing conditions.	Guiding Question: How do communities change over time? Content Specific Question: How was the native civilization impacted by the arrival of the conquistadors?
South America	<ul style="list-style-type: none"> Conflict/Cooperation: Diversity can lead to conflict or cooperation Adaptation: Assimilation can create a new system 	Health and Social- Students will research a current social issue in South America. They will create a report addressing the issue, its historical connections and current global implications, and recommend a solution.	Guiding Questions: How does conflict shape the way humans interact? Content Specific Question: How is the culture of South America today a reflection of its human history?

IV. Texts and Resources

Students will utilize a variety of resources, including; primary source documents, the textbook- People, Places and Change, novel studies, current periodicals, and trade books.

V. Methodology

The course utilizes several methodologies including, but not limited to: project-based learning, collaborative teams, teacher-led inquiry, web and internet based learning modules direct instruction and independent study. Students may have opportunities to utilize one or all of the following to extend their learning by the walls of Lincoln: skype, epals, blogs, wikis, and blackboard.

VII. Methods of Assessment

IBMYP Humanities Assessment Criteria & Possible Assessment Tasks	<p>Criterion A: Knowledge is fundamental to studying humanities, and forms the base from which to explore concepts and develop skills. Knowledge and understanding can be assessed through a wide variety of tasks that involve factual recall or description, and explanation. Tasks may include tests, examinations, written assignments, oral interviews and presentations, extended writing, projects and exhibits.</p> <p>Criterion B: Concepts are powerful ideas that have relevance within and across the MYP, and students must explore and re-explore these in order to develop understanding. Students develop their understanding of a concept to increasing levels of sophistication by applying acquired knowledge and skills. Assessment tasks should allow students to demonstrate and apply the full extent of their understanding of the concepts specified within, or across, disciplines. It is not intended that any one piece of work will assess all of the humanities concepts (time, place and space, change, systems, and global awareness). Suggested tasks for assessment include extended writing, oral presentations, research projects, case studies, essays and tests, and must give students the opportunity to demonstrate the requirements of the highest level descriptor.</p> <p>Criterion C: The development of skills in humanities is critical in enabling the student to undertake research and demonstrate an understanding of knowledge and concepts. Developments in the student's technical, analytical, decision-making and investigative skills will be invaluable in transferring these skills to other subject groups in the MYP, and for lifelong learning. Assessment tasks may give the student the opportunity to demonstrate one or more of the skills described in the objectives. Tasks for assessment may include fieldwork, data analysis, map analysis, evaluation of sources and/or evidence, a research paper or similar piece of extended writing, case studies, and oral presentations/interviews.</p> <p>Criterion D: Students need to develop the ability to organize and present information and ideas in order to be able to demonstrate their grasp of humanities knowledge, concepts and skills. Criterion D is more suited to assessing extended pieces of work, for example, fieldwork, research projects or essays. Teachers should use only the relevant elements of the descriptors when assessing organization and presentation.</p>
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VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Humanities. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress:

MYP Humanities / Geography– Grade 7

MYP Level 2

I. Course Description:

The goal of MYP Humanities is to foster the development of open-minded global citizens with a broad understanding of the geographical and historical perspectives of the human experience. The Humanities programme seeks to develop the 21st century skills of inquiry, communication, analysis and reflection to facilitate further study.

II. Colorado Model Content Standards and MYP Aims and Objectives

STATE / DISTRICT CONTENT STANDARDS:	MYP AIMS: MYP OBJECTIVES:
<p>State Standards: 7th Grade</p> <p>History:</p> <ol style="list-style-type: none"> 1. Demonstrate a working knowledge of the significant historical eras, individuals, groups, ideas, and themes in the past within regions of the eastern hemisphere and their relationships with one another 2. Seek and evaluate multiple historical sources with different points of view to investigate a historical question and to formulate and defend a thesis with evidence <p>Geography:</p> <ol style="list-style-type: none"> 1. Use geographic tools to gather data and make geographic inferences and predictions 2. Identify the influence of different perspectives on the definitions of regions and regional issues <p>Economics:</p> <ol style="list-style-type: none"> 1. Explore how the distribution of resources influences economic production and individual choices <p>Civics:</p> <ol style="list-style-type: none"> 1. Analyze how various nations interact and evaluate the consequences of global interactions 2. Analyze different forms of government and international organizations and their influence in the world community 	<p>The aims of the teaching and study of humanities are to encourage and enable the student to develop:</p> <ul style="list-style-type: none"> • An inquiring mind • The skills necessary for the effective study of humanities • A sense of time and place • A respect for and understanding of others' perspectives, values, and attitudes • Awareness and understanding of people, cultures and events in a variety of places at different times • An understanding of the interactions and interdependence of individuals, societies, and their environments • An understanding of the causes and consequences of change through physical and human actions and processes • An understanding of contemporary humanities issues • A sense of internationalism and a desire to be proactive as a responsible global citizen • An awareness of the connections with other subjects • A lifelong interest in and enjoyment of humanities <p>A Knowledge: Knowledge is fundamental to studying humanities, and forms the base from which to explore concepts and develop skills.</p> <p>B Concepts: Concepts are powerful ideas that have relevance within and across the disciplines. Students should be able to develop an understanding of the following key humanities concepts over the course at increasing levels of sophistication:</p> <ul style="list-style-type: none"> • Time • Place and space • Change • Systems • Global Awareness <p>C Skills: The development of skills in humanities is critical in enabling the student to undertake research and demonstrate their understanding of knowledge and concepts. Students should be able to demonstrate the following skills during the humanities course to an increasing level of sophistication:</p> <ul style="list-style-type: none"> • Technical skills • Analytical skills • Decision-making skills • Investigative skills <p>D Organization and Presentation Students should be comfortable using a variety of formats to organize and present their work, and using a variety of media and technologies. They should understand that their presentation is creating a new perspective on humanities.</p>

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will explore both geographic and human history. Throughout the course, students will experience different Areas of Interaction that provide a lens for them to view content knowledge and encourage reflection in that unit.

The area of interaction **Approaches to Learning** is interwoven through all the units and provides opportunities for students' development of skills and attitudes towards learning. ATL skills enable students to become competent in identifying their own personal learning styles and strengths, as well monitoring their own development and fostering a lifelong enjoyment of learning.

Unit Title	Enduring Understandings	Area of Interaction	Essential Questions
Introduction to Geography & Europe/Russia	Systems: the purpose and potential benefit of creating and belonging to a united system. Interdependence: the various components of a system and how systems can initiate change.	Approaches to Learning Human Ingenuity	How does human ingenuity solve problems?
The Middle East	Adaptation: the various ways people modify behaviors, lifestyles, needs, etc. meet the demands of changing environments.	Approaches to Learning Environment	Why do we live where we live?
Africa	Responsibility: the various dynamics and spheres of responsibility. Empathy: gained awareness of global human welfare and potential action.	Approaches to Learning Health & Social Education	How much control do humans really have?
Asia	Balance: the cause and effect relationship between development and one's surroundings.	Approaches to Learning Community & Service	How do human actions impact the environment?
Oceania & Antarctica	Balance: the cause and effect relationship between development and one's surroundings.	Approaches to Learning Environment	How do human actions impact the environment?

IV. Texts and Resources

Textbook: People, Places, and Change by Holt, Rinehart, Winston

V. Methodology

The course utilizes several methodologies including, but not limited to: project-based learning, collaborative teams, teacher-led inquiry, web and internet based learning modules direct instruction and independent study. Students may have opportunities to utilize one or all of the following to extend their learning by the walls of Lincoln: skype, epals, blogs, wikis, blackboard.

VI. Methods of Assessment

IBMYP Humanities Assessment Criteria & Possible Assessment Tasks	Criterion A: Knowledge is fundamental to studying humanities, and forms the base from which to explore concepts and develop skills. Knowledge and understanding can be assessed through a wide variety of tasks that involve factual recall or description, and explanation. Tasks may include tests, examinations, written assignments, oral interviews and presentations, extended writing, projects and exhibits. Criterion B: Concepts are powerful ideas that have relevance within and across the MYP, and students must explore and re-explore these in order to develop understanding. Students develop their understanding of a concept to increasing levels of sophistication by applying acquired knowledge and skills. Assessment tasks should allow students to demonstrate and apply the full extent of their understanding of the concepts specified within, or across, disciplines. It is not intended that any one piece of work will assess all of the humanities concepts (time, place and space, change, systems, and global awareness). Suggested tasks for assessment include extended writing, oral presentations, research
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	<p>projects, case studies, essays and tests, and must give students the opportunity to demonstrate the requirements of the highest level descriptor.</p> <p>Criterion C: The development of skills in humanities is critical in enabling the student to undertake research and demonstrate an understanding of knowledge and concepts. Developments in the student's technical, analytical, decision-making and investigative skills will be invaluable in transferring these skills to other subject groups in the MYP, and for lifelong learning. Assessment tasks may give the student the opportunity to demonstrate one or more of the skills described in the objectives. Tasks for assessment may include fieldwork, data analysis, map analysis, evaluation of sources and/or evidence, a research paper or similar piece of extended writing, case studies, and oral presentations/interviews.</p> <p>Criterion D: Students need to develop the ability to organize and present information and ideas in order to be able to demonstrate their grasp of humanities knowledge, concepts and skills. Criterion D is more suited to assessing extended pieces of work, for example, fieldwork, research projects or essays. Teachers should use only the relevant elements of the descriptors when assessing organization and presentation.</p>
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VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Humanities. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress:

MYP Humanities / US History – Grade 8

MYP Level 3

I. Course Description:

The goal of MYP Humanities is to foster the development of open-minded global citizens with a broad understanding of the geographical and historical perspectives of the human experience. The Humanities programme seeks to develop the 21st century skills of inquiry, communication, analysis and reflection to facilitate further study.

II. Colorado Model Content Standards and MYP Aims and Objectives

STATE / DISTRICT CONTENT STANDARDS:	MYP AIMS & OBJECTIVES:
<p>History 1. Formulate appropriate hypotheses about United States history based on a variety of historical sources and perspectives 2. historical eras, individuals, groups, ideas and themes from the origins of the American Revolution through Reconstruction and their relationships with one another</p> <p>Geography 1. Use geographic tools to analyze patterns in human and physical systems 2. Conflict and cooperation occur over space and resources</p> <p>Economics 1. Economic freedom (to include free trade) is important for economic growth 2. Manage personal credit and debt(PFL)</p> <p>Civics 1. Analyze elements of continuity and change in the United States government and the role of citizens over time 2. Law is the center of a constitutional system</p>	<p>The aims of the teaching and study of humanities are to encourage and enable the student to develop:</p> <ul style="list-style-type: none"> • An inquiring mind • The skills necessary for the effective study of humanities • A sense of time and place • A respect for and understanding of others' perspectives, values, and attitudes • Awareness and understanding of people, cultures and events in a variety of places at different times • An understanding of the interactions and interdependence of individuals, societies, and their environments • An understanding of the causes and consequences of change through physical and human actions and processes • An understanding of contemporary humanities issues • A sense of internationalism and a desire to be proactive as a responsible global citizen • An awareness of the connections with other subjects • A lifelong interest in and enjoyment of humanities <p>MYP Humanities Objectives:</p> <p>A Knowledge: Knowledge is fundamental to studying humanities, and forms the base from which to explore concepts and develop skills.</p> <p>B Concepts: Concepts are powerful ideas that have relevance within and across the disciplines. Students should be able to develop an understanding of the following key humanities concepts over the course at increasing levels of sophistication:</p> <ul style="list-style-type: none"> • Time • Place and space • Change • Systems • Global Awareness <p>C Skills: The development of skills in humanities is critical in enabling the student to undertake research and demonstrate their understanding of knowledge and concepts. Students should be able to demonstrate the following skills during the humanities course to an increasing level of sophistication:</p> <ul style="list-style-type: none"> • Technical skills • Analytical skills • Decision-making skills • Investigative skills <p>D Organization and Presentation Students should be comfortable using a variety of formats to organize and present their work, and using a variety of media and technologies. They should understand that their presentation is creating a new perspective on humanities.</p>

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will explore both geographic and human history. Throughout the course, students will experience different Areas of Interaction that provide a lens for them to view content knowledge and encourage reflection in that unit.

The area of interaction **Approaches to Learning** is interwoven through all the units and provides opportunities for students' development of skills and attitudes towards learning. ATL skills enable students to become competent in identifying their own personal learning styles and strengths, as well monitoring their own development and fostering a lifelong enjoyment of learning.

Unit Title	Enduring Understandings	Area of Interaction	Essential Questions
Introduction to History and North American Pre-History	Analyzing the past to understand the present. It is human nature to explore. Societies are shaped by their geography.	Human Ingenuity - Students will act as historians to create their own perception of history and to analyze themselves as objective historians.	How does literacy define and shape history and culture?
From Colonies to Independence	Students understand the concept of conflicts and how they are resolved	Health and Social Education - Students will analyze how changes in colonial attitudes and values led to a desire for independence.	What defines a hero?
Creating a Nation	Establishing the rules of a society. Creation of a living and enduring set of rules. Human/societal desire to expand and control the environment.	Community and Service - Students will create a government that is sensitive to the needs of their classroom society.	How is order created and maintained?
National Crisis and Reconciliation	Analyzing the decisions made on both sides of the conflict. Compare and contrast the basic events, issues, ideas, and arguments in their context.	Environments - Students will examine the United States as an emerging leader in the global environment of the 20 th century and beyond	What happens when an inequality is perceived?

IV. Texts and Resources

Textbook: *The American Journey* (Glencoe), Student Families, Multiple Internet Resources, Primary Sources, U.S. Constitution, SMARTBoard Notebook Software, School Media Center, Public Library, Video Clips

V. Methodology

The course utilizes several methodologies including, but not limited to: project-based learning, collaborative teams, teacher-led inquiry, web and internet based learning modules direct instruction and independent study. Students may have opportunities to utilize one or all of the following to extend their learning by the walls of Lincoln: skype, epals, blogs, wikis, blackboard.

VII. Methods of Assessment

IBMYP Humanities Assessment Criteria & Possible Assessment Tasks	<p>Criterion A: Knowledge is fundamental to studying humanities, and forms the base from which to explore concepts and develop skills. Knowledge and understanding can be assessed through a wide variety of tasks that involve factual recall or description, and explanation. Tasks may include tests, examinations, written assignments, oral interviews and presentations, extended writing, projects and exhibits.</p> <p>Criterion B: Concepts are powerful ideas that have relevance within and across the MYP, and students must explore and re-explore these in order to develop understanding. Students develop their understanding of a concept to increasing levels of sophistication by applying acquired knowledge and skills. Assessment tasks should allow students to demonstrate and apply the full extent of their understanding of the concepts specified within, or across, disciplines. It is not intended that any one piece of work will assess all of the humanities concepts (time, place and space, change, systems, and global awareness). Suggested tasks for assessment include extended writing, oral presentations, research projects, case studies, essays and tests, and must give students the opportunity to demonstrate the requirements of the highest level descriptor.</p> <p>Criterion C: The development of skills in humanities is critical in enabling the student to undertake</p>
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	<p>research and demonstrate an understanding of knowledge and concepts. Developments in the student's technical, analytical, decision-making and investigative skills will be invaluable in transferring these skills to other subject groups in the MYP, and for lifelong learning.</p> <p>Assessment tasks may give the student the opportunity to demonstrate one or more of the skills described in the objectives. Tasks for assessment may include fieldwork, data analysis, map analysis, evaluation of sources and/or evidence, a research paper or similar piece of extended writing, case studies, and oral presentations/interviews.</p> <p>Criterion D: Students need to develop the ability to organize and present information and ideas in order to be able to demonstrate their grasp of humanities knowledge, concepts and skills.</p> <p>Criterion D is more suited to assessing extended pieces of work, for example, fieldwork, research projects or essays. Teachers should use only the relevant elements of the descriptors when assessing organization and presentation.</p>
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VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Humanities. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress:

MYP Language Arts – Grade 6

MYP Level 1

I. Course Description:

The fundamental piece to learning, thinking, communicating and reflecting is language. Language A seeks to further develop six key skill areas: listening, speaking, reading, writing, research and reasoning, which cultivate independent and interdependent skills. Unit activities are structured not only to develop skills and knowledge, but also to address learning in a variety of modalities from oral interpretations, to written analyses, to group discussions, and visual prompts, as well as technology and 21st Century skills. The study of language and quality literature enables students to become highly proficient in their understanding and use of their language(s) and further enhances the attributes of the IB learner profile. Students need to foster an appreciation of the power and beauty of language and literature, as well as imagination and creativity through self-expression. MYP language A is academically rigorous, and challenges students to explore interdisciplinary essential questions, learning goals and academic vocabulary. (SpringBoard & IBMYP Language A Course Guide)

II. Colorado Model Content Standards and MYP Aims and Objectives

STATE / DISTRICT CONTENT STANDARDS:	MYP AIMS & OBJECTIVES:
<p>Oral Expression and Listening 1. Successful group discussions require planning and participation by all</p> <p>Reading for All Purposes 1. Understanding the meaning within different types of literature depends on properly analyzing literary components 2. Understanding and analyzing factual and information to depends on organizing structure 3. Word meanings are determined by how they are designed and how they are used in context.</p> <p>Writing and Composition 1. Ideas, organization, and voice develop while writing literary genres for intended audiences and purposes 2. Ideas, organization, and voice develop while writing informational and persuasive genres for intended audiences and purposes 3. Specific editing for grammar, usage, mechanics, and clarity gives writing its precision and legitimacy</p> <p>Research and Reasoning 1. Individual and group research projects require obtaining information on a topic from a variety of sources and organizing it for presentation 2. Assumptions can be concealed, and require identification and evaluation 3. Monitoring the thinking of self and others is a disciplined way to maintain awareness</p>	<p>Aims</p> <ul style="list-style-type: none"> • use language as a vehicle for thought, creativity, reflection, learning, self-expression and social interaction • develop the skills involved in listening, speaking, reading, writing, viewing and presenting in a variety of contexts • develop critical, creative and personal approaches to studying and analysing literary and non-literary works • engage in literature from a variety of cultures and representing different historical periods • explore and analyze aspects of personal, host and other cultures through literary and non-literary works • engage with information and communication technology in order to explore language • develop a lifelong interest in reading widely • apply language A skills and knowledge in a variety of real-life contexts. <p>Objectives</p> <p>A Content (receptive and productive) Students should be able to:</p> <ul style="list-style-type: none"> • understand and analyze the language, content, structure, meaning and significance of both familiar and previously unseen oral, written and visual texts • understand and apply language A terminology in context • analyze the effects of the author's choices on an audience • compose pieces that apply appropriate literary and/or non-literary features to serve the context and intention • compare and contrast works, and connect themes across and within genres • express an informed and independent response to literary and non-literary texts. <p>B Organization Students should be able to:</p> <ul style="list-style-type: none"> • create work that employs organizational structures and language-specific conventions throughout a variety of text types • organize ideas and arguments in a sustained, coherent and logical manner • employ appropriate critical apparatus. <p>C Style and language mechanics Students should be able to:</p> <ul style="list-style-type: none"> • use language to narrate, describe, analyse, explain, argue, persuade, inform, entertain and express feelings • use language accurately

- use appropriate and varied register, vocabulary and idiom
- use correct grammar and syntax
- use appropriate and varied sentence structure
- use correct spelling (alphabetic languages) or writing (character languages).

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will explore both geographic and human history. Throughout the course, students will experience different Areas of Interaction that provide a lens for them to view content knowledge and encourage reflection in that unit.

The area of interaction **Approaches to Learning** is interwoven through all the units and provides opportunities for students' development of skills and attitudes towards learning. ATL skills enable students to become competent in identifying their own personal learning styles and strengths, as well monitoring their own development and fostering a lifelong enjoyment of learning.

Unit Title	Enduring Understandings	Area of Interaction	Essential & Content Questions
Changes In Me	Aging and Maturity – students will understand through personal narrative and expository writing the connection between age and maturity.	Health and Social Education Reflection on understanding ourselves- including issues such as personal management, self esteem, and growing up	E.Q. What is the relationship between change and growth? C. Q. Why do writers use different modes to express their ideas?
Changes In MY World	Change/Continuity – students will understand that individuals can react to or create change in positive or negative ways. Students will make personal choices to create future change.	Environments: Awareness and understanding of the roles our environments play in the lives and well-being of human kind. Reflection on our responsibilities to our environments Taking action on a range of issues related to environments	E. Q. How are people influenced by changes in their worlds? C. Q. How does a writer effectively craft a story?
Changes in Self-Perception	Perspective – Students will understand the importance of multiple perspectives.	Community Service Community awareness and understanding of: a. the concept of community- including what “community” means, how communities are different, and how they are similar, what makes a community, b. individuals in communities, including the role of the individual, the needs of the individual, the responsibilities of communities to the members Reflection on responsibilities- including the ethical implications of activity or inactivity within the community, using personal strengths to enhance communities, identifying personal strengths and limitations	E. Q. How do internal and external factors influence one’s self perception? Can helping others change the way you view yourself? C. Q. How does voice relate to audience and purpose?
Measuring Changes in Me	Self Awareness /Reflection - Students will understand how reflection can lead to personal growth.	Human Ingenuity Awareness and understanding of: the individual desire to create, develop, or change things, how products develop and change over time. Reflection on: the impact of innovation on individuals, communities, societies, and the world.	E. Q. Is it important to reflect on personal change and growth? C. Q. Why does successful writing require writing?
Changes In Times and Places	Environment – Students will understand how the environment can change individuals and objects.	Human Ingenuity: Students will identify and analyze the elements commonly found in a variety of print and graphic, humorous texts. Students will examine the ways in which authors create humor, and they will demonstrate their understanding of a humorous text through performance	E. Q. Why do objects change over time, and how does this change affect society? C. Q. How does setting affect characterization and plot?

IV. Texts and Resources

SpringBoard, Step Up to Writing, Strategies That Work, The Circuit by Fransisco Jumeniz, Breaking Through by Fransisco Jumeniz, Holes by Louis Sacher, netbooks, pbworks, googledocs

V. Methodology

Language A is an inquiry based course that celebrates diversity, self-awareness and global-mindedness. Essential learning goals are met through application of 21st century skills, independent critical thinking and reasoning, and collaboration. Direct and independent instruction is balanced with teaching a variety of reading and writing genres. Students will critically analyze and compose expository, persuasive and narrative works to deepen their understanding and integration of the IB Learner Profile traits. This student-centered approach revolves around elaborated communication, including Kagan structures, student led small and large group discussion, oral performance, real-world based projects, and meaningful service learning. Relevant, significant applications extend learning beyond the classroom, creating principled digital and world citizens.

VI. Methods of Assessment

Students will be assessed on final writings in their writing portfolios including expository essays, persuasive writing, short stories, news stories, letters, and research. Students will also give two oral presentations. Students will also be assessed on quizzes and tests in class. Students will be provided with rubrics for assessments so they will know which criteria is being assessed.

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Language Arts. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress:

MYP Language Arts – Grade 7

MYP Level 2

I. Course Description:

The fundamental piece to learning, thinking, communicating and reflecting is language. Language A seeks to further develop six key skill areas: listening, speaking, reading, writing, research and reasoning, which cultivate independent and interdependent skills. Unit activities are structured not only to develop skills and knowledge, but also to address learning in a variety of modalities from oral interpretations, to written analyses, to group discussions, and visual prompts, as well as technology and 21st Century skills. The study of language and quality literature enables students to become highly proficient in their understanding and use of their language(s) A and further enhances the attributes of the IB learner profile. Students need to foster an appreciation of the power and beauty of language and literature, as well as imagination and creativity through self-expression. MYP language A is academically rigorous, and challenges students to explore interdisciplinary essential questions, learning goals and academic vocabulary. (SpringBoard & IBMYP Language A Course Guide)

II. Colorado Model Content Standards and MYP Aims and Objectives

STATE / DISTRICT CONTENT STANDARDS:	MYP AIMS & OBJECTIVES:
<p>Oral Expression and Listening 1. Successful group discussions require planning and participation by all</p> <p>Reading for All Purposes 1. Understanding the meaning within different types of literature depends on properly analyzing literary components 2. Understanding and analyzing factual and information to depends on organizing structure 3. Word meanings are determined by how they are designed and how they are used in context.</p> <p>Writing and Composition 1. Ideas, organization, and voice develop while writing literary genres for intended audiences and purposes 2. Ideas, organization, and voice develop while writing informational and persuasive genres for intended audiences and purposes 3. Specific editing for grammar, usage, mechanics, and clarity gives writing its precision and legitimacy</p> <p>Research and Reasoning 1. Individual and group research projects require obtaining information on a topic from a variety of sources and organizing it for presentation 2. Assumptions can be concealed, and require identification and evaluation 3. Monitoring the thinking of self and others is a disciplined way to maintain awareness</p>	<p>Aims</p> <ul style="list-style-type: none"> • use language as a vehicle for thought, creativity, reflection, learning, self-expression and social interaction • develop the skills involved in listening, speaking, reading, writing, viewing and presenting in a variety of contexts • develop critical, creative and personal approaches to studying and analysing literary and non-literary works • engage in literature from a variety of cultures and representing different historical periods • explore and analyze aspects of personal, host and other cultures through literary and non-literary works • engage with information and communication technology in order to explore language • develop a lifelong interest in reading widely • apply language A skills and knowledge in a variety of real-life contexts. <p>Objectives</p> <p>A Content (receptive and productive) Students should be able to:</p> <ul style="list-style-type: none"> • understand and analyze the language, content, structure, meaning and significance of both familiar and previously unseen oral, written and visual texts • understand and apply language A terminology in context • analyze the effects of the author's choices on an audience • compose pieces that apply appropriate literary and/or non-literary features to serve the context and intention • compare and contrast works, and connect themes across and within genres • express an informed and independent response to literary and non-literary texts. <p>B Organization Students should be able to:</p> <ul style="list-style-type: none"> • create work that employs organizational structures and language-specific conventions throughout a variety of text types • organize ideas and arguments in a sustained, coherent and logical manner • employ appropriate critical apparatus. <p>C Style and language mechanics Students should be able to:</p> <ul style="list-style-type: none"> • use language to narrate, describe, analyse, explain, argue, persuade, inform, entertain and express feelings • use language accurately • use appropriate and varied register, vocabulary and idiom

- use correct grammar and syntax
- use appropriate and varied sentence structure
- use correct spelling (alphabetic languages) or writing (character languages).

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will explore both geographic and human history. Throughout the course, students will experience different Areas of Interaction that provide a lens for them to view content knowledge and encourage reflection in that unit.

The area of interaction **Approaches to Learning** is interwoven through all the units and provides opportunities for students' development of skills and attitudes towards learning. ATL skills enable students to become competent in identifying their own personal learning styles and strengths, as well monitoring their own development and fostering a lifelong enjoyment of learning.

Unit Title	Enduring Understandings	Area of Interaction	Essential & Content Questions
The Choices We Make	Choices: The learner will have the ability to make a choice, examine their choice and the choices of others, and to understand the effect of those choices in literature and life.	Community and Service	E.Q. What is the relationship between change and growth? C. Q. Why do writers use different modes to express their ideas?
What Influences My Choices?	Interpretations and Influence: The learner will understand the nature of media; interpret, analyze, and evaluate the media messages they encounter daily; and create texts that express a point of view and influence others.	Health and Social Education	E. Q. How are people influenced by changes in their worlds? C. Q. How does a writer effectively craft a story?
Our Choices and Life's Lessons	The learner will strengthen his/her ability to interpret, analyze, and write about literary topics..	Health and Social Education	E. Q. How do internal and external factors influence one's self perception? Can helping others change the way you view yourself? C. Q. How does voice relate to audience and purpose?
Reflecting on My Choices	The learner will further develop his/her writing skills to prepare him/her for complex writing tasks.	Approaches to Learning	E. Q. Is it important to reflect on personal change and growth? C. Q. Why does successful writing require writing?
How We Choose to Act	The learner will strengthen his/her ability to control the tone conveyed in his/her messages—both oral and written. .	Human Ingenuity	E. Q. Why do objects change over time, and how does this change affect society? C. Q. How does setting affect characterization and plot?

IV. Texts and Resources

SpringBoard, Step Up to Writing, Strategies That Work, netbooks, pbworks, googledocs

V. Methodology

Language A is an inquiry based course that celebrates diversity, self-awareness and global-mindedness. Essential learning goals are met through application of 21st century skills, independent critical thinking and reasoning, and collaboration. Direct and independent instruction is balanced with teaching a variety of reading and writing genres. Students will critically analyze and compose expository, persuasive and narrative works to deepen their understanding and integration of the IB Learner Profile traits. This student-centered approach revolves around elaborated communication, including Kagan structures, student led small and large group discussion, oral performance, real-world based projects, and meaningful service learning. Relevant, significant applications extend learning beyond the classroom, creating principled digital and world citizens.

VI. Methods of Assessment

Students will be assessed on final writings in their writing portfolios including expository essays, persuasive writing, short stories, news stories, letters, and research. Students will also give two oral presentations. Students will also be assessed on quizzes and tests in class. Students will be provided with rubrics for assessments so they will know which criteria is being assessed.

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Language Arts. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress:

MYP Language A – Grade 8

MYP Level 3

I. Course Description:

The fundamental key to learning, thinking, communicating and reflecting is language. Language A seeks to further develop six skill areas: listening, speaking, reading, writing, research and reasoning, which cultivate independent and interdependent skills. Unit activities are structured not only to develop skills and knowledge, but also to address learning in a variety of modalities from oral interpretations, to written analyses, to group discussions, and visual prompts, as well as technology and 21st Century skills. The study of language and quality literature enables students to become highly proficient in their understanding and use of their language(s) A and further enhances the attributes of the IB learner profile. Students need to foster an appreciation of the power and beauty of language and literature, as well as imagination and creativity through self-expression. MYP language A is academically rigorous, and challenges students to explore interdisciplinary essential questions, learning goals and academic vocabulary. (SpringBoard & IBMYP Language A Course Guide)

II. Colorado Model Content Standards and MYP Aims and Objectives

STATE / DISTRICT CONTENT STANDARDS:	MYP AIMS & OBJECTIVES:
<p>Oral Expression and Listening</p> <ol style="list-style-type: none"> 1. Communication skills and interviewing techniques are required to gather information and to develop and deliver oral presentations 2. A variety of response strategies clarifies meaning or messages <p>Reading for All Purposes</p> <ol style="list-style-type: none"> 1. Quality comprehension and interpretation of literary texts demand self-monitoring and self-assessment 2. Quality comprehension and interpretation of informational and persuasive texts demand monitoring and self-assessment 3. Syntax, grammar, and word choice influence the understanding of literary, persuasive, and informational texts <p>Writing and Composition</p> <ol style="list-style-type: none"> 1. Stylistic devices and descriptive details in literary and narrative texts are organized for a variety of audiences and purposes and evaluated for quality 2. Ideas and supporting details in informational and persuasive texts are organized for a variety of audiences and purposes and evaluated for quality 3. Editing writing for grammar, usage, mechanics, and clarity is an essential trait of a well-written document <p>Research and Reasoning</p> <ol style="list-style-type: none"> 1. Individual research projects begin with information obtained from a variety of sources, and is organized, documented, and presented using logical procedures 2. Common fallacies and errors occur in reasoning 3. Analyze media quality reasoning within media relies on supporting evidence 	<p>Aims</p> <ul style="list-style-type: none"> • use language as a vehicle for thought, creativity, reflection, learning, self-expression and social interaction • develop the skills involved in listening, speaking, reading, writing, viewing and presenting in a variety of contexts • develop critical, creative and personal approaches to studying and analysing literary and non-literary works • engage in literature from a variety of cultures and representing different historical periods • explore and analyze aspects of personal, host and other cultures through literary and non-literary works • engage with information and communication technology in order to explore language • develop a lifelong interest in reading widely • apply language A skills and knowledge in a variety of real-life contexts. <p>Objectives</p> <p>A Content (receptive and productive) Students should be able to:</p> <ul style="list-style-type: none"> • understand and analyze the language, content, structure, meaning and significance of both familiar and previously unseen oral, written and visual texts • understand and apply language A terminology in context • analyze the effects of the author's choices on an audience • compose pieces that apply appropriate literary and/or non-literary features to serve the context and intention • compare and contrast works, and connect themes across and within genres • express an informed and independent response to literary and non-literary texts. <p>B Organization Students should be able to:</p> <ul style="list-style-type: none"> • create work that employs organizational structures and language-specific conventions throughout a variety of text types • organize ideas and arguments in a sustained, coherent and logical manner

	<ul style="list-style-type: none"> • employ appropriate critical apparatus. <p>C Style and language mechanics Students should be able to:</p> <ul style="list-style-type: none"> • use language to narrate, describe, analyse, explain, argue, persuade, inform, entertain and express feelings • use language accurately • use appropriate and varied register, vocabulary and idiom • use correct grammar and syntax • use appropriate and varied sentence structure • use correct spelling (alphabetic languages) or writing (character languages).
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III. MYP Units of Study & Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will explore both geographic and human history. Throughout the course, students will experience different Areas of Interaction that provide a lens for them to view content knowledge and encourage reflection in that unit.

The area of interaction **Approaches to Learning** is interwoven through all the units and provides opportunities for students' development of skills and attitudes towards learning. ATL skills enable students to become competent in identifying their own personal learning styles and strengths, as well monitoring their own development and fostering a lifelong enjoyment of learning.

Unit Title	Enduring Understandings	Area of Interaction	Essential Questions
Shape Your World	Learners will be aware of different kinds of personal and global challenges, reflect on them and learn how individuals and cultures deal with those issues through language arts. Learners will strengthen the coherence of their writing and use multiple reading strategies.	Health and Social: Students examine personal and cultural challenges and changes, and learn about multiple intelligences - identifying personal learning styles through surveys, class discussion, and analyzing written work. Students are challenged to learn more about the impact of the media and its techniques in order to become more socially intelligent consumers of information. How do what we do, read, hear, say and record impact ourselves and those around us?	How does literacy define and shape culture?
Be a Hero	Learners will understand the archetype of the hero's journey and apply it in various scenarios. Learners will recognize heroic attributes as a reflection of society. Learners will define heroism.	Community and Service: Students investigate how they live in relation to each other, how they can contribute to their community, and how they can help others. Students are challenged to consider why everyone has an important role to fill in society and how sometimes just stepping up to that role makes some a hero.	What defines a hero?
Conflict as a Catalyst	Learners will understand how conflict changes people in different ways, recognize literature is a record of human existence and a mechanism for social modification – even through just one voice. Learners will also distinguish and use credible sources.	Health and Social: Using the Holocaust and WWII as the academic vehicle, students are challenged with analyzing how they and others think and act. It gives students a change to develop a sense of responsibility over their own decisions and well-being and the well-being of those around them. Exploration of self and history allows students to discuss and reflect on the connections between physical, social, mental and emotional health, and examine psychological and sociological impacts of one's immediate environment.	How is conflict a catalyst for change?

Inequality	Learners will recognize impacts of humanity on local and global environments and increase their awareness and responsibility in helping to solve those issues. Learners will develop clear and logical arguments, and then express and respond to arguments in writing and oral debate.	Environments: Students examine the importance of human impact on local and global environments. Students are able to develop positive and responsible attitudes towards these environments. Students can explore the links between economic, political and social issues, and how these directly and indirectly affect the environment.	What happens when inequality is perceived?
Ingenuity Rules	Learners will know how to informatively and persuasively design and create an original environmentally friendly invention.	Human Ingenuity: Students study why & how we create, & the positive and negative personal and societal consequences of those creations across space, time and cultures. Students will get the chance to reflect on current situations and attempt to improve the quality of life.	How can innovation overcome challenges?

IV. Texts and Resources

Language A level 8 implements three primary novels: *The Giver*, *Night* and *The Outsiders*. In addition to these texts, students will use multiple technological resources including, language based program features, extensive word processing formats, Windows Moviemaker, online dictionaries, thesauruses, encyclopedias, periodicals and databases, Glogster.com, Youtube.com, synchronous blogging and animated movie making. SpringBoard offers each student an interactive textbook. SpringBoard and supplementary materials also present a wide variety of additional short stories, historical documents, movie clips and poetry.

V. Methodology

Language A is an inquiry based course that celebrates diversity, self-awareness and global-mindedness. Essential learning goals are met through the application of 21st century skills, such as critical thinking, reasoning, and collaboration around a variety of reading and writing genres. Students will analyze and compose expository, persuasive and narrative works to deepen their understanding and integration of the IB Learner Profile traits. This student-centered approach revolves around elaborated communication, student lead small and large group discussion, oral performance, Socratic seminars, real-world based projects, and meaningful service learning. Relevant, significant applications extend learning beyond the classroom, creating principled digital and world citizens.

VI. Methods of Assessment

Unit Title	Enduring Understandings
Shape your World	PhotoVoice: Students will capture thematic definitions of cultural conceptions through digital photography. Students will create an online educational glog representing their interpretations of those concepts. If available, students will compare their views with the views of kids their own ages from other cultures. MYP Criteria: Criterion A – Content & Criterion B – Organization
Be a Hero	Hero Definition Essay: Students will identify and analyze heroes from multiple cultures and cliques. Students will develop an argument in the form of an essay explaining what heroes show about a society and what does it really take to be considered a hero. MYP Criteria: Criterion B – Organization & Criterion C: Style and Language Mechanics
Conflict as a Catalyst	Body Biography: Students will use textual evidence, symbolism, literary devices, and summarizations to creatively present their interpretation of the major theme/s in the novel <i>Night</i> in relation to the unit's essential question: How is conflict a catalyst for change? MYP Criteria: Criterion A – Content
Inequality	Persuasive Advertisement: Students will synchronously blog to collaboratively work using 21 st century skills with other students in remote locations to design an advertisement for Californian farms during the Dust Bowl era. MYP Criteria: Criterion A – Content & Criterion C: Style and Language Mechanics
Ingenuity Rules	IQ Project: Students design, build and market a new/modified invention that will impact mankind or the world in a positive way. Students will compete against other groups by presenting their projects to an expert panel of speech writers, successful entrepreneurs and people involved in sales, competing for an actual business contract. Students will evaluate the success of their own projects as well as those of the groups they are competing against. MYP Criteria: Criterion A – Content & Criterion B – Organization

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Language Arts. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress:

MYP Mathematics Grade 6 -- Connected Math 1

MYP Level 1

I. Course Description:

Mathematics plays an essential role both within the school and society. It promotes powerful universal language, analytical reasoning and problem-solving skills that contribute to the development of logical, abstract and critical thinking. (IBMYP Mathematics Content Guide, 2008). Sixth grade mathematics uses the Connected Mathematics Project (CMP). Connected Math helps students develop understanding of important concepts, skills, procedures and ways of thinking and reasoning in number sense, geometry, measurement, algebra, probability and statistics. CMP is problem based; important mathematical concepts are embedded in engaging problems. While solving these types of problems, students observe and make conjectures about patterns and relationships. Topics covered in this course include factors and multiples, statistics, two-dimensional geometry, two-dimensional measurement, rational numbers, probability and spatial visualization.

In MYP mathematics, the four main objectives support the IB learner profile, promoting the development of students who are knowledgeable, inquirers, communicators and reflective learners.

II. Colorado Model Content Standards and MYP Aims and Objectives

STATE / DISTRICT CONTENT STANDARDS:	MYP AIMS & OBJECTIVES:
<ul style="list-style-type: none"> • Students develop number sense and use numbers and number relationships in problem solving situations and communicate the reasoning used in solving these problems. • Students use algebraic methods to explore, model, and describe patterns and functions involving numbers, shapes, data, and graphs in problem-solving situations and communicate the reasoning used in solving these problems. • Students use data collection and analysis, statistics, and probability in problem-solving situations and communicate the reasoning used in solving these problems. • Students use geometric concepts, properties, and relationships in problem-solving situations and communicate the reasoning used in solving these problems. • Students use a variety of tools and techniques to measure, apply the results in problem solving situations, and communicate the reasoning used in solving these problems. • Students link concepts and procedures as they develop and use computational techniques, including estimation, mental arithmetic, paper-and-pencil, calculators, and computers, in problem-solving situations and communicate the reasoning used in solving these problems. 	<p>A. Knowledge and Understanding: are fundamental to studying mathematics and form the base from which to explore concepts and develop problem solving skills. Through this objective students develop mathematical reasoning to make deductions and solve problems. At the end of the first and second year of the programme, students should be able to demonstrate basic knowledge and understanding of the following branches of mathematics: number, algebra, geometry & trigonometry, statistics and probability and discrete mathematics.</p> <p>B. Investigation of Patterns: allows students to experience the excitement and satisfaction of mathematical discovery. Inquiry encourages students to become risk takers, inquirers and critical thinkers. Through investigations, students are given the opportunity to apply mathematical knowledge and problem-solving techniques to investigate a problem, generate and/or analyze information, find relationships and patterns, describe these mathematically as general rules and justify or prove them</p> <p>C. Communication in Math: Mathematics provides a powerful and universal language. Students are expected to use mathematical language appropriately when communicating mathematical ideas, reasoning and findings – both orally and in writing.</p> <p>D. Reflections in Math: MYP mathematics encourages students to reflect upon their findings and problem-solving processes. Students are encouraged to share their thinking with teachers and peers to examine different problem-solving strategies. Reflection in mathematics help students gain insight into their strengths and weaknesses as learners and to appreciate the value of errors as powerful motivators to enhance learning and understanding.</p>

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Throughout the year students will uncover 8 different units, each addressing the standards listed above.

Through the *Areas of Interaction* students will learn about the processes and real world applications of math. It will also help them acquire 21st Century learning skills that can be used to tackle both general and subject-specific tasks. Throughout the course, students will experience different *Areas of Interaction* which provide a lens for them to view the curriculum and encourage reflection on the area of study in that unit.

The Area of Interaction, *Approaches to Learning*, is integrated in all science units and provides students an opportunity for the development of the skills and attitudes necessary for learning. ATL skills should enable students to become competent in identifying, monitoring, and managing their own learning.

Unit Title	Concept/Enduring Understandings	Areas of Interaction	Essential/ Content Question
Data About Us: Data Analysis	Data - Students will understand that data can be used to drive decisions and structure our world.	Health & Social Education:	Essential Question: How do we use information to make judgments and decisions about the world around us? Content Question: How do mathematicians use data influence our decisions? What are some techniques for describing data?
Prime Time: Factors	Relationships – Students will understand that identifying relationships can be used to develop strategies for problem solving.	Approaches to Learning: “My Special Number” project. This project requires students to use and develop such skills as planning, organizing, creating and building on prior knowledge to create a Photostory presentation.	Essential Question: What makes a relationship and why are they important? Content Questions: What are the benefits of understanding the properties and relationships of whole numbers? How and why do we classify numbers?
Bits & Pieces I: Fractions, Decimals, and Percents	Perspective - Students will understand that there are multiple ways to view or represent information.	Approaches to Learning:	Essential Question: What are the benefits of looking at information in multiple ways? Content Questions: How can different representations/approaches yield the same results? How can the same idea be demonstrated in different ways?
Shapes & Designs: Polygons and Angles	Construction and Patterns – Students will understand how to use patterns to create sound structures.	Human Ingenuity: Students use and knowledge about polygons and their structures to create a two-dimensional city design. Aesthetics, functionality of building choices and overall city design will be used to assess and reflect on finished project.	Essential Question: How are patterns used to create sound and innovative structures? Content Questions: What are the properties of various shapes? How do we use our knowledge about the properties of various shapes to build sound structures?
Covering & Surrounding: Perimeter and Area	Reasoning - Students will understand and use inductive and deductive reasoning when solving problems.	Human Ingenuity:	Essential Question: How do we use what we know to find out what we want to know? Content Questions: What strategy will help me find the area or the perimeter of any given shape?
Variables & Patterns: Variables and Patterns	Perspective - Students will understand that there are multiple ways to view or represent information.	Environments: In collaborative groups students collect and analyze information on the local population and its effect on the local environment. Findings are	Essential Question: What are the benefits of looking at information in multiple ways? Content Questions: How do we use tables, graphs or equations to make

		displayed in three different representations: a coordinate graph, a narrative and a table.	predictions?
How Likely Is It?: Probability	Predictions - Students will understand how to make reasonable predictions based on past events.	Community & Service:	Essential Question: How do we use information from past and present events to make judgments and decisions? Content Questions: What do we mean by predictable?
Bits & Pieces II: Fractions, Decimals, and Percents	Reasoning - Students will understand and use inductive and deductive reasoning when solving problems.	Community & Service:	Essential Question: How do we use what we know to find out what we want to know? Content Question: What models or diagrams are useful when deciding how to solve a problem? What is a reasonable estimate for the answer?

IV. Texts and Resources

Connected Math I text, Supplementary Resources, Manipulatives, Photostory, United Streaming, Smartboard Lessons, Story books

V. Methodology

As a problem-centered curriculum, students spend time solving problems, reflecting on solution methods, examining why the method worked, comparing methods and relating methods to those used in previous situations. Students will be working on complex problems that cannot always be solved in one lesson. The CMP curriculum develops mathematical skills and conceptual understanding across mathematical classes and interdisciplinary content areas.

VI. Methods of Assessment

IBMYP Math Assessment Criteria & Possible Assessment Tasks	<p>Criteria A. Knowledge and Understanding: assessment tasks for this criterion are likely to be class tests, examinations, real-life problems and investigations that may have a variety of solutions (eg. Developing and playing a game that requires a particular set of skills or knowledge and understanding of certain concepts or making a poster or wall chart)</p> <p>Criteria B. Investigating Patterns: assessment tasks for this criterion should be mathematical investigations of some complexity, as appropriate to 6th Grade. Tasks should allow students to choose their own mathematical techniques to investigate problems, and to reason from the specific to the general. Assessment tasks could have a variety of solutions and may be set in real-life contexts (eg. Making a three dimensional model)</p> <p>Criteria C. Communication in Math: assessment tasks for this criterion are likely to be real-life problems, tests, examinations and investigations. Tests and examinations that are to be assessed against criterion C must be designed to allow students to show complete lines of reasoning using mathematical language (eg. Creating pictures, diagrams or cartoons to illustrate a particular concept or process, making a presentation using visual aids or collecting data and storing it in appropriate formats -- tables, spreadsheets, etc.)</p> <p>Criteria D. Reflections in Math: assessment tasks are most likely to be investigations and real-life problems. Generally these types of tasks will provide students with opportunities to use mathematical concepts and skills to solve problems in real life contexts. (eg. Keeping a personal journal that documents their development of mathematical understanding)</p>
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VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Math. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress:

MYP Mathematics Grade 7 -- Connected Math 2

MYP Level Year 2

I. Course Description:

Mathematics plays an essential role both within the school and society. It promotes powerful universal language, analytical reasoning and problem-solving skills that contribute to the development of logical, abstract and critical thinking. (IBMYP Mathematics Content Guide, 2008). Seventh grade mathematics uses the Connected Mathematics Project (CMP). Connected Math helps students develop understanding of important concepts, skills, procedures and ways of thinking and reasoning in number sense, geometry, measurement, algebra, probability and statistics. CMP is problem based; important mathematical concepts are embedded in engaging problems. While solving these types of problems, students observe and make conjectures about patterns and relationships. Topics covered in this course include introducing algebra, similarity, ratio, proportion and percent, integers, linear relationships, three-dimensional measurement, probability, expected value and number sense.

In MYP mathematics, the four main objectives support the IB learner profile, promoting the development of students who are knowledgeable, inquirers, communicators and reflective learners.

II. Colorado Model Content Standards and MYP Aims and Objectives

STATE / DISTRICT CONTENT STANDARDS:	MYP AIMS & OBJECTIVES:
<ul style="list-style-type: none"> • Students will understand in the real number system, rational numbers have a unique location on the number line. Students will also Formulate, represent, and use algorithms with integers and positive rational numbers flexibly, accurately, and efficiently. They will also use proportional reasoning that involves comparisons and multiplicative relationships among ratios • Students will find relationships involving the constant rate of change are modeled and solved using linear functions. • Students will create visual displays and summary statistics with one-variable data condense the information in data sets into usable knowledge. • Students will investigate objects in space and their parts and attributes can be measured and analyzed. Students will also use proportional reasoning is used to make indirect measurements 	<p>A. Knowledge and Understanding: are fundamental to studying mathematics and form the base from which to explore concepts and develop problem solving skills. Through this objective, students develop mathematical reasoning to make deductions and solve problems. At the end of the first and second year of the programme, students should be able to demonstrate basic knowledge and understanding of the following branches of mathematics: number, algebra, geometry & trigonometry, statistics and probability and discrete mathematics.</p> <p>B. Investigation of Patterns: allows students to experience the excitement and satisfaction of mathematical discovery. Inquiry encourages students to become risk takers, inquirers and critical thinkers. Through investigations, students are given the opportunity to apply mathematical knowledge and problem-solving techniques to investigate a problem, generate and/or analyze information, find relationships and patterns, describe these mathematically as general rules and justify or prove them</p> <p>C. Communication in Math: Mathematics provides a powerful and universal language. Students are expected to use mathematical language appropriately when communicating mathematical ideas, reasoning and findings – both orally and in writing.</p> <p>D. Reflections in Math: MYP mathematics encourages students to reflect upon their findings and problem-solving processes. Students are encouraged to share their thinking with teachers and peers to examine different problem-solving strategies. Reflection in mathematics help students gain insight into their strengths and weaknesses as learners and to appreciate the value of errors as powerful motivators to enhance learning and understanding.</p>

III. MYP Units & the Role of the Areas of Interaction in the Course

Throughout the year students will experience 9 separate units, each addressing the standards listed above.

Through the *Areas of Interaction* students will learn about the processes and real world applications of math. Throughout the course, students will experience different *Areas of Interaction* which provide a lens for them to view the curriculum and encourage reflection on the area of study in that unit. The *Areas of Interaction* will also help students acquire 21st Century learning skills that can be used to tackle both general and subject-specific tasks.

The Area of Interaction, *Approaches to Learning*, is integrated in all math units and provides students an opportunity for the development of the skills and attitudes necessary for learning. ATL skills should enable students to become competent in identifying, monitoring, and managing their own learning.

Unit Title	Concept/Enduring Understandings	Area of Interaction	Essential/ Content Question
Stretching and Shrinking: Similarity	Relationships & Predictions: Students will compare relationships and make prediction.	Human Ingenuity Approaches to Learning	<u>Essential Question:</u> How does human ingenuity solve problems? <u>Content Question:</u> What is the value of being able to scale up or down?
Comparing and Scaling: Ratios and Proportions	Relationships: Students will see how information can be displayed in many different ways.	Human Ingenuity Approaches to Learning	<u>Essential Question:</u> How does human ingenuity solve problems? <u>Content Question:</u> How do proportions help us make decisions?
Accentuate the Negative: Operations of Integers	Systems & Patterns: Students will use organization of systems to find patterns.	Community and Service Approaches to Learning	<u>Essential Question:</u> <u>Content Question:</u> What are the real world implications of negative numbers?
What Do You Expect? Probability	Predictions: Students will have an understanding of how information influences our decisions.	Health and Social Education Approaches to Learning	<u>Essential Question:</u> How much control do humans really have? <u>Content Question:</u> What makes the study of probability universal?
Supplemental Unit: Circles	Patterns: Students will use patterns to develop patterns to solve problems	Human Ingenuity Approaches to Learning	<u>Essential Question:</u> How can we use patterns to develop strategies to solve problems? <u>Content Question:</u> What are the concepts you need to know to understand the properties of circles?
Supplemental Unit: Data Analysis	Data: Students will explore comparisons and relationships from information.	Health and Social Education Approaches to Learning	<u>Essential Question:</u> How do we use information to determine our level of control? <u>Content Question:</u> What is the value of graphs?
Filling and Wrapping: Surface Area and Volume	Patterns: Students will use patterns to develop patterns to solve problems	Human Ingenuity Approaches to Learning	<u>Essential Question:</u> How can we use patterns to develop strategies to solve problems? <u>Content Question:</u> How is surface area and volume applied to the larger world?
Moving Straight Ahead: Linear Relationships			<u>Essential Question:</u> How can multiple representations be used to make predictions? <u>Content Question:</u> How can multiple representations be used to express solutions?
Data Around Us: Scientific Notation	Reasoning: Students will be able to reason about or interpret realistic information.	Human Ingenuity Approaches to Learning	<u>Essential Question:</u> <u>Content Question:</u> How do we represent the same number in multiple ways?

IV. Texts and Resources

- Connected Math Books
- Math's Mates Homework Program
- United Streaming
- Brain Pop
- Middle School Math with Pizzazz
- Manipulative
- Smart Board Lessons
- Graphing Calculators
- Microsoft Office
- College Predatory Mathemati

V. Methodology

As a problem-centered curriculum, students spend time solving problems, reflecting on solution methods, examining why the method worked, comparing methods and relating methods to those used in previous situations. Students will be working on complex problems that cannot always be solved in one lesson. The CMP curriculum develops mathematical skills and conceptual understanding across mathematical classes and interdisciplinary content areas.

VI. Methods of Assessment

IBMYP Math Assessment Criteria & Possible Assessment Tasks	<p>Criteria A. Knowledge and Understanding: assessment tasks for this criterion are likely to be class tests, examinations, real-life problems and investigations that may have a variety of solutions (eg. Developing and playing a game that requires a particular set of skills or knowledge and understanding of certain concepts or making a poster or wall chart)</p> <p>Criteria B. Investigating Patterns: assessment tasks for this criterion should be mathematical investigations of some complexity, as appropriate to 7th Grade. Tasks should allow students to choose their own mathematical techniques to investigate problems, and to reason from the specific to the general. Assessment tasks could have a variety of solutions and may be set in real-life contexts (eg. Making a three dimensional model)</p> <p>Criteria C. Communication in Math: assessment tasks for this criterion are likely to be real-life problems, tests, examinations and investigations. Tests and examinations that are to be assessed against criterion C must be designed to allow students to show complete lines of reasoning using mathematical language (eg. Creating pictures, diagrams or cartoons to illustrate a particular concept or process, making a presentation using visual aids or collecting data and storing it in appropriate formats -- tables, spreadsheets, etc.)</p> <p>Criteria D. Reflections in Math: assessment tasks are most likely to be investigations and real-life problems. Generally these types of tasks will provide students with opportunities to use mathematical concepts and skills to solve problems in real life contexts. (eg. Keeping a personal journal that documents their development of mathematical understanding)</p>
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VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Math. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress:

MYP Mathematics Grade 8 -- Connected Math 3

MYP Level 3

I. Course Description:

Mathematics plays an essential role both within the school and society. It promotes powerful universal language, analytical reasoning and problem-solving skills that contribute to their development of logical, abstract and critical thinking. (IBMYP Mathematics Content Guide, 2008). Eighth grade mathematics uses the Connected Mathematics Project (CMP). Connected Math helps students develop understanding of important concepts, skills, procedures and ways of thinking and reasoning in number sense, geometry, measurement, algebra, probability and statistics. CMP is problem based; important mathematical concepts are embedded in engaging problems. While solving these types of problems, students observe and make conjectures about patterns and relationships. Topics covered in this course include function relationships, the Pythagorean Theorem, exponential relationships, algebraic reasoning, symmetry and transformations, data and statistics and combinations.

In MYP mathematics, the four main objectives support the IB learner profile, promoting the development of students who are knowledgeable, inquirers, communicators and reflective learners.

II. Colorado Model Content Standards and MYP Aims and Objectives

STATE / DISTRICT CONTENT STANDARDS:	MYP AIMS & OBJECTIVES:
<ul style="list-style-type: none"> • Students develop number sense and use numbers and number relationships in problem-solving situations and communicate the reasoning used in solving these problems. • Students use algebraic methods to explore, model and describe patterns and functions involving numbers, shapes, data and graphs in problem-solving situations and communicate the reasoning used in solving these problems. • Students use data collection and analysis, statistics and probability in problem-solving situations and communicate the reasoning and processes used in solving these problems. • Students use geometric concepts, properties and relationships in problem-solving situations and communicate the reasoning used in solving these problems. • Students use a variety of tools and techniques to measure, apply the results in problem-solving situations and communicate the reasoning involved in solving these problems. • Students link concepts and procedures as they develop and use computational techniques, including estimation, mental arithmetic, paper-and-pencil, calculators and computes in problem-solving situations and communicate the reasoning involved in solving these problems. 	<p>A. Knowledge and Understanding: are fundamental to studying mathematics and form the base from which to explore concepts and develop problem solving skills. Through this objective, students develop mathematical reasoning to make deductions and solve problems. At the end of the first and second year of the programme, students should be able to demonstrate basic knowledge and understanding of the following branches of mathematics: number, algebra, geometry & trigonometry, statistics and probability and discrete mathematics.</p> <p>B. Investigation of Patterns: allows students to experience the excitement and satisfaction of mathematical discovery. Inquiry encourages students to become risk takers, inquirers and critical thinkers. Through investigations, students are given the opportunity to apply mathematical knowledge and problem-solving techniques to investigate a problem, generate and/or analyze information, find relationships and patterns, describe these mathematically as general rules and justify or prove them</p> <p>C. Communication in Math: Mathematics provides a powerful and universal language. Students are expected to use mathematical language appropriately when communicating mathematical ideas, reasoning and findings – both orally and in writing.</p> <p>D. Reflections in Math: MYP mathematics encourages students to reflect upon their findings and problem-solving processes. Students are encouraged to share their thinking with teachers and peers to examine different problem-solving strategies. Reflection in mathematics help students gain insight into their strengths and weaknesses as learners and to appreciate the value of errors as powerful motivators to enhance learning and understanding.</p>

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Throughout the year students will experience 10 separate units, each addressing the standards listed above.

Through the *Areas of Interaction* students will learn about the processes and real world applications of math. Throughout the course, students will experience different *Areas of Interaction* which provide a lens for them to view the curriculum and encourage reflection on the area of study in that unit. The *Areas of Interaction* will also help students acquire 21st Century learning skills that can be used to tackle both general and subject-specific tasks.

The Area of Interaction, *Approaches to Learning*, is integrated in all math units and provides students an opportunity for the development of the skills and attitudes necessary for learning. ATL skills should enable students to become competent in identifying, monitoring, and managing their own learning.

Unit Title	Concept/Enduring Understandings	Area of Interaction	Essential/ Content Question
Samples and Populations	Students will make connections between data and the real-world.	Environment -Using water quality data from science class	Essential Question: How do we use what we know to find what we want to know?
Linear Functions Review	Student will make connections between change and multiple representations.	Human Ingenuity	Essential Question: How do we use what we know to find what we want to know?
Looking for Pythagoras	Students will learn new strategies for solving and reasoning in real-world situations.	Human Ingenuity	Essential Question: How do we use what we know to find what we want to know?
Clever Counting	Students will learn new strategies for reasoning in situations involving data.	Health and Social Education	Essential Question: How precise must we be?
Supplemental Unit (Proportions, Probability, Surface Area and Volume)	Students will learn multiple strategies to solve and predict real-world situations.	Approaches To Learning	Essential Question: How do we use what we know to find what we want to know?
Thinking with Mathematical Models	Students will make connections between change and multiple representations	Human Ingenuity – Creating a business and tracking profits and losses with multiple representations.	Essential Question: How do we use what we know to find what we want to know?
Kaleidoscopes, Hubcaps and Mirrors	Students will begin to understand the concept of design in the real world.	Community Service – Culminating project (tessellation) will have a community betterment focus	Essential Question: How do we use what we know to create something new?
Say it with Symbols	Students will learn to use multiple representations and reasoning to solve real-world situations.	Approaches To Learning	Essential Question: How do we use what we know to find what we want to know?
Growing, Growing, Growing	Students will learn to recognize and model data and patterns using multiple representations.	Environment	Essential Question: How do we use what we know to find what we want to know?
Frogs, Fleas and Painted Cubes	Students will gain understanding and reasoning in using multiple representations.	Approaches To Learning	Essential Question: How do we view change?

IV. Texts and Resources

- Connected Mathematics-Algebra – Prentice Hall Books:
- Geometry Sketch Pad
- Math's Mate
- Interactive Web Sites
- Interactive SMART Lessons

- Microsoft Office
- Graphing Calculators
- Pizzazz Series
- United Streaming – Discovery Education
- Manipulatives

V. Methodology

As a problem-centered curriculum, students spend time solving problems, reflecting on solution methods, examining why the method worked, comparing methods and relating methods to those used in previous situations. Students will be working on complex problems that cannot always be solved in one lesson. The CMP curriculum develops mathematical skills and conceptual understanding across mathematical classes and interdisciplinary content areas.

VI. Methods of Assessment

<p>IBMYP Math Assessment Criteria & Possible Assessment Tasks</p>	<p>Criteria A. Knowledge and Understanding: assessment tasks for this criterion are likely to be class tests, examinations, real-life problems and investigations that may have a variety of solutions (eg. Developing and playing a game that requires a particular set of skills or knowledge and understanding of certain concepts or making a poster or wall chart)</p> <p>Criteria B. Investigating Patterns: assessment tasks for this criterion should be mathematical investigations of some complexity, as appropriate to 6th Grade. Tasks should allow students to choose their own mathematical techniques to investigate problems, and to reason from the specific to the general. Assessment tasks could have a variety of solutions and may be set in real-life contexts (eg. Making a three dimensional model)</p> <p>Criteria C. Communication in Math: assessment tasks for this criterion are likely to be real-life problems, tests, examinations and investigations. Tests and examinations that are to be assessed against criterion C must be designed to allow students to show complete lines of reasoning using mathematical language (eg. Creating pictures, diagrams or cartoons to illustrate a particular concept or process, making a presentation using visual aids or collecting data and storing it in appropriate formats -- tables, spreadsheets, etc.)</p> <p>Criteria D. Reflections in Math: assessment tasks are most likely to be investigations and real-life problems. Generally these types of tasks will provide students with opportunities to use mathematical concepts and skills to solve problems in real life contexts. (eg. Keeping a personal journal that documents their development of mathematical understanding)</p>
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VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Math. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress:

MYP Science – Grade 6

MYP Level 1

I. Course Description:

The sciences and their methods of investigation offer a way of learning through inquiry that can contribute to the development of an analytical and critical way of thinking. MYP sciences emphasize the role of inquiry and encourages the development of not only scientific inquiry skills but also transferable thinking skills. MYP science students use the PROJECT-BASED INQUIRY SCIENCE (PBIS) developed by the National Science Foundation. The program challenges students to learn about the process of science in an authentic sequence of steps. PBIS is a unique program that helps students explore big ideas in science as well as the process of inquiry in science. Each of the four units involves hand's on, problem based challenges that requires students to think as scientists through a collaborative process. At the end of each unit is a culminating project that requires students to apply their knowledge and ideas in an authentic way. Projects range from debates, small writing challenges, to creating visual models of their understanding.

II. Colorado Model Content Standards and MYP Aims and Objectives

STATE / DISTRICT CONTENT STANDARDS:	MYP AIMS & OBJECTIVES:
<p>Scientific Process: Use knowledge and understanding of scientific processes and skills to solve problems and communicate ideas in science (integrated throughout all units).</p>	<p>Communication in Science: Students develop their communication skills in science. Students understand scientific information, such as data, ideas, arguments and investigations, and communicate it using appropriate scientific language in a variety of communication modes and formats.</p> <p>Scientific Inquiry: Students develop scientific inquiry skills to design and carry out scientific investigations.</p> <p>One World: Enable students to understand the interdependence between science and society. Students are aware of the global dimension of science, as a universal activity with consequences for our lives and subject to social, economical, political, environmental, cultural and ethical factors.</p> <p>Attitudes in Science: Encourages attitudes and dispositions that will contribute to students' development as caring and responsible individuals & society members.</p> <p>Knowledge and Understanding: Students understand the main ideas and concepts of science and to apply them to solve problems in familiar and unfamiliar situations. Students develop critical and reflective thinking and judge the credibility of scientific information when this is presented to them.</p> <p>Processing Data: Enable students to record, organize, and process data. Students will collect and transfer data by numerical calculations into diagrammatic form. Students will analyze and interpret data and explain appropriate conclusions</p>
<p>Life Science: Analyze the relationship between structure and function in living systems at a variety of organizational levels, and recognize living things systems' dependence on natural selection.</p>	
<p>Physical Science: Apply an understanding that energy exists in various forms, and its transformation and conservation occur in processes that are predictable and measurable</p> <p>Apply an understanding that energy exists in various forms, and its transformation and conservation occur in processes that are predictable and measurable.</p>	
<p>Earth Systems Science: Describe and interpret how Earth's geologic history and place in space are relevant to our understanding of the process that shape our planet.</p>	

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will learn about the processes and real world applications of science. It will also help them acquire 21st Century learning skills that can be used to tackle both general and subject-specific tasks. Throughout the course, students will experience different *Areas of Interaction* which provide a lens for them to view the curriculum and encourage reflection on the area of study in that unit.

The Area of Interaction, *Approaches to Learning*, is integrated in all science units and provides students an opportunity for development of skills and attitudes necessary for learning. ATL skills should enable students to become competent in identifying, monitoring, and managing their own learning.

Unit	Concept/Enduring Understandings	Area of Interaction	Essential/ Content Question
Diving Into Science: Science as Inquiry	<ul style="list-style-type: none"> Models can be used to predict change Scientific ideas are used to explain previous observations to predict future events Logical conclusions can be made by interpreting and evaluating data 	Human Ingenuity: Students will have an awareness and understanding of how systems or products change over time. Students will take action to create solutions and products to solve their own and others problems.	Essential Question: How do I work with others to solve problems? Content Specific Question How do scientists work together to solve problems?
Feast or Famine: The Human Machine (Based on <u>Good Friends and Germs</u>, PBIS)	<ul style="list-style-type: none"> Genes, environment, economics, and culture play a role in human health. The choices I make about what I eat impact my health in the short term and long term Body systems work together to give me energy for everyday life. 	Health and Social: Students will reflect on looking after ourselves such as personal hygiene, diseases and substance abuse. Students will be making choices in terms of ourselves and others – including personal values and taking responsibility.	Essential Question: Am I healthy? How can I make healthy choices? Content Specific Question: How do cells, organs, and organ systems work together to keep me healthy?
Astronomy: Windows to the Universe	<ul style="list-style-type: none"> The solar system is comprised of various objects that orbit the sun and are classified on their characteristics Human understanding of the universe has evolved with new technology Observations can be used to determine the composition, size, and structure of the universe 	Human Ingenuity: Students will create an awareness and understanding of the process called innovation, creation, development, and change. They will reflect on the impact of innovation on individuals, communities, societies and the world.	Essential Question: How has technology changed our perspective on our place in universe? Content Specific Question: How is the universe structured? How do objects move through space?
Energy: Choices Today and Tomorrow	<ul style="list-style-type: none"> Energy is not lost but changes form as it moves from one medium to the next; the amount of energy in the Universe is constant. The choices we make today around energy will impact humans now and in the future. 	Community and Service: Students will reflect on responsibilities- including implications of activity or inactivity within the community, using personal strengths to enhance communities, identifying personal strengths and limitations.	Essential Question: Can life on earth be sustained? Content Specific Question: How can you use energy to do work?

IV. Texts and Resources

Project Based Inquiry Science series, various websites, interactive software, netbooks., and interactive software.

V. Methodology

The course utilizes several methodologies included, but not limited to: project-inquiry based learning, teacher-led inquiry, collaborative teams, independent study, hands-on science activities and demonstration, computer models and simulations, classroom debates, and other technologies.

Students will be primarily be learning by the use of inquiry in class discussions, laboratories, and other hands on activities. Students, as scientists will ask questions to address challenges and big questions, reflect in many different ways, and collaborate together to address challenges and questions.

Ultimately, students are challenged to engage in learning content knowledge and transfer that knowledge to create a personal representation of their learning and or to solve problems both individually and in collaborative groups. a

VI. Methods of Assessment

Students will be assessed on MYP Criteria for year 1 throughout each unit. To demonstrate their understanding students will have formative assessments such as quizzes, journal entries, and various summative projects. To assess students learning at the end of each unit there will be a culminating assessment linked to the state content standards and MYP criteria.

The following are assessments for each unit:

Unit	Assessment and MYP Criteria
Diving In: Science as Inquiry	Students will complete design and carry out an experiment that contains a procedure and can be tested. MYP Criteria: Objective D: Scientific Inquiry, Objective F: Attitudes in Science
Feast or Famine: The Human Machine (Based on <u>Good Friends and Germs</u>, PBIS)	Students will create alternative school lunch menus after extensively researching the human body, health, nutrition and the growing obesity rate. Prior to their assessment they will keep nutritional journals and assess their own eating habits. MYP Criteria: Objective D: Scientific Inquiry, Objective E: Knowledge and Understanding in Science
Astronomy: Windows to the Universe	Students will host an Astronomer's Café to present their research and data collection on a variety of different topics of their choosing (star and sky journals, telescope building, Sun and Seasonal tracking). MYP Criteria: Objective D: Scientific Inquiry, Objective E: Processing Data
Energy: Today and Tomorrow	Students will conduct a Socratic seminar (debate) that will discuss the future of energy. Students will use data and propose a road map to future energy use. MYP Criteria: Objective A: One World, Objective C: Processing Data

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Math. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress:

MYP Science– Grade 7

MYP Level 2

I. Course Description:

The sciences and their methods of investigation offer a way of learning through inquiry that can contribute to the development of an analytical and critical way of thinking. MYP sciences emphasize the role of inquiry and encourage the development of not only scientific inquiry skills but also transferable thinking skills. MYP science students use the PROJECT-BASED INQUIRY SCIENCE (PBIS) developed by the National Science Foundation. The program challenges students to learn about the process of science in an authentic sequence of steps. PBIS is a unique program that helps students explore big ideas in science as well as the process of inquiry in science. Each of the four units involves hand's on, problem based challenges that requires students to think as scientists through a collaborative process. At the end of each unit is a culminating project that requires students to apply their knowledge and ideas in an authentic way. Projects range from debates, small writing challenges, to creating visual models of their understanding.

II. Colorado Model Content Standards and MYP Aims and Objectives

STATE / DISTRICT CONTENT STANDARDS:	MYP AIMS & OBJECTIVES:
<p>Scientific Process:</p> <ul style="list-style-type: none"> Use knowledge and understanding to a scientific processes and skills to solve problems and communicate ideas in science. (Integrated throughout all units.) 	<p>Knowledge and Understanding: Students understand the main ideas and concepts of science and to apply them to solve problems in familiar and unfamiliar situations. Students develop critical and reflective thinking and judge the credibility of scientific information when this is presented to them.</p> <p>Attitudes in Science: Encourages attitudes and dispositions that will contribute to students' development as caring and responsible individuals and members of society.</p> <p>Communication in Science: Students develop their communication skills in science. Students understand scientific information, such as data, ideas, arguments and investigations, and communicate it using appropriate scientific language in a variety of communication modes and formats.</p> <p>Processing Data: Enable students to record, organize, and process data. Students will collect and transfer data by numerical calculations into diagrammatic form. Students will analyze and interpret data and explain appropriate conclusions.</p> <p>One World: Enable students to understand the interdependence between science and society. Students are aware of the global dimension of science, as a universal activity with consequences for our lives and subject to social, economical, political, environmental, cultural and ethical factors.</p> <p>Scientific Inquiry: Students develop scientific inquiry skills to design and carry out scientific investigations.</p>
<p>Earth Systems Science:</p> <ul style="list-style-type: none"> Evaluate evidence that Earth's geosphere, atmosphere, hydrosphere, and biosphere interact as a complex system. Describe how humans are dependent on the diversity resources provided by Earth and Sun. 	
<p>Life Science:</p> <ul style="list-style-type: none"> Analyze how various organisms grow, develop, and differentiate during their lifetimes based on interplay between genetics and their environment. Explain biological evolution accounts for the unity and diversity of living organisms. Analyze the relationship between structure and function in living systems at a variety of organizational levels, and recognize living systems' dependence on natural selection. 	
<p>Physical Science:</p> <ul style="list-style-type: none"> Apply an understanding of atomic and molecular structure to explain the properties of matter, and predict outcomes of chemical and nuclear reactions. 	

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will learn about the processes and real world applications of science. It will also help them acquire 21st Century learning skills that can be used to tackle both general and subject-specific tasks. Throughout the course, students will experience different *Areas of Interaction* which provide a lens for them to view the curriculum and encourage reflection on the area of study in that unit.

The Area of Interaction, *Approaches to Learning*, is integrated in all science units and provides students an opportunity for development of skills and attitudes necessary for learning. ATL skills should enable students to become competent in identifying, monitoring, and managing their own learning.

Unit	Concept/Enduring Understanding	Area of Interaction	Essential/Content Questions
Animals in Action	<ul style="list-style-type: none"> • Collaboration allows for multiple solutions to problems • Criteria and constraints are examples of limitations that need to be considered and used when creating possible solutions to problems. • Communication allows for the sharing of ideas and information. 	Human Ingenuity: Students will use knowledge of scientific processes to design a zoo enclosure that will support natural animal behavior.	Essential Question: How does human ingenuity solve problems? Content Question(s): How do scientists answer big questions and solve big problems?
Planetary Forecaster	<ul style="list-style-type: none"> • Human beings need certain conditions to sustain life • Form and structure play a role in how things respond to direct and indirect stimuli. • Energy can be transferred and stored but total energy is conserved. 	Environment: Students will use knowledge and understanding of energy in our environment and apply it to a new situation.	Essential Question: Why do we live where we live? Content Question(s): Which regions of a newly discovered planet have surface temperatures appropriate for a human colony?
Genetics	<ul style="list-style-type: none"> • Availability and access to various conditions can effect the survival of individual organisms, populations, and species. • Following a process is useful for organizing and analyzing data and information when investigating a problem. 	Health and Social Education: Students will use their knowledge and understanding of genetics to evaluate its use in solving global issues.	Essential Question: How much control do humans really have? Content Question(s): How can knowledge of genetics help feed the world?
Air Quality	<ul style="list-style-type: none"> • Structure and function play an important role in the existence of systems. • Matter and energy interact to effect environmental outcomes. 	Community and Service: Students work in groups to make recommendations for improving air quality in their community.	Essential Question: How do human actions impact the environment? Content Question(s): How can you improve the air quality in your community?

IV. Texts and Resources

Project Based Inquiry Science series, various websites and interactive software, netbooks..

V. Methodology

The course utilizes several methodologies included, but not limited to: project-inquiry based learning, teacher-led inquiry, collaborative teams, independent study, hands-on science activities and demonstration, computer models and simulations, classroom debates, and other technologies.

Students will be primarily be learning by the use of inquiry in class discussions, laboratories, and other hands on activities. Students, as scientists will ask questions to address challenges and big questions, reflect in many different ways, and collaborate together to address challenges and questions.

Ultimately, students are challenged to engage in learning content knowledge and transfer that knowledge to create a personal representation of their learning and or to solve problems both individually and in collaborative groups.

VI. Methods of Assessment

Students will be assessed on MYP Criteria for year 2 throughout each unit. To demonstrate their understanding students will have formative assessments such as quizzes, journal entries, and reflections. To assess students learning at the end of each unit students will have a culminating assessment linked to the standards and MYP objectives listed above.

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Math. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress:

MYP Science– Grade 8

MYP Level 3

I. Course Description:

The sciences and their methods of investigation offer a way of learning through inquiry that can contribute to the development of an analytical and critical way of thinking. MYP sciences emphasizes the role of inquiry and encourages the development of not only scientific inquiry skills but also transferable thinking skills. MYP science students use the PROJECT-BASED INQUIRY SCIENCE (PBIS) developed by the National Science Foundation. The program challenges students to learn about the process of science in an authentic sequence of steps. PBIS is a unique program that helps students explore big ideas in science as well as the process of inquiry in science. Each of the four units involves hand's on, problem based challenges that requires students to think as scientists through a collaborative process. At the end of each unit is a culminating project that requires students to apply their knowledge and ideas in an authentic way. Projects range from debates, small writing challenges, to creating visual models of a students understanding.

II. Colorado Model Content Standards and MYP Aims and Objectives

STATE / DISTRICT CONTENT STANDARDS:	MYP AIMS & OBJECTIVES:
<p>Scientific Process:</p> <ul style="list-style-type: none"> Use knowledge and understanding to of scientific processes and skills to solve problems and communicate ideas in science (Integrated throughout all units) 	<p>Scientific Inquiry: Students develop scientific inquiry skills to design and carry out scientific investigations.</p> <p>Attitudes in Science: Encourages attitudes and dispositions that will contribute to students' development as caring and responsible individuals and members of society.</p> <p>One World: Enable students to understand the interdependence between science and society. Students are aware of the global dimension of science, as a universal activity with consequences for our lives and subject to social, economical, political, environmental, cultural and ethical factors.</p> <p>Communication in Science: Students develop their communication skills in science. Students understand scientific information, such as data, ideas, arguments and investigations, and communicate it using appropriate scientific language in a variety of communication modes and formats.</p> <p>Knowledge and Understanding: Students understand the main ideas and concepts of science and to apply them to solve problems in familiar and unfamiliar situations. Students develop critical and reflective thinking and judge the credibility of scientific information when this is presented to them.</p> <p>Processing Data: Enable students to record, organize, and process data. Students will collect and transfer data by numerical calculations into diagrammatic form. Students will analyze and interpret data and explain appropriate Conclusions.</p>
<p>Life Science:</p> <ul style="list-style-type: none"> Explain and illustrate with examples how living systems interact with the biotic and abiotic environment Analyze the relationship between structure and function in living systems at a variety of organizational levels, and recognize living systems' dependence on natural selection. 	
<p>Earth Systems Science:</p> <ul style="list-style-type: none"> Evaluate evidence that Earth's geosphere, atmosphere, hydrosphere, and biosphere interact as a complex system Describe and interpret how Earth's geologic history and place in space are relevant to our understanding of the processes that have shaped our planet 	
<p>Physical Science:</p> <ul style="list-style-type: none"> Observe explain and predict natural phenomena by Newton's laws of motion, acknowledging the limitations of their applications to very small or very fast objects Apply an understanding that energy exists in various forms, and its transformation and conservation occur in processes that are predictable and measurable 	

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Throughout the year students will uncover four separate units, each addressing the standards listed above.

Through the *Areas of Interaction* students will learn about the processes and real world applications of science. It will also help them acquire 21st Century learning skills that can be used to tackle both general and subject-specific tasks. Throughout the course, students will experience different *Areas of Interaction* which provide a lens for them to view the curriculum and encourage reflection on the area of study in that unit.

The Area of Interaction, *Approaches to Learning*, is integrated in all science units and provides students an opportunity for the development of the skills and attitudes necessary for learning. ATL skills should enable students to become competent in identifying, monitoring, and managing their own learning.

Unit	Concept/Enduring Understandings	Area of Interaction	Essential/ Content Question
Digging In	<ul style="list-style-type: none"> Models can be used to predict change Scientific ideas are used to explain previous observations to predict future events Logical conclusions can be made by interpreting and evaluating data 	<p>Human Ingenuity: Students will be involved in a final project that where they are asked to use innovation, and create a solution to a problem while they monitor development and change things over time</p> <p>Health and Social: Students will reflect on an understanding themselves-including issues such as personal management, self esteem, and growing up through working together in groups in the scientific process.</p>	<p>Guiding Question: How do people work together to solve problems?</p> <p>Content Specific Question: How do scientists work together to solve problems?</p>
Living Together	<ul style="list-style-type: none"> Resources go through cycles of abundance and scarcity Living and non living factors are interdependent Communities share responsibilities in making decisions about resource quality and quantity There are interrelationships amongst science, technology, and human activity that affect the world 	<p>Community and Service: Students will conduct a discussion on the responsibilities of a community including the ethical implications of activity or inactivity within the community, using personal strengths to enhance communities, identifying personal strengths and limitations.</p> <p>Environments Students will engage in content which allow students to explore the role environment plays in the lives and well being of human kind and the effects of one environment on the other. Students will reflect on the effects of our actions, attitudes, and constructs, such as sustainable development and conservation.</p>	<p>Guiding Question: How are humans and their use of natural resources interdependent?</p> <p>Content Specific Question: How does water quality and quantity affect the ecology of a community?</p>
Ever-Changing Earth	<ul style="list-style-type: none"> Change is constant. The earth is a dynamic place. Scientists use data and inferring to figure out what is under the Earth's surface. Rocks tell the story about how the earth has changed in the past. Models can be used to predict natural disasters and monitor valuable resources. 	<p>Environments Students will explore and develop models on how Physical, Social, political, economic and cultural dimensions of a geologic issue around the world</p> <p>Students will reflect on The role of virtual environments in modeling other environments</p>	<p>Guiding Question: What processes drive change?</p> <p>Content Specific Question: What processes within earth cause geologic activity and change? What story does a rock tell about how the earth has changed in the past? Present? Future?</p>
Vehicles in Motion	<ul style="list-style-type: none"> Through repeating and building on ideas designs can be improved Technology can be used to improve ideas and understanding of the world Quantities that characterize moving objects and their interactions within the system can be described, measured, and calculated 	<p>Human Ingenuity Students will be involved in a final project that where they are asked to use innovation, and create a solution to a problem while they monitor development and change things over time</p>	<p>Guiding Questions: How does design affect performance?</p> <p>Content Specific Question: How can you build a vehicle that will go straight, far, and fast and carry a load?</p>

IV. Texts and Resources

Project Based Inquiry Science series, various websites, and interactive software, current articles, netbooks..

V. Methodology

The course utilizes several methodologies included, but not limited to: project-inquiry based learning, teacher-led inquiry, collaborative teams, independent study, hands-on science activities and demonstration, computer models and simulations, classroom debates, and GIS Software and other technologies.

Students will be primarily be learning by the use of inquiry in class discussions, laboratories, and other hands on activities. Students, as scientists will ask questions to address challenges and big questions, reflect in many different ways, and collaborate together to address challenges and questions.

VI. Methods of Assessment

Students will be assessed on MYP Criteria for year 3 throughout each unit. To demonstrate their understanding students will have formative assessments such as quizzes, journal entries, and reflections. To assess students learning at the end of each unit there will be a culminating assessment linked to the standards and MYP criteria listed above. The following are assessments for each unit:

Unit	Assessment and MYP Criteria
Digging In	Mystery Liquid Lab: Students will test their knowledge of the scientific process to do a procedure and find the mystery liquid to solve a crime. MYP Criteria: Objective D: Scientific Inquiry, Objective F: Attitudes in Science
Living Together	Conversation Cafe on a Local Water Issue: Students analyze a water quality issue and stake holders points of view in the community to make a decision in the issue at a publically hosted Conversation Café. MYP Criteria: Objective A: One World, Objective B: Communication in Science
Ever-Changing Earth	Geologic Future Comic: Students will research the geologic stratigraphy of the past in Colorado and construct a comic of a prediction about the future geology of the area. MYP Criteria: Objective D: Scientific Inquiry, Objective E: Processing Data
Vehicles in Motion	Model Car Design: Students design and build a vehicle that will go far, fast, and carry a load. Students will evaluate how well they met the criteria and constraints of the challenge. Students will race their vehicles and compete for the best design to assess their final understanding. MYP Criteria: Objective A: One World, Objective C: Knowledge and Understanding in Science

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Math. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress:

MYP Language B– Grade 6

MYP Level 1

I. Course Description:

Lincoln IB World Middle School has offered a balanced literacy approach in the teaching of language B in the MYP, integrating its curriculum with the use of appropriate technology to provide instruction that will enable students to effectively communicate using the language points taught, as well as the social conditions to certain situations, while noting the differences among linguistically diverse worlds. This course guides students towards mastery of thinking skills enclosed in any cultural learning activity. Students' background knowledge and ethnic home environments vary, making our classrooms diverse and multicultural. Students will work cooperatively through logical reasoning and problem solving activities simulating real life conditions. The course hopes to instill in students an appreciation of languages and cultural communities other than their own, and an ongoing interest in the acquisition and development of an additional language.

II. Colorado Model Content Standards and MYP Aims and Objectives

STATE / DISTRICT CONTENT STANDARDS:	MYP AIMS & OBJECTIVES:
<p>1. Communication in Languages Other Than English</p> <ol style="list-style-type: none"> 1. Communicate about very familiar topics (written or oral) using isolated words and high frequency phrases (interpersonal mode) 2. Comprehend isolated learned words and high- frequency phrases (written or oral) on very familiar topics (interpretive mode) 3. Present on very familiar topics (written or oral) using isolated words, and high-frequency phrases (presentational mode) <p>2. Knowledge and Understanding of Other Cultures</p> <ol style="list-style-type: none"> 1. Identify common practices within the target cultures studied 2. Identify common products of the target cultures studied <p>3. Connections with Other Disciplines and Information Acquisition</p> <ol style="list-style-type: none"> 1. Identify information that can be gathered from target language resources connected to other content areas 2. Locate and use basic information from target language resources. <p>4. Comparisons to Develop Insight into the Nature of Language and Culture</p> <ol style="list-style-type: none"> 1. Identify similarities and differences of the most basic vocabulary through comparisons of the student's own language and the language studied 2. Identify and recognize the nature of culture through comparisons of the target culture(s) and the student's own culture 	<p>Aims</p> <p>The aims of the teaching and study of modern foreign languages are to:</p> <ul style="list-style-type: none"> • enable the student to use language(s) effectively as a means of practical communication, providing a sound base of communication skills necessary for future study, work and leisure • enable the student to understand the nature of language and the process of total language learning, which comprises the integration of linguistic, cultural and social components • enable the student to develop an appreciation of a variety of literary and non-literary texts • offer insight into the cultural characteristics of the communities where the language(s) is (are) spoken • encourage an awareness and understanding of the perspectives of people from other cultures • promote involvement with different communities, where relevant • provide access to varied sources of information • foster curiosity, a lifelong interest and enjoyment in language learning. <p>Objectives:</p> <p>Define what the student will be able to accomplish as a result of studying the subject.</p> <p>At the end of the course students should be able to:</p> <ul style="list-style-type: none"> • communicate information, ideas and opinions • demonstrate comprehension of specific factual information and attitudes, expressed in spoken and written contexts • identify main ideas and supporting details and draw conclusions from spoken and written texts • understand and appropriately use structures and vocabulary • request and provide information in both spoken and written contexts • engage actively in oral production using comprehensible pronunciation and intonation

- take part in formal and informal communications.

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Students hone in on their personal **approaches to learning** as they discover the ways in which they learn a second language best. They will learn their place within **communities**, and volunteer their **services** while making connections between their local home/school environments, and linguistically diverse communities. Students will investigate a range of **health and social educational** issues within the linguistically diverse world studied and their own, the complex interrelationships among home, classroom, and global **environments**, and how **human ingenuity** has influenced the way these communities think, interact, and find solutions to local and global issues.

Unit Title	Enduring Understandings	Area of Interaction	Essential & Content Questions
El primer paso Introduction to the Spanish World	<ul style="list-style-type: none"> • Language and communication are the essence and means of preserving and sharing culture • Culture, world view, and language are inextricably interwoven 	Environment <ul style="list-style-type: none"> • How can I interface my second language environment and both utilize what it has to offer and contribute to it? • Humans connect to their language B environment socially and culturally 	<i>How can learning a new language enhance your understanding of cultures of the world?</i>
Capítulo 1 <u>Y tú, ¿cómo eres?</u> Friendship	<ul style="list-style-type: none"> • identity, and the factors that contribute to our self Friendship • Self image, concept, esteem 	Health & Social Education <ul style="list-style-type: none"> • Establishing positive self concept as well as respecting others • Developing good choices in the friends we make Human Ingenuity: Autobiographical poetry and art	<i>How do teenage relationships differ in the US from those in Spanish speaking</i>
Capítulo 2 <u>¿Qué clases tienes?</u> School	<ul style="list-style-type: none"> • Learning organizational systems and structures helps students succeed. 	Health and Social Education: <ul style="list-style-type: none"> • Making choices in one's education • Developing an awareness of the importance of education world wide Environment: <ul style="list-style-type: none"> • Describing one's educational environment including classrooms, teachers, school supplies, and schedules 	<i>How can I survive and be successful in my new school?</i>

IV. Texts and Resources

Paso a Paso / Spanish
 Nuevas Vistas / Spanish
studyspanish.com
quia.com
unitedstreaming.com

V. Methodology

The course utilizes several methodologies including, but not limited to: project-based learning, collaborative teams, teacher-led inquiry, web and internet based learning modules direct instruction and independent study. Students may

have opportunities to utilize one or all of the following to extend their learning by the walls of Lincoln: skype, epals, blogs, wikis, and blackboard.

VI. Methods of Assessment

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Foreign Language. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress:

MYP Language B– Grade 7

MYP Level 2

I. Course Description:

Lincoln IB World Middle School has offered a balanced literacy approach in the teaching of language B in the MYP, integrating its curriculum with the use of appropriate technology to provide instruction that will enable students to effectively communicate using the language points taught, as well as the social conditions to certain situations, while noting the differences among linguistically diverse worlds. This course guides students towards mastery of thinking skills enclosed in any cultural learning activity. Students' background knowledge and ethnic home environments vary, making our classrooms diverse and multicultural. Students will work cooperatively through logical reasoning and problem solving activities simulating real life conditions. The course hopes to instill in students an appreciation of languages and cultural communities other than their own, and an ongoing interest in the acquisition and development of an additional language.

II. Colorado Model Content Standards and MYP Aims and Objectives

STATE / DISTRICT CONTENT STANDARDS:	MYP AIMS & OBJECTIVES:
<p>1. Communication in Languages Other Than English</p> <p>4. Communicate about very familiar topics (written or oral) using isolated words and high frequency phrases (interpersonal mode)</p> <p>5. Comprehend isolated learned words and high- frequency phrases (written or oral) on very familiar topics (interpretive mode)</p> <p>6. Present on very familiar topics (written or oral) using isolated words, and high-frequency phrases (presentational mode)</p> <p>2. Knowledge and Understanding of Other Cultures</p> <p>3. Identify common practices within the target cultures studied</p> <p>4. Identify common products of the target cultures studied</p> <p>3. Connections with Other Disciplines and Information Acquisition</p> <p>3. Identify information that can be gathered from target language resources connected to other content areas</p> <p>4. Locate and use basic information from target language resources.</p> <p>4. Comparisons to Develop Insight into the Nature of Language and Culture</p> <p>3. Identify similarities and differences of the most basic vocabulary through comparisons of the student's own language and the language studied</p> <p>4. Identify and recognize the nature of culture through comparisons of the target culture(s) and the student's own culture</p>	<p>Aims</p> <p>The aims of the teaching and study of modern foreign languages are to:</p> <ul style="list-style-type: none"> • enable the student to use language(s) effectively as a means of practical communication, providing a sound base of communication skills necessary for future study, work and leisure • enable the student to understand the nature of language and the process of total language learning, which comprises the integration of linguistic, cultural and social components • enable the student to develop an appreciation of a variety of literary and non-literary texts • offer insight into the cultural characteristics of the communities where the language(s) is (are) spoken • encourage an awareness and understanding of the perspectives of people from other cultures • promote involvement with different communities, where relevant • provide access to varied sources of information • foster curiosity, a lifelong interest and enjoyment in language learning. <p>Objectives:</p> <p>Define what the student will be able to accomplish as a result of studying the subject.</p> <p>At the end of the course students should be able to:</p> <ul style="list-style-type: none"> • communicate information, ideas and opinions • demonstrate comprehension of specific factual information and attitudes, expressed in spoken and written contexts • identify main ideas and supporting details and draw conclusions from spoken and written texts • understand and appropriately use structures and vocabulary • request and provide information in both spoken and written contexts • engage actively in oral production using comprehensible pronunciation and intonation • take part in formal and informal communications.

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Students hone in on their personal **approaches to learning** as they discover the ways in which they learn a second language best. They will learn their place within **communities**, and volunteer their **services** while making connections between their local home/school environments, and linguistically diverse communities. Students will investigate a range of **health and social educational** issues within the linguistically diverse world studied and their own, the complex interrelationships among home, classroom, and global **environments**, and how **human ingenuity** has influenced the way these communities think, interact, and find solutions to local and global issues.

Unit Title	Enduring Understandings	Area of Interaction	Essential & Content Questions
Capítulo 3 <u>Los pasatiempos</u> Sports and leisure activities	Sports and activities help establish physical and mental well-being and personal balance.	Health & Social Education <ul style="list-style-type: none"> Discussing the origins of leisure time Exploring the vast and rich array of possible pastimes as they exist across cultures and time Affirming the essential nature of making good choices about free time activities and their impact on our mental and physical health Environment: <ul style="list-style-type: none"> Connecting outdoor activities with environmental stewardship 	How are extra-curricular activities important to enriching your life?
Capítulo 4 <u>¿Qué prefieres comer?</u> Food	Expression of culture through food.	Health and Social Education: <ul style="list-style-type: none"> Studying a range of materials concerning health issues Comparing/contrasting health issues in different cultures 	How does food from different countries enrich our own culture?
Capítulo 5 <u>¿Cómo es tu familia?</u> Family	Systems and structures in family and extended family.	Community and Service: <ul style="list-style-type: none"> How can my education help my community? How does family serve as my community Human Ingenuity: <ul style="list-style-type: none"> Can I create a family tree? 	What role does your family play in your life?

IV. Texts and Resources

Paso a Paso / Spanish
 Nuevas Vistas / Spanish
studyspanish.com
quia.com
unitedstreaming.com

V. Methodology

The course utilizes several methodologies including, but not limited to: project-based learning, collaborative teams, teacher-led inquiry, web and internet based learning modules direct instruction and independent study. Students may have opportunities to utilize one or all of the following to extend their learning by the walls of Lincoln: skype, epals, blogs, wikis, and blackboard.

VI. Methods of Assessment

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Foreign Language. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress:

MYP Language B– Grade 8

MYP Level 3

I. Course Description:

Lincoln IB World Middle School has offered a balanced literacy approach in the teaching of language B in the MYP, integrating its curriculum with the use of appropriate technology to provide instruction that will enable students to effectively communicate using the language points taught, as well as the social conditions to certain situations, while noting the differences among linguistically diverse worlds. This course guides students towards mastery of thinking skills enclosed in any cultural learning activity. Students’ background knowledge and ethnic home environments vary, making our classrooms diverse and multicultural. Students will work cooperatively through logical reasoning and problem solving activities simulating real life conditions. The course hopes to instill in students an appreciation of languages and cultural communities other than their own, and an ongoing interest in the acquisition and development of an additional language.

II. Colorado Model Content Standards and MYP Aims and Objectives

STATE / DISTRICT CONTENT STANDARDS: (Novice-Mid)	MYP AIMS & OBJECTIVES:
<p>1. Communication in Languages Other Than English</p> <ol style="list-style-type: none"> 1. Participate in basic conversations (written or oral) on a variety of familiar and predictable topics using isolated words and learned phrases (interpersonal mode) 2. Comprehend short learned exchanges (written or oral) on learned topics that use learned vocabulary and grammatical structures (interpretive mode) 3. Present using learned and simple phrases or expressions (written or oral) on very familiar topics (presentational mode) <p>2. Knowledge and Understanding of Other Cultures</p> <ol style="list-style-type: none"> 1. Reproduce common practices of the cultures studied 2. Describe familiar products of the cultures studied <p>3. Connections with Other Disciplines and Information Acquisition</p> <ol style="list-style-type: none"> 1. Summarize information gathered from target language resources connected to other content areas 2. Organize information acquired from authentic resources <p>4. Comparisons to Develop Insight into the Nature of Language and Culture</p> <ol style="list-style-type: none"> 1. Expand knowledge of similarities and differences of basic structural patterns of language through comparisons of the student’s own language and the language studied 2. Investigate the nature of culture through comparisons of the target culture(s) and the student’s own culture and how the two 	<p>Aims</p> <p>The aims of the teaching and study of modern foreign languages are to:</p> <ul style="list-style-type: none"> • enable the student to use language(s) effectively as a means of practical communication, providing a sound base of communication skills necessary for future study, work and leisure • enable the student to understand the nature of language and the process of total language learning, which comprises the integration of linguistic, cultural and social components • enable the student to develop an appreciation of a variety of literary and non-literary texts • offer insight into the cultural characteristics of the communities where the language(s) is (are) spoken • encourage an awareness and understanding of the perspectives of people from other cultures • promote involvement with different communities, where relevant • provide access to varied sources of information • foster curiosity, a lifelong interest and enjoyment in language learning. <p>Objectives:</p> <p>Define what the student will be able to accomplish as a result of studying the subject.</p> <p>At the end of the course students should be able to:</p> <ul style="list-style-type: none"> • communicate information, ideas and opinions • demonstrate comprehension of specific factual information and attitudes, expressed in spoken and written contexts • identify main ideas and supporting details and draw conclusions from spoken and written texts • understand and appropriately use structures and vocabulary • request and provide information in both spoken and written contexts • engage actively in oral production using comprehensible pronunciation and intonation • take part in formal and informal communications.

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Students hone in on their personal **approaches to learning** as they discover the ways in which they learn a second language best. They will learn their place within **communities**, and volunteer their **services** while making connections between their local home/school environments, and linguistically diverse communities. Students will investigate a range of **health and social educational** issues within the linguistically diverse world studied and their own, the complex interrelationships among home, classroom, and global **environments**, and how **human ingenuity** has influenced the way these communities think, interact, and find solutions to local and global issues.

Unit Title	Enduring Understandings	Area of Interaction	Essential & Content Questions
Capítulo 6 <u>¿Qué desea usted?</u> Clothing	Cultural expression through fashion --the variability of fashion. Cultural dependence of fashion. Ubiquity of fashion	Health & Social Education: <ul style="list-style-type: none"> Clothing as a basic need, as well as a cultural statement Human Ingenuity: <ul style="list-style-type: none"> Fashion as art 	<i>How do clothes play a role in ones' culture?</i>
Capítulo 7 <u>¿Adónde vas a ir de vacaciones?</u> Leisure and vacation time	Awareness of diversity and differences through travel	Environments: <ul style="list-style-type: none"> Experiencing new environments Eco-travel Community and Service: <ul style="list-style-type: none"> Service mission to Nicaragua Fund raising for the Nica trip 	<i>How can international travel enhance your understanding of other cultures?</i>
Capítulo 8 <u>¿Qué haces en tu casa?</u> Home	Structures -- All homes have structures. Architecture as cultural expression and scientific statement.	Environments: <ul style="list-style-type: none"> The home as our principle environment Human Ingenuity: <ul style="list-style-type: none"> Architecture and design 	<i>How does where I live effect how I live?</i>

IV. Texts and Resources

Paso a Paso / Spanish
Nuevas Vistas / Spanish
studyspanish.com
quia.com
unitedstreaming.com

V. Methodology

The course utilizes several methodologies including, but not limited to: project-based learning, collaborative teams, teacher-led inquiry, web and internet based learning modules direct instruction and independent study. Students may have opportunities to utilize one or all of the following to extend their learning by the walls of Lincoln: skype, epals, blogs, wikis, and blackboard.

VI. Methods of Assessment

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Foreign Language. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress:

MYP Physical Education – Grade 6

MYP Level 1

I. Course Description:

Physical education in the MYP is concerned with more than just participating in sports and games. Its primary aims are to encourage the development of “intelligent performers” and to encourage students to understand the importance of a balanced, healthy lifestyle. Throughout the five years of the MYP, students should develop knowledge, critical thinking and reflection skills, and a sense of responsibility, as well as interpersonal and self-motivational skills. This in turn should encourage choices that will contribute to long-term healthy living.

The learning and development associated with physical education should contribute to students developing the qualities of the IB learner profile and engaging with the fundamental concepts of the MYP—holistic learning, intercultural awareness and communication..

II. Colorado Model Content Standards and MYP Aims and Objectives

Colorado Model Content Standards:	MYP AIMS & OBJECTIVES:
<ol style="list-style-type: none"> 1. Movement Competence and Understanding <ul style="list-style-type: none"> • Demonstrate beginning strategies for a variety of games and sports • Participate in activities that require problem-solving, cooperation, skill assessment, and teambuilding • Use information from a variety of resources to improve performance 2. Physical and Personal Wellness <ul style="list-style-type: none"> • Set personal goals for improving health-related fitness • Demonstrate the ability to perform self-paced cardiovascular endurance activities • Identify opportunities in school and in the community for regular participation in physical activity to enhance physical fitness 3. Emotional and Social Wellness <ul style="list-style-type: none"> • Recognize diverse skill performance in others and how that diversity affects game, activity, and sport participation • Work cooperatively and productively in a group 4. Prevention and Risk Management <ul style="list-style-type: none"> • Demonstrate knowledge of safe practices in a physical activity setting 	<p>MYP Aims The aims of the teaching and study of MYP physical education are to encourage and enable students to develop:</p> <ul style="list-style-type: none"> • an appreciation and understanding of the value of physical education and its relationship to a healthy & balanced lifestyle. • an interest in the promotion of health and wellness • the motivation to participate fully in all aspects of physical education • their optimal level of physical fitness • effective communication strategies, verbal, non-verbal and written • the skills and understanding necessary to participate successfully in a variety of physical activities, for example, learning, practicing, refining, adapting, thinking, interacting • the ability to reflect critically on all aspects of physical education, including being a critical performer • an understanding of international perspectives on physical activity, sport and health education • a lifelong interest in and enjoyment of physical activities as a participant. <p>MYP PE Objectives:</p> <p>A. Use of knowledge</p> <ul style="list-style-type: none"> • use physical education terminology in context • demonstrate an understanding of concepts, strategies, techniques and rules related to a variety of physical activities, and apply them in various contexts • demonstrate an understanding of the various principles that contribute to fitness, and their importance in various contexts • use their knowledge to analyze situations and solve problems. <p>B Movement composition At the end of the course students should be able to:</p> <ul style="list-style-type: none"> • explore movement possibilities and variations in accordance with the principles of a particular aesthetic activity • compose aesthetic movements • link movements in order to compose aesthetic sequences, taking into account the concepts of space, time, level, force and flow. <p>C Performance</p> <ul style="list-style-type: none"> • demonstrate the skills and techniques necessary for active participation in a variety of physical activities

	<ul style="list-style-type: none"> • apply tactics, strategies and rules in both individual and group situations • perform movement concepts and sequences of movement in a variety of physical contexts. <p>D Social skills and personal engagement</p> <ul style="list-style-type: none"> • communicate effectively, including verbal and non-verbal forms of communication • demonstrate attitudes and strategies that enhance their relationships with others • show respect and sensitivity to their own and different cultures • take responsibility for their own learning process and demonstrate engagement with the activity • reflect critically upon their own achievements • set goals to enhance learning and take action towards achieving them.
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III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will learn about the processes and real world applications of science. It will also help them acquire 21st Century learning skills that can be used to tackle both general and subject-specific tasks.

Throughout the course, students will experience different *Areas of Interaction* which provide a lens for them to view the curriculum and encourage reflection on the area of study in that unit.

The Area of Interaction, *Approaches to Learning*, is integrated in all science units and provides students an opportunity for development of skills and attitudes necessary for learning. ATL skills should enable students to become competent in identifying, monitoring, and managing their own learning.

Unit	Concept/Enduring Understanding	Area of Interaction	Essential/Content Questions
Invasion Sports (Basketball, Hockey, Football, Lacrosse, Net ball, Soccer, Ultimate Frisbee)	Community & Teams: Students will understand that they are a part of a greater whole.	Health & Social Students can identify their role on their team and the roles that others play in their team.	How do you determine what everybody's role is on a team?
Net/Wall (Badminton, Pickle ball, Tennis, Volleyball, Handball, Racquetball, Squash)	Evaluation: Students will understand that they can use their knowledge of a skill to evaluate a result.	Approaches to Learning Students can learn what they are doing incorrectly based solely upon the result of their action	How can you predict the result of an action?
Fielding/Run Scoring (Baseball, Cricket, Kickball, Softball)	Modifications: Students will understand that every game can be modified to meet a specific goal	Human Ingenuity Students will discuss the similarities and differences among these games and how that makes each game unique	How can we modify these games to meet a desired outcome?
Target (Croquet, Billiards, Bowling, Golf)	Physics: Students will understand that angles and force play a large role in athletics.	Approaches to Learning Students will learn the relationship of mathematics and sport.	How can knowledge of angles and force help you in athletics?
Dance & Balance (Yoga, Pilates, Aerobics, Dance, etc.)	Innovation: Students will understand that technology can make self-monitoring easier.	Human Ingenuity Students will learn the relationship between technology and exercise	How can technology assist you with your exercise?

IV. Text and Resources

V. Methodology

The course utilizes several methodologies including, but not limited to: project-based learning, collaborative teams, teacher-led inquiry, web and internet based learning modules direct instruction and independent study. Students may have opportunities to utilize one or all of the following to extend their learning by the walls of Lincoln: skype, epals, blogs, wikis, and blackboard.

VI. Methods of Assessment

Students will be assessed on MYP Criteria for year 1 throughout each unit. To demonstrate their understanding students will have formative assessments such as quizzes, journal entries, and reflections. To assess students learning at the end of each unit there will be a culminating assessment linked to the identified MYP objectives and criteria for PE year 1 of the programme.

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Physical Education. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress:

MYP Physical Education – Grade 7

MYP Level 2

II. Course Description:

Physical education in the MYP is concerned with more than just participating in sports and games. Its primary aims are to encourage the development of “intelligent performers” and to encourage students to understand the importance of a balanced, healthy lifestyle. Throughout the five years of the MYP, students should develop knowledge, critical thinking and reflection skills, and a sense of responsibility, as well as interpersonal and self-motivational skills. This in turn should encourage choices that will contribute to long-term healthy living.

The learning and development associated with physical education should contribute to students developing the qualities of the IB learner profile and engaging with the fundamental concepts of the MYP—holistic learning, intercultural awareness and communication..

II. Colorado Model Content Standards and MYP Aims and Objectives

Colorado Model Content Standards:	MYP AIMS & OBJECTIVES:
<ol style="list-style-type: none"> 1. Movement Competence and Understanding <ul style="list-style-type: none"> • Combine the critical elements of movement and skills concepts 3. Emotional and Social Wellness <ul style="list-style-type: none"> • Develop strategies to communicate ideas and feelings • Demonstrate inclusiveness in and out of classroom settings 4. Prevention and Risk Management <ul style="list-style-type: none"> • Implement safety procedures in the utilization of space and equipment 	<p>MYP Aims The aims of the teaching and study of MYP physical education are to encourage and enable students to develop:</p> <ul style="list-style-type: none"> • an appreciation and understanding of the value of physical education and its relationship to a healthy & balanced lifestyle. • an interest in the promotion of health and wellness • the motivation to participate fully in all aspects of physical education • their optimal level of physical fitness • effective communication strategies, verbal, non-verbal and written • the skills and understanding necessary to participate successfully in a variety of physical activities, for example, learning, practicing, refining, adapting, thinking, interacting • the ability to reflect critically on all aspects of physical education, including being a critical performer • an understanding of international perspectives on physical activity, sport and health education • a lifelong interest in and enjoyment of physical activities as a participant. <p>MYP PE Objectives:</p> <p>A. Use of knowledge</p> <ul style="list-style-type: none"> • use physical education terminology in context • demonstrate an understanding of concepts, strategies, techniques and rules related to a variety of physical activities, and apply them in various contexts • demonstrate an understanding of the various principles that contribute to fitness, and their importance in various contexts • use their knowledge to analyze situations and solve problems. <p>B Movement composition At the end of the course students should be able to:</p> <ul style="list-style-type: none"> • explore movement possibilities and variations in accordance with the principles of a particular aesthetic activity • compose aesthetic movements • link movements in order to compose aesthetic sequences, taking into account the concepts of space, time, level, force and flow. <p>C Performance</p> <ul style="list-style-type: none"> • demonstrate the skills and techniques necessary for active

	<p>participation in a variety of physical activities</p> <ul style="list-style-type: none"> • apply tactics, strategies and rules in both individual and group situations • perform movement concepts and sequences of movement in a variety of physical contexts. <p>D Social skills and personal engagement</p> <ul style="list-style-type: none"> • communicate effectively, including verbal and non-verbal forms of communication • demonstrate attitudes and strategies that enhance their relationships with others • show respect and sensitivity to their own and different cultures • take responsibility for their own learning process and demonstrate engagement with the activity • reflect critically upon their own achievements • set goals to enhance learning and take action towards achieving them.
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III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will learn about the processes and real world applications of science. It will also help them acquire 21st Century learning skills that can be used to tackle both general and subject-specific tasks.

Throughout the course, students will experience different *Areas of Interaction* which provide a lens for them to view the curriculum and encourage reflection on the area of study in that unit.

The Area of Interaction, *Approaches to Learning*, is integrated in all science units and provides students an opportunity for development of skills and attitudes necessary for learning. ATL skills should enable students to become competent in identifying, monitoring, and managing their own learning.

Unit	Concept/Enduring Understanding	Area of Interaction	Essential/Content Questions
Invasion Sports (Basketball, Hockey, Football, Lacrosse, Net ball, Soccer, Ultimate Frisbee)	<u>Cooperation</u> Students begin to learn how to work together. Students learn that working as a team is an important life skill.	<u>Approaches to Learning</u> Learning how to solve problems through physical activity and group work. <u>Health and Social Education</u> Promoting fair play and respect for others through physical activity	How can one communicate with teammates (verbally & non-verbally) to ensure that everyone feels like a valued part of a team?
Net/Wall (Badminton, Pickle ball, Tennis, Volleyball, Handball, Racquetball, Squash)	<u>Correlation</u> Students will make connections including knowledge, understanding and skills across other sports.	<u>Approaches to Learning</u> Learning the skills and techniques necessary to lead a healthy lifestyle.	When would it be most effective to learn a skill in parts?
Fielding/Run Scoring (Baseball, Cricket, Kickball, Softball)	<u>Culture & Connections</u> Compare and show respect and sensitivity to their own and different cultures. Research how your physical fitness compares to peers from other countries around the world.	<u>Environment</u> Comparing/contrasting different sports in relation to different cultures	What role do sports play in different cultures?
Target (Croquet, Billiards, Bowling, Golf)	<u>Community(ies)</u> Taking responsibility for one's own health is an essential step toward developing and maintaining a healthy, active lifestyle.	<u>Community Service</u> a. Exploring community health/fitness and taking responsibility for one's own health. b. Individuals discuss with friends and family the physical fitness activities that can be done in society and the family. Individuals participate in activities such as social dances that require integration of skills and knowledge and their social life.	Why is it important to be active and participate in community activities?

Dance & Balance (Yoga, Pilates, Aerobics, Dance, etc.)	<u>Connections</u> Students will investigate differences between males and females regarding dance, rules and other issues. <u>Creativity</u> Students will create a dance.	<u>Human Ingenuity</u> Investigating the impact of gender roles in dance	What role does gender play in the creation of a dance and the role of dance partners?
5 Components of Fitness (Cardiovascular, Muscle Strength, Muscle Endurance, Flexibility, & Body Composition)	<u>Reflection</u> Students will investigate why related fitness is interrelated with nutrition and other person health habits.	<u>Health and Social</u> Students will reflect on how physical education can directly and indirectly influence wellness	Why is nutrition important and what does it have to do with your fitness?

IV. Text and Resources

V. Methodology

The course utilizes several methodologies including, but not limited to: project-based learning, collaborative teams, teacher-led inquiry, web and internet based learning modules direct instruction and independent study. Students may have opportunities to utilize one or all of the following to extend their learning by the walls of Lincoln: skype, epals, blogs, wikis, and blackboard.

VI. Methods of Assessment

Students will be assessed on MYP Criteria for year 2 throughout each unit. To demonstrate their understanding students will have formative assessments such as quizzes, journal entries, and reflections. To assess students learning at the end of each unit there will be a culminating assessment linked to the identified MYP objectives and criteria for PE year 2 of the programme.

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Physical Education. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress:

MYP Physical Education – Grade 8

MYP Level 3

III. Course Description:

Physical education in the MYP is concerned with more than just participating in sports and games. Its primary aims are to encourage the development of “intelligent performers” and to encourage students to understand the importance of a balanced, healthy lifestyle. Throughout the five years of the MYP, students should develop knowledge, critical thinking and reflection skills, and a sense of responsibility, as well as interpersonal and self-motivational skills. This in turn should encourage choices that will contribute to long-term healthy living.

The learning and development associated with physical education should contribute to students developing the qualities of the IB learner profile and engaging with the fundamental concepts of the MYP—holistic learning, intercultural awareness and communication..

II. Colorado Model Content Standards and MYP Aims and Objectives

Colorado Model Content Standards:	MYP AIMS & OBJECTIVES:
<p>1. Movement Competence and Understanding</p> <ul style="list-style-type: none"> • Demonstrate knowledge of principles and concepts for effective rhythmic motor development • Understand and apply game strategies to physical activities and sports <p>2. Physical and Personal Wellness</p> <ul style="list-style-type: none"> • Identify the personal, physiological, and fitness benefits of participating in a variety of physical activities • Identify preferences for lifetime physical activity • Determine one's responsibility for developing skills, acquiring knowledge, and achieving fitness 	<p>MYP Aims The aims of the teaching and study of MYP physical education are to encourage and enable students to develop:</p> <ul style="list-style-type: none"> • an appreciation and understanding of the value of physical education and its relationship to a healthy & balanced lifestyle. • an interest in the promotion of health and wellness • the motivation to participate fully in all aspects of physical education • their optimal level of physical fitness • effective communication strategies, verbal, non-verbal and written • the skills and understanding necessary to participate successfully in a variety of physical activities, for example, learning, practicing, refining, adapting, thinking, interacting • the ability to reflect critically on all aspects of physical education, including being a critical performer • an understanding of international perspectives on physical activity, sport and health education • a lifelong interest in and enjoyment of physical activities as a participant. <p>MYP PE Objectives:</p> <p>A. Use of knowledge</p> <ul style="list-style-type: none"> • use physical education terminology in context • demonstrate an understanding of concepts, strategies, techniques and rules related to a variety of physical activities, and apply them in various contexts • demonstrate an understanding of the various principles that contribute to fitness, and their importance in various contexts • use their knowledge to analyze situations and solve problems. <p>B Movement composition At the end of the course students should be able to:</p> <ul style="list-style-type: none"> • explore movement possibilities and variations in accordance with the principles of a particular aesthetic activity • compose aesthetic movements • link movements in order to compose aesthetic sequences, taking into account the concepts of space, time, level, force and flow. <p>C Performance</p>

	<ul style="list-style-type: none"> • demonstrate the skills and techniques necessary for active participation in a variety of physical activities • apply tactics, strategies and rules in both individual and group situations • perform movement concepts and sequences of movement in a variety of physical contexts. <p>D Social skills and personal engagement</p> <ul style="list-style-type: none"> • communicate effectively, including verbal and non-verbal forms of communication • demonstrate attitudes and strategies that enhance their relationships with others • show respect and sensitivity to their own and different cultures • take responsibility for their own learning process and demonstrate engagement with the activity • reflect critically upon their own achievements • set goals to enhance learning and take action towards achieving them.
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III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will learn about the processes and real world applications of science. It will also help them acquire 21st Century learning skills that can be used to tackle both general and subject-specific tasks.

Throughout the course, students will experience different *Areas of Interaction* which provide a lens for them to view the curriculum and encourage reflection on the area of study in that unit.

The Area of Interaction, *Approaches to Learning*, is integrated in all science units and provides students an opportunity for development of skills and attitudes necessary for learning. ATL skills should enable students to become competent in identifying, monitoring, and managing their own learning.

Unit	Concept/Enduring Understanding	Area of Interaction	Essential/Content Questions
Invasion Sports (Basketball, Hockey, Football, Lacrosse, Net ball, Soccer, Ultimate Frisbee)	Collaboration Students learn that teamwork is vital to success.	Approaches to Learning Awareness & understanding of working well with others -- Learning how to solve problems during group work. Community Service Reflection on your responsibilities in the community including using personal strengths to enhance community & identifying personal strengths & limitations -- Peer coaching teammates during games.	How can your teammates help or hinder you?
Net/Wall (Badminton, Pickle ball, Tennis, Volleyball, Handball, Racquetball, Squash)	Strategy Students will learn that different strategies might work for different people.	Environment Awareness & understanding of the effects of our actions, attitudes, beliefs and creations.-- Adapting your strategy to different environments. Human Ingenuity Awareness & understanding of the word ingenious -- Use ingenuity to figure out which strategy best matches your skill set.	To what extent does strategy influence performance?
Fielding/Run Scoring (Baseball, Cricket, Kickball, Softball)	Preparedness Students will learn that being prepared increases the likelihood of good decision-making.	Approaches to Learning Awareness & understanding of how to approach tasks, managing time & materials -- Students will learn how to plan for different scenarios.	What is the relationship between being prepared and decision making?
Target (Croquet, Billiards,	Social Health Students will learn that sports and	Health and Social Education Awareness & understanding of ourselves in the	What roles do physical activity and games

Bowling, Golf)	other social activities play an important role in their social health	wider society -- Students will learn how sports and physical activity interact with society	play in our society?
Dance & Balance (Yoga, Pilates, Aerobics, Dance, etc.)	Physical Health Students will learn about the impact that their health and lifestyle choices have on themselves and society at large.	Health and Social Education Awareness & understanding of looking after ourselves -- Students analyze the importance of taking care of oneself as well as the consequences of their choices.	Why is it important to live a healthy lifestyle?
5 Components of Fitness (Cardiovascular, Muscle Strength, Muscle Endurance, Flexibility, & Body Composition)	Students will learn that all 5 components of physical health are important.	Health and Social Education <ul style="list-style-type: none"> Developing an understanding of the effects that exercise has on the body and mind 	How can physical fitness benefit you in other areas of your life?

IV. Text and Resources

V. Methodology

The course utilizes several methodologies including, but not limited to: project-based learning, collaborative teams, teacher-led inquiry, web and internet based learning modules direct instruction and independent study. Students may have opportunities to utilize one or all of the following to extend their learning by the walls of Lincoln: skype, epals, blogs, wikis, and blackboard.

VI. Methods of Assessment

Students will be assessed on MYP Criteria for year 3 throughout each unit. To demonstrate their understanding students will have formative assessments such as quizzes, journal entries, and reflections. To assess students learning at the end of each unit there will be a culminating assessment linked to the identified MYP objectives and criteria for PE year 3 of the programme.

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Physical Education. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress.

MYP Visual Arts – Grade 6

MYP Level 1

IV. Course Description:

The arts are a universal form of human expression and a unique way of knowing that engage us in affective, imaginative and productive activity. Learning through the arts helps us to explore, shape and communicate our sense of identity and understanding of the world, while providing opportunities to develop self-confidence, resilience and adaptability.

In the MYP, the arts should challenge students to consider authentic issues and develop their skills beyond superficiality and imitation. Students are provided with opportunities to function as artists, as well as learners of the arts. To be an artist one has to be curious, and by developing curiosity about themselves, others and the world, students become effective learners, inquirers and creative problem solvers. In the MYP, students are guided to create, perform and present art in ways that engage and convey their own feelings, experiences and ideas. The IB learner profile should infuse teaching and learning in the arts.

Involvement with the arts can contribute to an inquiring and empathetic world view, stimulate imaginations, challenge perceptions, develop thinking and analytical skills, enrich emotional, cultural and spiritual lives, uplift and entertain: this is the goal of MYP arts.

II. Colorado Model Content Standards and MYP Aims and Objectives

MYP AIMS & OBJECTIVES:
<p>Aims:</p> <p>The aims of the teaching and study of MYP arts are for students to:</p> <ul style="list-style-type: none">• understand how the arts play a role in developing and expressing personal and cultural identities• appreciate how the arts innovate and communicate across time and culture• become informed and reflective practitioners of the arts• experience the process of making art in a variety of situations• explore, express and communicate ideas• become more effective learners, inquirers and thinkers• develop self-confidence and self-awareness through art experiences• appreciate lifelong learning in and enjoyment of the arts. <p>Objectives:</p> <p>A Knowledge and understanding</p> <p>Building knowledge and understanding of both the art form and artistic processes. It should inform the student's practice as a young artist and allow him or her to appraise other artworks. At the end of the course, students should be able to:</p> <ul style="list-style-type: none">• demonstrate knowledge and understanding of the art form studied in relation to societal, cultural, historical and personal contexts• demonstrate knowledge and understanding of the elements of the art form studied, including specialized language, concepts and processes• communicate a critical understanding of the art form studied in the context of their own artwork. <p>B Application</p> <p>Practical application of the student's skills to the creation of artwork. The student should investigate and experiment with his or her artistic processes through the planning, creation, performance and presentation of artwork, developing an initial idea or theme to a point of realization. At the end of the course, students should be able to:</p> <ul style="list-style-type: none">• develop an idea, theme or personal interpretation to a point of realization, expressing and communicating their artistic intentions• apply skills, techniques and processes to create, perform and/or present art. <p>C. Reflection and evaluation</p> <p>Focuses on the way that a student gradually comes to feel and think like an artist. Reflecting critically requires the student to question and justify the choices that he or she has made and to develop an objective evaluation of his or her own work.</p>

The student should show a growing insight into his or her own artistic development. The student is encouraged to seek feedback from others and to consider how this feedback might inform his or her work as it develops. At the end of the course, students should be able to:

- reflect critically on their own artistic development and processes at different stages of their work
- evaluate their work
- use feedback to inform their own artistic development and processes.

D. Personal engagement

Development of the attitudes essential to engage with the artistic processes and the art form studied. The student should develop the personal and interpersonal skills that will enable him or her to initiate, to explore, to negotiate with others and to take informed risks during his or her artistic experience. The student should develop his or her ability to interact with other students in a supportive and sensitive way. It is also anticipated that students will become increasingly mindful of their own and other cultures and use their experiences to advance their artistic development. At the end of the course, students should be able to:

- show commitment in using their own artistic processes
- demonstrate curiosity, self-motivation, initiative and a willingness to take informed risks
- support, encourage and work with their peers in a positive way
- be receptive to art practices and artworks from various cultures, including their own.

Colorado Visual Arts Standards

1. Observe and Learn to **Comprehend**
 1. The characteristics and expressive features of art and design are used in unique ways to respond to two- and three-dimensional art
 2. Art created across time and cultures can exhibit stylistic differences and commonalities
 3. Specific art vocabulary is used to describe, analyze, and interpret works of art
2. Envision and Critique to **Reflect**
 1. Visual symbols and metaphors can be used to create visual expression
 2. Key concepts, issues, and themes connect the visual arts to other disciplines such as the humanities, sciences, mathematics, social studies, and technology
3. Invent and Discover to **Create**
 1. Plan the creation of a work of art
 2. Explore various media, materials, and techniques used to create works of art
 3. Utilize current, available technology to refine ideas in works of art
4. Relate and Connect to **Transfer**
 1. Critical thinking in the arts transfers to multiple lifelong endeavors
 2. Visual arts impact community, cultural traditions, and events
 3. Eco-art is a contemporary response to environmental issues

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will learn about the processes and real world applications of science. It will also help them acquire 21st Century learning skills that can be used to tackle both general and subject-specific tasks.

Throughout the course, students will experience different *Areas of Interaction* which provide a lens for them to view the curriculum and encourage reflection on the area of study in that unit.

The Area of Interaction, *Approaches to Learning*, is integrated in all science units and provides students an opportunity for development of skills and attitudes necessary for learning. ATL skills should enable students to become competent in identifying, monitoring, and managing their own learning.

Unit	Concept/Enduring Understanding	Area of Interaction	Essential/Content Questions
Developing our Thinking	Processes: Organizing thinking through the artistic process and it's connections to learning, both comprehension and application	Human Ingenuity Awareness and Understanding of: <ul style="list-style-type: none"> • Artistic Process/ Design Cycle Approaches to Learning Awareness and Understanding of: <ul style="list-style-type: none"> • How to use the Design Cycle as a learning tool 	Why is it important to record our thinking?

		Health and Social Awareness and Understanding of: <ul style="list-style-type: none"> Relationship between IB Traits and Design Cycle Reflection on: <ul style="list-style-type: none"> Personal strengths and how they relate to the artistic process 	
Design with Line	Diversity and Balance: Using variety to create unity.	Human Ingenuity Awareness and Understanding of: <ul style="list-style-type: none"> Range of solutions Artistic Process Reflection on: <ul style="list-style-type: none"> Variety of design solutions Taking Action to: <ul style="list-style-type: none"> Create a unique solution Apply thinking to other contexts 	How can we use diversity to encourage and/or create unity?
Drawing from Nature	Perspective: Understanding that there are multiple ways to see the same thing.	Human Ingenuity Awareness and Understanding of: <ul style="list-style-type: none"> Innovations that use observation or imagination or both Artistic Process Reflection on: <ul style="list-style-type: none"> Impact of da Vinci's work Ways of thinking Taking Action to: <ul style="list-style-type: none"> Apply knowledge of observation and imagination to the artistic process Environment Awareness and Understanding of: <ul style="list-style-type: none"> The role environment can play in artistic inspiration 	How can the skills of observation and imagination help understand my environment?

IV. Text and Resources

V. Methodology

The course utilizes several methodologies including, but not limited to: project-based learning, collaborative teams, teacher-led inquiry, web and internet based learning modules direct instruction and independent study. Students may have opportunities to utilize one or all of the following to extend their learning by the walls of Lincoln: skype, epals, blogs, wikis, and blackboard.

VI. Methods of Assessment

Students will be assessed on MYP Criteria for year 1 throughout each unit. To demonstrate their understanding students will have formative assessments such as quizzes, journal entries, and reflections. To assess students learning at the end of each unit there will be a culminating assessment linked to the identified MYP objectives and criteria for the Arts in year 1 of the programme and the Design Cycle.

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Arts. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress.

MYP Visual Arts – Grade 7

MYP Level 2

V. Course Description:

The arts are a universal form of human expression and a unique way of knowing that engage us in affective, imaginative and productive activity. Learning through the arts helps us to explore, shape and communicate our sense of identity and understanding of the world, while providing opportunities to develop self-confidence, resilience and adaptability.

In the MYP, the arts should challenge students to consider authentic issues and develop their skills beyond superficiality and imitation. Students are provided with opportunities to function as artists, as well as learners of the arts. To be an artist one has to be curious, and by developing curiosity about themselves, others and the world, students become effective learners, inquirers and creative problem solvers. In the MYP, students are guided to create, perform and present art in ways that engage and convey their own feelings, experiences and ideas. The IB learner profile should infuse teaching and learning in the arts.

Involvement with the arts can contribute to an inquiring and empathetic world view, stimulate imaginations, challenge perceptions, develop thinking and analytical skills, enrich emotional, cultural and spiritual lives, uplift and entertain: this is the goal of MYP arts.

II. Colorado Model Content Standards and MYP Aims and Objectives

MYP AIMS & OBJECTIVES:
<p>Aims: The aims of the teaching and study of MYP arts are for students to:</p> <ul style="list-style-type: none"> • understand how the arts play a role in developing and expressing personal and cultural identities • appreciate how the arts innovate and communicate across time and culture • become informed and reflective practitioners of the arts • experience the process of making art in a variety of situations • explore, express and communicate ideas • become more effective learners, inquirers and thinkers • develop self-confidence and self-awareness through art experiences • appreciate lifelong learning in and enjoyment of the arts. <p>Objectives:</p> <p>A Knowledge and understanding Building knowledge and understanding of both the art form and artistic processes. It should inform the student's practice as a young artist and allow him or her to appraise other artworks. At the end of the course, students should be able to:</p> <ul style="list-style-type: none"> • demonstrate knowledge and understanding of the art form studied in relation to societal, cultural, historical and personal contexts • demonstrate knowledge and understanding of the elements of the art form studied, including specialized language, concepts and processes • communicate a critical understanding of the art form studied in the context of their own artwork. <p>B Application Practical application of the student's skills to the creation of artwork. The student should investigate and experiment with his or her artistic processes through the planning, creation, performance and presentation of artwork, developing an initial idea or theme to a point of realization. At the end of the course, students should be able to:</p> <ul style="list-style-type: none"> • develop an idea, theme or personal interpretation to a point of realization, expressing and communicating their artistic intentions • apply skills, techniques and processes to create, perform and/or present art. <p>C. Reflection and evaluation Focuses on the way that a student gradually comes to feel and think like an artist. Reflecting critically requires the student</p>

to question and justify the choices that he or she has made and to develop an objective evaluation of his or her own work. The student should show a growing insight into his or her own artistic development. The student is encouraged to seek feedback from others and to consider how this feedback might inform his or her work as it develops. At the end of the course, students should be able to:

- reflect critically on their own artistic development and processes at different stages of their work
- evaluate their work
- use feedback to inform their own artistic development and processes.

D. Personal engagement

Development of the attitudes essential to engage with the artistic processes and the art form studied. The student should develop the personal and interpersonal skills that will enable him or her to initiate, to explore, to negotiate with others and to take informed risks during his or her artistic experience. The student should develop his or her ability to interact with other students in a supportive and sensitive way. It is also anticipated that students will become increasingly mindful of their own and other cultures and use their experiences to advance their artistic development. At the end of the course, students should be able to:

- show commitment in using their own artistic processes
- demonstrate curiosity, self-motivation, initiative and a willingness to take informed risks
- support, encourage and work with their peers in a positive way
- be receptive to art practices and artworks from various cultures, including their own.

Colorado Visual Arts Standards

1. Observe and Learn to **Comprehend**
 4. The characteristics and expressive features of art and design are used in analyzing and synthesizing the meaning in works of art
 5. Understanding works of art involves knowledge of historical and cultural styles, genre, and artists over time
 6. Knowledge of art vocabulary is important when critically analyzing works of arts
2. Envision and Critique to **Reflect**
 3. Visual literacy skills are used to create meaning from a variety of information
 4. Concepts, issues, and themes in the visual arts can be used to communicate ideas in various other disciplines
3. Invent and Discover to **Create**
 4. Achieve the ability to plan, anticipate outcomes, and demonstrate craftsmanship in creating a work of art
 5. Restructure and apply the technical skills and processes required to achieve desired results in producing works of art
 6. Use of various media, materials, and tools to express specific meaning in works of art
 7. Utilize current, available technology as a primary medium to create original works of art
4. Relate and Connect to **Transfer**
 4. Critical thinking in the arts transfers to multiple uses in life
 5. The visual arts community messages its cultural traditions and events
 6. Art and design strategies can solve environmental problems

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will learn about the processes and real world applications of science. It will also help them acquire 21st Century learning skills that can be used to tackle both general and subject-specific tasks. Throughout the course, students will experience different *Areas of Interaction* which provide a lens for them to view the curriculum and encourage reflection on the area of study in that unit.

The Area of Interaction, *Approaches to Learning*, is integrated in all art units and provides students an opportunity for development of skills and attitudes necessary for learning. ATL skills should enable students to become competent in identifying, monitoring, and managing their own learning.

Unit	Concept/Enduring Understanding	Area of Interaction	Essential/Content Questions
Developing our Thinking	Processes: Organizing thinking through the	Human Ingenuity Awareness and Understanding of:	Why is it important to record our

	artistic process and it's connections to learning, both comprehension and application	<ul style="list-style-type: none"> • Artistic Process/ Design Cycle Approaches to Learning Awareness and Understanding of: <ul style="list-style-type: none"> • How to use the Design Cycle as a learning tool Health and Social Awareness and Understanding of: <ul style="list-style-type: none"> • Relationship between Areas of Interaction and Design Cycle Reflection on: <ul style="list-style-type: none"> • Personal strengths and how they relate to the artistic process 	thinking?
Logo Designs	Creation and Invention: Developing and following through with an idea from start to finish, considering the multiple aspects of graphic design	Human Ingenuity Awareness and Understanding of: <ul style="list-style-type: none"> • Range of solutions • Artistic Process Reflection on: <ul style="list-style-type: none"> • Variety of design solutions Taking Action to: <ul style="list-style-type: none"> • Create a unique solution • Apply thinking to other contexts Health and Social Awareness and Understanding of: <ul style="list-style-type: none"> • Relationship between Symbol and Logo Reflection on: <ul style="list-style-type: none"> • Branding, logo design and self-concept 	How is using an image to communicate an idea different from using just text?
Mini Museum	Connections: Using art from the past to help us understand our culture.	Human Ingenuity Awareness and Understanding of: <ul style="list-style-type: none"> • Range of solutions • Artistic Process Reflection on: <ul style="list-style-type: none"> • Variety of design solutions Taking Action to: <ul style="list-style-type: none"> • Create a unique solution • Apply thinking to other contexts Community and Service Awareness and Understanding of: <ul style="list-style-type: none"> • Role of art in a community Reflection on: <ul style="list-style-type: none"> • How art helps us understand culture and creates community Environment Reflection on: <ul style="list-style-type: none"> • Art as it interacts with an environment 	How does studying the past influence the present?

IV. Text and Resources

V. Methodology

The course utilizes several methodologies including, but not limited to: project-based learning, collaborative teams, teacher-led inquiry, web and internet based learning modules direct instruction and independent study. Students may have opportunities to utilize one or all of the following to extend their learning by the walls of Lincoln: skype, epals, blogs, wikis, and blackboard.

VI. Methods of Assessment

Students will be assessed on MYP Criteria for year 2 throughout each unit. To demonstrate their understanding students will have formative assessments such as quizzes, journal entries, and reflections. To assess students learning at the end

of each unit there will be a culminating assessment linked to the identified MYP objectives and criteria for the Arts in year 2 of the programme and the Design Cycle.

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Arts. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress

MYP Visual Arts – Grade 8

MYP Level 3

VI. Course Description:

The arts are a universal form of human expression and a unique way of knowing that engage us in affective, imaginative and productive activity. Learning through the arts helps us to explore, shape and communicate our sense of identity and understanding of the world, while providing opportunities to develop self-confidence, resilience and adaptability.

In the MYP, the arts should challenge students to consider authentic issues and develop their skills beyond superficiality and imitation. Students are provided with opportunities to function as artists, as well as learners of the arts. To be an artist one has to be curious, and by developing curiosity about themselves, others and the world, students become effective learners, inquirers and creative problem solvers. In the MYP, students are guided to create, perform and present art in ways that engage and convey their own feelings, experiences and ideas. The IB learner profile should infuse teaching and learning in the arts.

Involvement with the arts can contribute to an inquiring and empathetic world view, stimulate imaginations, challenge perceptions, develop thinking and analytical skills, enrich emotional, cultural and spiritual lives, uplift and entertain: this is the goal of MYP arts.

II. Colorado Model Content Standards and MYP Aims and Objectives

MYP AIMS & OBJECTIVES:
<p>Aims:</p> <p>The aims of the teaching and study of MYP arts are for students to:</p> <ul style="list-style-type: none">• understand how the arts play a role in developing and expressing personal and cultural identities• appreciate how the arts innovate and communicate across time and culture• become informed and reflective practitioners of the arts• experience the process of making art in a variety of situations• explore, express and communicate ideas• become more effective learners, inquirers and thinkers• develop self-confidence and self-awareness through art experiences• appreciate lifelong learning in and enjoyment of the arts. <p>Objectives:</p> <p>A Knowledge and understanding</p> <p>Building knowledge and understanding of both the art form and artistic processes. It should inform the student's practice as a young artist and allow him or her to appraise other artworks. At the end of the course, students should be able to:</p> <ul style="list-style-type: none">• demonstrate knowledge and understanding of the art form studied in relation to societal, cultural, historical and personal contexts• demonstrate knowledge and understanding of the elements of the art form studied, including specialized language, concepts and processes• communicate a critical understanding of the art form studied in the context of their own artwork. <p>B Application</p> <p>Practical application of the student's skills to the creation of artwork. The student should investigate and experiment with his or her artistic processes through the planning, creation, performance and presentation of artwork, developing an initial idea or theme to a point of realization. At the end of the course, students should be able to:</p> <ul style="list-style-type: none">• develop an idea, theme or personal interpretation to a point of realization, expressing and communicating their artistic intentions• apply skills, techniques and processes to create, perform and/or present art. <p>C. Reflection and evaluation</p> <p>Focuses on the way that a student gradually comes to feel and think like an artist. Reflecting critically requires the student to question and justify the choices that he or she has made and to develop an objective evaluation of his or her own work. The student should show a growing insight into his or her own artistic development. The student is encouraged to seek</p>

feedback from others and to consider how this feedback might inform his or her work as it develops. At the end of the course, students should be able to:

- reflect critically on their own artistic development and processes at different stages of their work
- evaluate their work
- use feedback to inform their own artistic development and processes.

D. Personal engagement

Development of the attitudes essential to engage with the artistic processes and the art form studied. The student should develop the personal and interpersonal skills that will enable him or her to initiate, to explore, to negotiate with others and to take informed risks during his or her artistic experience. The student should develop his or her ability to interact with other students in a supportive and sensitive way. It is also anticipated that students will become increasingly mindful of their own and other cultures and use their experiences to advance their artistic development. At the end of the course, students should be able to:

- show commitment in using their own artistic processes
- demonstrate curiosity, self-motivation, initiative and a willingness to take informed risks
- support, encourage and work with their peers in a positive way
- be receptive to art practices and artworks from various cultures, including their own.

Colorado Visual Arts Standards

1. Observe and Learn to **Comprehend**
 7. Conceptual art theories explain how works of art are created
 8. The history of art, world cultures, and artistic styles influence contemporary art concerns
 9. Art criticism strategies are used to analyze, interpret, and make informed judgments about works of art
2. Envision and Critique to **Reflect**
 5. Visual literacy skills help to establish personal meaning and artistic intent in works of art
 6. Key concepts, issues, and themes in the visual arts can solve problems using real-world applications
3. Invent and Discover to **Create**
 8. Achieve artistic purpose to communicate intent
 9. Demonstrate technical proficiency and craftsmanship when planning
 10. Utilize current and available technology to refine an idea, and create original and imaginative works of art
4. Relate and Connect to **Transfer**
 7. Visual arts are valuable for a variety of art and non-art related lifelong endeavors
 8. Cultural traditions and events impact visual arts within a community
 9. Visual arts provide an opportunity to explore sustainable environments, design and architecture

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will learn about the processes and real world applications of science. It will also help them acquire 21st Century learning skills that can be used to tackle both general and subject-specific tasks.

Throughout the course, students will experience different *Areas of Interaction* which provide a lens for them to view the curriculum and encourage reflection on the area of study in that unit.

The Area of Interaction, *Approaches to Learning*, is integrated in all art units and provides students an opportunity for development of skills and attitudes necessary for learning. ATL skills should enable students to become competent in identifying, monitoring, and managing their own learning.

Unit	Concept/Enduring Understanding	Area of Interaction	Essential/Content Questions
Developmental Workbooks	Processes: Organizing thinking through the artistic process and it's connections to learning, both comprehension and application	Human Ingenuity Awareness and Understanding of: <ul style="list-style-type: none"> • Artistic Process/ Design Cycle Approaches to Learning Awareness and Understanding of: <ul style="list-style-type: none"> • How to use the Design Cycle as a learning tool Health and Social	How can keeping a record of your thinking help you become more creative?

		<p>Awareness and Understanding of:</p> <ul style="list-style-type: none"> Relationship between careers, the Design Cycle and creativity <p>Reflection on:</p> <ul style="list-style-type: none"> Creativity and the Design Cycle and the future 	
Patterns	<p>Patterns: Understanding how to see and manipulate patterns in a creative way</p>	<p>Human Ingenuity Awareness and Understanding of:</p> <ul style="list-style-type: none"> Range of solutions Artistic Process <p>Reflection on:</p> <ul style="list-style-type: none"> Variety of design solutions <p>Taking Action to:</p> <ul style="list-style-type: none"> Create a unique solution Apply thinking to other contexts <p>Health and Social Awareness and Understanding of:</p> <ul style="list-style-type: none"> pattern as a way to communicate <p>Reflection on:</p> <ul style="list-style-type: none"> How patterns can help us learn and understand the world 	How can understanding patterns help us understand the world?
Public Sculpture	<p>Environment & Community: Understanding how art is part of and affects both the environment and therefore a community.</p>	<p>Human Ingenuity Awareness and Understanding of:</p> <ul style="list-style-type: none"> Range of solutions Artistic Process <p>Reflection on:</p> <ul style="list-style-type: none"> Variety of design solutions <p>Taking Action to:</p> <ul style="list-style-type: none"> Create a unique solution Apply thinking to other contexts <p>Environment Awareness and Understanding of:</p> <ul style="list-style-type: none"> The relationship between art and the environment How art can affect an environment <p>Reflection on:</p> <ul style="list-style-type: none"> The responsibility of a public artist <p>Community and Service Awareness and Understanding of:</p> <ul style="list-style-type: none"> The relationship between art and a community <p>Reflections on:</p> <ul style="list-style-type: none"> The affects a community has on art and vice versa 	What influences a community?

IV. Text and Resources

V. Methodology

The course utilizes several methodologies including, but not limited to: project-based learning, collaborative teams, teacher-led inquiry, web and internet based learning modules direct instruction and independent study. Students may have opportunities to utilize one or all of the following to extend their learning by the walls of Lincoln: skype, epals, blogs, wikis, and blackboard.

VI. Methods of Assessment

Students will be assessed on MYP Criteria for year 3 throughout each unit. To demonstrate their understanding students will have formative assessments such as quizzes, journal entries, and reflections. To assess students learning at the end of each unit there will be a culminating assessment linked to the identified MYP objectives and criteria for the Arts in year 3 of the programme and the Design Cycle.

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Arts. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress

MYP Computer Technology– Grade 6

MYP Level 1

VII. Course Description:

MYP technology aspires to develop creative problem solvers who are caring and responsible individuals, able to respond critically and resourcefully to the demands of the increasingly technological society and to appreciate the importance of technology for life, society and the environment.

The MYP technology course intends to:

- challenge all students to apply practical and creative-thinking skills to solve problems in technology
- encourage students to explore the role of technology in both historical and contemporary contexts
- raise students’ awareness of their responsibilities as world citizens when making decisions and taking action on technology issues.

II. Colorado Model Content Standards and MYP Aims and Objectives

NET-S CONTENT STANDARDS:	MYP AIMS & OBJECTIVES:
<p>1. Facilitate and Inspire Student Learning and Creativity</p> <p>a. promote, support, and model creative and innovative thinking and inventiveness</p> <p>b. engage students in exploring real-world issues and solving authentic problems using digital tools and resources</p> <p>c. promote student reflection using collaborative tools to reveal and clarify students’ conceptual understanding and thinking, planning, and creative processes</p> <p>d. model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments</p> <p>2. Design and Develop Digital-Age Learning Experiences and Assessments</p> <p>a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity</p> <p>b. develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress</p> <p>c. customize and personalize learning activities to address students’ diverse learning styles, working strategies, and abilities using digital tools and resources</p> <p>d. provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching</p> <p>3. Model Digital-Age Work and Learning</p> <p>a. demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations</p> <p>b. collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation</p> <p>c. communicate relevant information and ideas effectively to students, parents, and peers using a</p>	<p>The aims of the teaching and study of technology are to encourage and enable students to:</p> <ul style="list-style-type: none"> • develop an appreciation of the significance of technology for life, society and the environment • use knowledge, skills and techniques to create products/solutions of appropriate quality • develop problem-solving, critical- and creative-thinking skills through the application of the design cycle • develop respect for others’ viewpoints and appreciate alternative solutions to problems • use and apply information and communication technology (ICT) effectively as a means to access, process and communicate information, and to solve problems. <p>The objectives define what the learner will be able to do, or do better, as a result of studying the subject. The design cycle model is used in technology. It is intended to be the central tool to help students create and evaluate products/solutions in response to challenges. The MYP technology design cycle consists of four major stages and these relate to the objectives of the course.</p> <p>Investigate</p> <p>Students identify the problem to be solved. At the end of the course, they should be able to:</p> <ul style="list-style-type: none"> • evaluate the importance of the problem for life, society and the environment outline the design brief. <p>Students should develop the design brief. At the end of the course, they should be able to:</p> <ul style="list-style-type: none"> • formulate and discuss appropriate questions that guide the investigation • identify and acknowledge a range of appropriate sources of information • collect, analyse, select, organize and evaluate information and sources. <p>Students formulate a design specification. At the end of the course, they should be able to:</p> <ul style="list-style-type: none"> • list the specific requirements that must be met by the product/solution • design tests to evaluate the product/solution against the design specification. <p>Plan</p> <p>Students design the product/solution. At the end of the course,</p>

variety of digital-age media and formats
d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

4. Promote and Model Digital Citizenship and Responsibility

a. advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources

b. address the diverse needs of all learners by using learner-centered strategies and providing equitable access to appropriate digital tools and resources

c. promote and model digital etiquette and responsible social interactions related to the use of technology and information

d. develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools

5. Engage in Professional Growth and Leadership

a. participate in local and global learning communities to explore creative applications of technology to improve student learning

b. exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others

c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning

d. contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community

they should be able to

- generate several feasible designs that meet the design specification
- evaluate the designs against the design specification
- select one design and justify its choice.

Students **plan the product/solution**. At the end of the course, they should be able to:

- construct a plan to create the product/solution that has a series of logical steps
 - construct a plan to create the product/solution that makes effective use of resources and time
- evaluate the plan and justify any modifications to the design.

Create

Students **use appropriate techniques and equipment**. At the end of the course, they should be able to:

- use a range of appropriate techniques and equipment competently
- ensure a safe working environment for themselves and others.

Students **follow the plan**. At the end of the course, they should be able to:

- follow the plan to produce the product/solution
- evaluate the plan and justify any changes to the plan

Students create the product solution:

- create a product/solution of appropriate quality.

Evaluate

Students **evaluate the product/solution**. At the end of the course, they should be able to

- carry out tests to evaluate the product/solution against the design specification
- evaluate the success of the product/solution in an objective manner based on testing, their own views and the views of the intended user
- evaluate the impact of the product/solution on individuals and on society explain how the product/solution could be improved.

Students **evaluate their use of the design cycle**. At the end of the course, they should be able to:

- evaluate their performance at each stage of the design cycle
- suggest ways in which their performance could be improved.

Attitudes in technology

encouraging attitudes and dispositions that will contribute to students' development as caring and responsible individuals and members of society.

includes notions of safety and responsibility when working in technology as well as respect for and collaboration with others and their shared environment.

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will learn about the processes and real world applications of science. It will also help them acquire 21st Century learning skills that can be used to tackle both general and subject-specific tasks.

Throughout the course, students will experience different *Areas of Interaction* which provide a lens for them to view the curriculum and encourage reflection on the area of study in that unit.

The Area of Interaction, *Approaches to Learning*, is integrated in all science units and provides students an opportunity for development of skills and attitudes necessary for learning. ATL skills should enable students to become competent in identifying, monitoring, and managing their own learning.

Unit	Concept/Enduring Understanding	Area of Interaction	Essential/Content Questions
Digital Video Production - Internet Safety	<p>Ethics: 1. Understand and practice legal and ethical behavior. 2. Virtual environments and individuals are directly linked. 3. Where we live impacts how we live</p> <p>Innovation: 1. Creative thinking and develop innovative products applying technologies</p>	<p>Health & Social <u>Awareness and Understanding:</u> Students identify their role in relationships using appropriate vocabulary. <u>Reflect On:</u> Students name how world issues impacted them personally.</p> <p>Community & Service <u>Awareness and Understanding:</u> Students can identify their role in their community and the roles that others play in their community. <u>Reflect On:</u> Students can recognize and consider various ways they view other communities</p>	<p>What is the relationship between choices and consequences?</p>
Google Docs	<p>Critical Thinking: 1. Use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using a variety of digital media while working collaboratively. 2. Technology can help us better understand our world</p>	<p>Human Ingenuity <u>Awareness and Understanding:</u> With assistance students can recognize and begin to use the steps in a design process in different content areas. <u>Reflect On:</u> With assistance, students can identify and discuss the effectiveness of various approaches to problem solving (final systems, solutions or products)</p> <p>Community & Service <u>Awareness and Understanding:</u> Students can identify their role in their community and the roles that others play in their community. <u>Reflect On:</u> Students can recognize and consider various ways they view other communities.</p>	<p>How do we use what we know to find what we want to know?</p>
Online Research	<p>Critical Thinking: 1. Use critical thinking skills to plan and conduct research and make informed decisions using a variety of digital Internet-based media.</p>	<p>Human Ingenuity <u>Awareness and Understanding:</u> Research and explain how a specific system or product has changed over time. <u>Reflect On:</u> Students can share one example of how innovation has impacted themselves and/or their community.</p> <p>Environment <u>Awareness and Understanding:</u> With assistance students will identify and explain physical, social and cultural dimensions of environments. <u>Reflect On:</u> With assistance students recognize the virtual environments as a way to represent the natural and built environments.</p>	<p>How do we find out more about the world around us?</p>
Social Bookmarking and Blogging	<p>Ethics: Understand and practice legal and ethical behavior.</p> <p>Virtual environments and individuals are directly linked.</p>	<p>Health and Social Education <u>Awareness and Understanding:</u> Students can identify specific past and current societal policies and norms that impact themselves. <u>Making Choices:</u> Students are able to identify their own beliefs and values and how that guides their actions and choices.</p> <p>Environment <u>Awareness and Understanding:</u></p>	<p>How can we communicate in unfamiliar environments?</p>

		<p>With assistance, students will recognize that human actions, attitudes, beliefs and creations can impact environments in positive and negative ways.</p> <p><u>Reflect On:</u></p> <p>With assistance students will identify and explain physical, social and cultural dimensions of environments.</p>	
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IV. Text and Resources

V. Methodology

The course utilizes several methodologies included, but not limited to: project-inquiry based learning, teacher-led inquiry, collaborative teams, independent study, hands-on science activities and demonstration, computer models and simulations, and other technologies.

Students will be primarily be learning by the use of inquiry in class discussions, and other hands on activities. Students will ask questions to address challenges and big questions, reflect in many different ways and collaborate together to address challenges and questions.

VI. Methods of Assessment

Students will be assessed on MYP Criteria for year 1 throughout each unit. To demonstrate their understanding students will have formative assessments such as quizzes, journal entries, and reflections. To assess students learning at the end of each unit there will be a culminating assessment linked to the NET-S and Design Cycle Criteria.

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Technology. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress

MYP Computer Technology– Grade 7

MYP Level 2

VIII.Course Description:

MYP technology aspires to develop creative problem solvers who are caring and responsible individuals, able to respond critically and resourcefully to the demands of the increasingly technological society and to appreciate the importance of technology for life, society and the environment.

The MYP technology course intends to:

- challenge all students to apply practical and creative-thinking skills to solve problems in technology
- encourage students to explore the role of technology in both historical and contemporary contexts
- raise students’ awareness of their responsibilities as world citizens when making decisions and taking action on technology issues.

II. Colorado Model Content Standards and MYP Aims and Objectives

ITSE CONTENT STANDARDS:	MYP AIMS & OBJECTIVES:
<p>1. Facilitate and Inspire Student Learning and Creativity</p> <p>a. promote, support, and model creative and innovative thinking and inventiveness</p> <p>b. engage students in exploring real-world issues and solving authentic problems using digital tools and resources</p> <p>c. promote student reflection using collaborative tools to reveal and clarify students’ conceptual understanding and thinking, planning, and creative processes</p> <p>d. model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments</p> <p>2. Design and Develop Digital-Age Learning Experiences and Assessments</p> <p>a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity</p> <p>b. develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress</p> <p>c. customize and personalize learning activities to address students’ diverse learning styles, working strategies, and abilities using digital tools and resources</p> <p>d. provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching</p> <p>3. Model Digital-Age Work and Learning</p> <p>a. demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations</p> <p>b. collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation</p> <p>c. communicate relevant information and ideas effectively to students, parents, and peers using a</p>	<p>The aims of the teaching and study of technology are to encourage and enable students to:</p> <ul style="list-style-type: none"> • develop an appreciation of the significance of technology for life, society and the environment • use knowledge, skills and techniques to create products/solutions of appropriate quality • develop problem-solving, critical- and creative-thinking skills through the application of the design cycle • develop respect for others’ viewpoints and appreciate alternative solutions to problems • use and apply information and communication technology (ICT) effectively as a means to access, process and communicate information, and to solve problems. <p>The objectives define what the learner will be able to do, or do better, as a result of studying the subject. The design cycle model is used in technology. It is intended to be the central tool to help students create and evaluate products/solutions in response to challenges. The MYP technology design cycle consists of four major stages and these relate to the objectives of the course.</p> <p>Investigate Students identify the problem to be solved. At the end of the course, they should be able to:</p> <ul style="list-style-type: none"> • evaluate the importance of the problem for life, society and the environment outline the design brief. <p>Students should develop the design brief. At the end of the course, they should be able to:</p> <ul style="list-style-type: none"> • formulate and discuss appropriate questions that guide the investigation • identify and acknowledge a range of appropriate sources of information • collect, analyse, select, organize and evaluate information and sources. <p>Students formulate a design specification. At the end of the course, they should be able to:</p> <ul style="list-style-type: none"> • list the specific requirements that must be met by the product/solution • design tests to evaluate the product/solution against the design specification. <p>Plan Students design the product/solution. At the end of the course,</p>

variety of digital-age media and formats
d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

4. Promote and Model Digital Citizenship and Responsibility

a. advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources

b. address the diverse needs of all learners by using learner-centered strategies and providing equitable access to appropriate digital tools and resources

c. promote and model digital etiquette and responsible social interactions related to the use of technology and information

d. develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools

5. Engage in Professional Growth and Leadership

a. participate in local and global learning communities to explore creative applications of technology to improve student learning

b. exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others

c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning

d. contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community

they should be able to

- generate several feasible designs that meet the design specification
- evaluate the designs against the design specification
- select one design and justify its choice.

Students **plan the product/solution**. At the end of the course, they should be able to:

- construct a plan to create the product/solution that has a series of logical steps
 - construct a plan to create the product/solution that makes effective use of resources and time
- evaluate the plan and justify any modifications to the design.

Create

Students **use appropriate techniques and equipment**. At the end of the course, they should be able to:

- use a range of appropriate techniques and equipment competently
- ensure a safe working environment for themselves and others.

Students **follow the plan**. At the end of the course, they should be able to:

- follow the plan to produce the product/solution
- evaluate the plan and justify any changes to the plan

Students create the product solution:

- create a product/solution of appropriate quality.

Evaluate

Students **evaluate the product/solution**. At the end of the course, they should be able to

- carry out tests to evaluate the product/solution against the design specification
- evaluate the success of the product/solution in an objective manner based on testing, their own views and the views of the intended user
- evaluate the impact of the product/solution on individuals and on society explain how the product/solution could be improved.

Students **evaluate their use of the design cycle**. At the end of the course, they should be able to:

- evaluate their performance at each stage of the design cycle
- suggest ways in which their performance could be improved.

Attitudes in technology

encouraging attitudes and dispositions that will contribute to students' development as caring and responsible individuals and members of society.

includes notions of safety and responsibility when working in technology as well as respect for and collaboration with others and their shared environment.

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will learn about the processes and real world applications of science. It will also help them acquire 21st Century learning skills that can be used to tackle both general and subject-specific tasks.

Throughout the course, students will experience different *Areas of Interaction* which provide a lens for them to view the curriculum and encourage reflection on the area of study in that unit.

The Area of Interaction, *Approaches to Learning*, is integrated in all science units and provides students an opportunity for development of skills and attitudes necessary for learning. ATL skills should enable students to become competent in identifying, monitoring, and managing their own learning.

Unit	Concept/Enduring Understanding	Area of Interaction	Essential/Content Questions
Internet Safety	Ethics: 1. Understand and practice legal and ethical behavior. 2. Virtual environments and individuals are directly linked. 3. Where we live impacts how we live	Health & Social <u>Awareness and Understanding:</u> Students are able to identify their role and the role of others within a variety of relationships. <u>Reflect On:</u> Students can compare and contrast how a world issue impacts themselves and another. Community & Service <u>Awareness and Understanding:</u> Students can understand the roles of individuals and needs of various communities. <u>Reflect On:</u> Students recognize the ways in which they view other communities and can suggest how their community may be identified by others.	How can I stay safe while using digital technologies and the Internet?
3D Modeling with Google Sketch-Up	Innovation: 1. Creativity and technology used together results in innovative products. Recognize that math exists in the world around us. 2. Self-awareness and reflection can lead to personal growth.	Human Ingenuity <u>Awareness and Understanding:</u> Students demonstrate a basic understanding of the processes involved in innovation, creation and development and change and how they relate to the design process in different content areas. <u>Reflect On:</u> Students are able to reflect upon current and past creations and/or products used by society. Environment <u>Awareness and Understanding:</u> Students can independently identify and explain the interdependence of one environment on another. <u>Reflect On:</u> Students can identify examples of how virtual environments can impact the natural and built environments.	How do structures influence our world?
Google Earth	Innovation: 1. Creative thinking and develop innovative products applying technologies	Community & Service <u>Awareness and Understanding:</u> Students can explain the various forms, needs, and issues within their own communities and other communities. <u>Reflect On:</u> Students recognize the ways in which they view other communities and can suggest how their community may be identified by others. Environment <u>Awareness and Understanding:</u> Students can identify examples of human actions, attitudes, beliefs and creations have impacted environments. <u>Reflect On:</u> Students can identify examples of how virtual environments can impact the natural and built environments.	How do we study our world?
Video Game Programming	Systems: 1. Systems are sometimes developed	Human Ingenuity <u>Awareness and Understanding:</u> Students can describe possible solutions to a problem and/or create	How does probability and chance help you make decisions?

	<p>or understood through trial, error and reflection.</p>	<p>a product that addresses a specific problem or set of problems.</p> <p><u>Reflect On:</u> Students can independently identify and discuss the effectiveness of various approaches to problem solving (final systems, solutions or products).</p> <p>Environment</p> <p><u>Awareness and Understanding:</u> Students can identify examples of human actions, attitudes, beliefs and creations have impacted environments.</p> <p><u>Reflect On:</u> Students can identify examples of how virtual environments can impact the natural and built environments.</p>	
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IV. Text and Resources

V. Methodology

The course utilizes several methodologies included, but not limited to: project-inquiry based learning, teacher-led inquiry, collaborative teams, independent study, hands-on science activities and demonstration, computer models and simulations, and other technologies.

Students will be primarily be learning by the use of inquiry in class discussions, and other hands on activities. Students will ask questions to address challenges and big questions, reflect in many different ways and collaborate together to address challenges and questions.

VI. Methods of Assessment

Students will be assessed on MYP Criteria for year 2 throughout each unit. To demonstrate their understanding students will have formative assessments such as quizzes, journal entries, and reflections. To assess students learning at the end of each unit there will be a culminating assessment linked to the NET-S and Design Cycle Criteria.

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Technology. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress

MYP Computer Technology– Grade 8

MYP Level 3

IX. Course Description:

MYP technology aspires to develop creative problem solvers who are caring and responsible individuals, able to respond critically and resourcefully to the demands of the increasingly technological society and to appreciate the importance of technology for life, society and the environment.

The MYP technology course intends to:

- challenge all students to apply practical and creative-thinking skills to solve problems in technology
- encourage students to explore the role of technology in both historical and contemporary contexts
- raise students’ awareness of their responsibilities as world citizens when making decisions and taking action on technology issues.

II. Colorado Model Content Standards and MYP Aims and Objectives

NET-S CONTENT STANDARDS:	MYP AIMS & OBJECTIVES:
<p>1. Facilitate and Inspire Student Learning and Creativity</p> <p>a. promote, support, and model creative and innovative thinking and inventiveness</p> <p>b. engage students in exploring real-world issues and solving authentic problems using digital tools and resources</p> <p>c. promote student reflection using collaborative tools to reveal and clarify students’ conceptual understanding and thinking, planning, and creative processes</p> <p>d. model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments</p> <p>2. Design and Develop Digital-Age Learning Experiences and Assessments</p> <p>a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity</p> <p>b. develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress</p> <p>c. customize and personalize learning activities to address students’ diverse learning styles, working strategies, and abilities using digital tools and resources</p> <p>d. provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching</p> <p>3. Model Digital-Age Work and Learning</p> <p>a. demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations</p> <p>b. collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation</p> <p>c. communicate relevant information and ideas effectively to students, parents, and peers using a</p>	<p>The aims of the teaching and study of technology are to encourage and enable students to:</p> <ul style="list-style-type: none"> • develop an appreciation of the significance of technology for life, society and the environment • use knowledge, skills and techniques to create products/solutions of appropriate quality • develop problem-solving, critical- and creative-thinking skills through the application of the design cycle • develop respect for others’ viewpoints and appreciate alternative solutions to problems • use and apply information and communication technology (ICT) effectively as a means to access, process and communicate information, and to solve problems. <p>The objectives define what the learner will be able to do, or do better, as a result of studying the subject. The design cycle model is used in technology. It is intended to be the central tool to help students create and evaluate products/solutions in response to challenges. The MYP technology design cycle consists of four major stages and these relate to the objectives of the course.</p> <p>Investigate</p> <p>Students identify the problem to be solved. At the end of the course, they should be able to:</p> <ul style="list-style-type: none"> • evaluate the importance of the problem for life, society and the environment outline the design brief. <p>Students should develop the design brief. At the end of the course, they should be able to:</p> <ul style="list-style-type: none"> • formulate and discuss appropriate questions that guide the investigation • identify and acknowledge a range of appropriate sources of information • collect, analyse, select, organize and evaluate information and sources. <p>Students formulate a design specification. At the end of the course, they should be able to:</p> <ul style="list-style-type: none"> • list the specific requirements that must be met by the product/solution • design tests to evaluate the product/solution against the design specification. <p>Plan</p> <p>Students design the product/solution. At the end of the course,</p>

variety of digital-age media and formats
d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

4. Promote and Model Digital Citizenship and Responsibility

a. advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources

b. address the diverse needs of all learners by using learner-centered strategies and providing equitable access to appropriate digital tools and resources

c. promote and model digital etiquette and responsible social interactions related to the use of technology and information

d. develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools

5. Engage in Professional Growth and Leadership

a. participate in local and global learning communities to explore creative applications of technology to improve student learning

b. exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others

c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning

d. contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community

they should be able to

- generate several feasible designs that meet the design specification
- evaluate the designs against the design specification
- select one design and justify its choice.

Students **plan the product/solution**. At the end of the course, they should be able to:

- construct a plan to create the product/solution that has a series of logical steps
 - construct a plan to create the product/solution that makes effective use of resources and time
- evaluate the plan and justify any modifications to the design.

Create

Students **use appropriate techniques and equipment**. At the end of the course, they should be able to:

- use a range of appropriate techniques and equipment competently
- ensure a safe working environment for themselves and others.

Students **follow the plan**. At the end of the course, they should be able to:

- follow the plan to produce the product/solution
- evaluate the plan and justify any changes to the plan

Students create the product solution:

- create a product/solution of appropriate quality.

Evaluate

Students **evaluate the product/solution**. At the end of the course, they should be able to

- carry out tests to evaluate the product/solution against the design specification
- evaluate the success of the product/solution in an objective manner based on testing, their own views and the views of the intended user
- evaluate the impact of the product/solution on individuals and on society explain how the product/solution could be improved.

Students **evaluate their use of the design cycle**. At the end of the course, they should be able to:

- evaluate their performance at each stage of the design cycle
- suggest ways in which their performance could be improved.

Attitudes in technology

encouraging attitudes and dispositions that will contribute to students' development as caring and responsible individuals and members of society.

includes notions of safety and responsibility when working in technology as well as respect for and collaboration with others and their shared environment.

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will learn about the processes and real world applications of science. It will also help them acquire 21st Century learning skills that can be used to tackle both general and subject-specific tasks.

Throughout the course, students will experience different *Areas of Interaction* which provide a lens for them to view the curriculum and encourage reflection on the area of study in that unit.

The Area of Interaction, *Approaches to Learning*, is integrated in all science units and provides students an opportunity for development of skills and attitudes necessary for learning. ATL skills should enable students to become competent in identifying, monitoring, and managing their own learning.

Unit	Concept/Enduring Understanding	Area of Interaction	Essential/Content Questions
History of Web Design	Systems: Systems are sometimes developed or understood through trial, error and reflection	<p>Human Ingenuity <u>Awareness and Understanding:</u> Research and explain how a specific system or product has changed over time in response to a need and/or changing needs AND predict possible future changes. <u>Reflect On:</u> Students can reflect upon current and past creations and/or products used by society and make predictions about possible future innovations.</p> <p>Environment <u>Awareness and Understanding:</u> Students can analyze the impact of human actions, attitudes, beliefs and creations on the environments. <u>Reflect On:</u> Students can propose new ways that the virtual environment can positively impact the natural and built environments</p>	How do past experiences shape future decisions?
Image Editing	Innovation: Creativity and technology used together in the virtual environment results in innovative representations of the natural and built environments.	<p>Human Ingenuity <u>Awareness and Understanding:</u> The student can develop a product based on intrinsic motivations. <u>Take Action:</u> The student is able to independently apply the design cycle to a unique individualized project.</p> <p>Environment <u>Awareness and Understanding:</u> Students can identify and explain their role and responsibilities the various environments. <u>Reflect On:</u> Students can independently identify and explain their responsibilities to the environments and describe and evaluate the choices that they can make with regards to the environments.</p>	How does the virtual environment represent natural and built environments?
Computer Animation	Innovation: Creative thinking to develop innovative products and representations using 21 st Century skills and technology	<p>Human Ingenuity <u>Awareness and Understanding:</u> The student can develop a product based on intrinsic motivations. <u>Take Action:</u> The student is able to independently apply the design cycle to a unique individualized project.</p> <p>Environment <u>Awareness and Understanding:</u> Students can identify and explain their role and responsibilities the various environments. <u>Reflect On:</u> Students can independently identify and explain their responsibilities to the environments and describe and evaluate the choices that they can make with regards to the environments.</p>	How can we communicate an idea using 21 st Century skills?
Web Design Applications	Innovation: Creative communication using 21 st Century skills and technology	<p>Human Ingenuity <u>Awareness and Understanding:</u> The students can independently implement all stages of an appropriate design and/or inquiry cycle in all content areas. (Design cycle, scientific method, writing process, and problem solving) <u>Reflect On:</u> Students can share an example(s) of how innovation and/or creation have impacted global communities.</p> <p>Health and Social Education <u>Awareness and Understanding:</u> Students analyze how societal policies and norms impact the global society as well as their role as a global citizen. <u>Making Choices:</u> Students demonstrate their personal values through</p>	How do we effectively communicate to others through the virtual environment?

		their actions as well as understand and accept that others may have different values	
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IV. Text and Resources

V. Methodology

The course utilizes several methodologies included, but not limited to: project-inquiry based learning, teacher-led inquiry, collaborative teams, independent study, hands-on science activities and demonstration, computer models and simulations, and other technologies.

Students will be primarily be learning by the use of inquiry in class discussions, and other hands on activities. Students will ask questions to address challenges and big questions, reflect in many different ways and collaborate together to address challenges and questions.

VI. Methods of Assessment

Students will be assessed on MYP Criteria for year 3 throughout each unit. To demonstrate their understanding students will have formative assessments such as quizzes, journal entries, and reflections. To assess students learning at the end of each unit there will be a culminating assessment linked to the NET-S and Design Cycle Criteria.

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Technology. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress

MYP Technology– Grade 6

MYP Level 1

X. Course Description:

MYP technology aspires to develop creative problem solvers who are caring and responsible individuals, able to respond critically and resourcefully to the demands of the increasingly technological society and to appreciate the importance of technology for life, society and the environment.

The MYP technology course intends to:

- challenge all students to apply practical and creative-thinking skills to solve problems in technology
- encourage students to explore the role of technology in both historical and contemporary contexts
- raise students’ awareness of their responsibilities as world citizens when making decisions and taking action on technology issues.

II. National Technology Education Standards and MYP Aims and Objectives

NETS-T CONTENT STANDARDS	MYP AIMS & OBJECTIVES:
<p>1. Facilitate and Inspire Student Learning and Creativity</p> <p>a. promote, support, and model creative and innovative thinking and inventiveness</p> <p>b. engage students in exploring real-world issues and solving authentic problems using digital tools and resources</p> <p>c. promote student reflection using collaborative tools to reveal and clarify students’ conceptual understanding and thinking, planning, and creative processes</p> <p>d. model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments</p> <p>2. Design and Develop Digital-Age Learning Experiences and Assessments</p> <p>a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity</p> <p>b. develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress</p> <p>c. customize and personalize learning activities to address students’ diverse learning styles, working strategies, and abilities using digital tools and resources</p> <p>d. provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching</p> <p>3. Model Digital-Age Work and Learning</p> <p>a. demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations</p> <p>b. collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation</p> <p>c. communicate relevant information and ideas effectively to students, parents, and peers using a</p>	<p>The aims of the teaching and study of technology are to encourage and enable students to:</p> <ul style="list-style-type: none"> • develop an appreciation of the significance of technology for life, society and the environment • use knowledge, skills and techniques to create products/solutions of appropriate quality • develop problem-solving, critical- and creative-thinking skills through the application of the design cycle • develop respect for others’ viewpoints and appreciate alternative solutions to problems • use and apply information and communication technology (ICT) effectively as a means to access, process and communicate information, and to solve problems. <p>The objectives define what the learner will be able to do, or do better, as a result of studying the subject. The design cycle model is used in technology. It is intended to be the central tool to help students create and evaluate products/solutions in response to challenges. The MYP technology design cycle consists of four major stages and these relate to the objectives of the course.</p> <p>Investigate</p> <p>Students identify the problem to be solved. At the end of the course, they should be able to:</p> <ul style="list-style-type: none"> • evaluate the importance of the problem for life, society and the environment outline the design brief. <p>Students should develop the design brief. At the end of the course, they should be able to:</p> <ul style="list-style-type: none"> • formulate and discuss appropriate questions that guide the investigation • identify and acknowledge a range of appropriate sources of information • collect, analyse, select, organize and evaluate information and sources. <p>Students formulate a design specification. At the end of the course, they should be able to:</p> <ul style="list-style-type: none"> • list the specific requirements that must be met by the product/solution • design tests to evaluate the product/solution against the design specification. <p>Plan</p> <p>Students design the product/solution. At the end of the course,</p>

variety of digital-age media and formats
d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

4. Promote and Model Digital Citizenship and Responsibility

a. advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources

b. address the diverse needs of all learners by using learner-centered strategies and providing equitable access to appropriate digital tools and resources

c. promote and model digital etiquette and responsible social interactions related to the use of technology and information

d. develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools

5. Engage in Professional Growth and Leadership

a. participate in local and global learning communities to explore creative applications of technology to improve student learning

b. exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others

c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning

d. contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community

they should be able to

- generate several feasible designs that meet the design specification
- evaluate the designs against the design specification
- select one design and justify its choice.

Students **plan the product/solution**. At the end of the course, they should be able to:

- construct a plan to create the product/solution that has a series of logical steps
 - construct a plan to create the product/solution that makes effective use of resources and time
- evaluate the plan and justify any modifications to the design.

Create

Students **use appropriate techniques and equipment**. At the end of the course, they should be able to:

- use a range of appropriate techniques and equipment competently
- ensure a safe working environment for themselves and others.

Students **follow the plan**. At the end of the course, they should be able to:

- follow the plan to produce the product/solution
- evaluate the plan and justify any changes to the plan

Students create the product solution:

- create a product/solution of appropriate quality.

Evaluate

Students **evaluate the product/solution**. At the end of the course, they should be able to

- carry out tests to evaluate the product/solution against the design specification
- evaluate the success of the product/solution in an objective manner based on testing, their own views and the views of the intended user
- evaluate the impact of the product/solution on individuals and on society explain how the product/solution could be improved.

Students **evaluate their use of the design cycle**. At the end of the course, they should be able to:

- evaluate their performance at each stage of the design cycle
- suggest ways in which their performance could be improved.

Attitudes in technology

Encouraging attitudes and dispositions that will contribute to students' development as caring and responsible individuals and members of society. Includes notions of safety and responsibility when working in technology as well as respect for and collaboration with others and their shared environment.

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will learn about the processes and real world applications of science. It will also help them acquire 21st Century learning skills that can be used to tackle both general and subject-specific tasks.

Throughout the course, students will experience different *Areas of Interaction* which provide a lens for them to view the curriculum and encourage reflection on the area of study in that unit.

The Area of Interaction, *Approaches to Learning*, is integrated in all science units and provides students an opportunity for development of skills and attitudes necessary for learning. ATL skills should enable students to become competent in identifying, monitoring, and managing their own learning.

Unit	Concept/Enduring Understanding	Area of Interaction	Essential/Content Questions
Pick Up Sticks/Structural Design	<p>Communities & Constraints:</p> <ol style="list-style-type: none"> Communities have rules so that everyone feels safe, we do too. Design constraints are used as boundaries to successfully construct things. Collaboration allows for more possible solutions to problems. 	<p>Health and Social</p> <ul style="list-style-type: none"> The process involved in innovation, creation, development and the changes society must make to become successful. The individual desire to create, develop or change things How systems or products develop or change over time can get better or worse along the way <p>Taking action to:</p> <ul style="list-style-type: none"> Create solutions and products to solve own and others problems Think creatively to barter, cooperate, and communicate with other groups to avoid court costs, lawsuits and disagreement. 	<p><u>EQ:</u> How do societies achieve honesty? <u>EQ:</u> How can resources be designed for efficient/longstanding use? <u>CQ:</u> What rules and systems will we use to achieve integrity while bartering? <u>CQ:</u> How can I use my knowledge of geometry to create structures that resist stress?</p>
Make it Move/ Mechanical Energy Transfer	<p>Classification: Classification systems are used for everything including LEGOS!</p> <p>Energy & Relationships: Input energy can be transformed into different forms of output energy, and there is always <i>relationship</i> between Input and Output energy.</p>	<p>Community and Service</p> <p>Awareness and understanding of:</p> <ul style="list-style-type: none"> Concept of community-including what systems are used to classify things. Individuals in communities including the role of the individual, Needs of the individual, and the responsibilities of communities to their members Different communities- including the various forms of community, the needs of different communities, the issues within the communities, organizations within the community <p>Reflection on:</p> <ul style="list-style-type: none"> Responsibilities- including the ethical implications of activity or inactivity within the community, using personal strengths to enhance communities, identifying personal strengths and limitations 	<p><u>EQ:</u> How do we usually classify things? <u>EQ:</u> How can Input energy be used for many different functions? <u>CQ:</u> How do we classify, organize and use Legos? <u>CQ:</u> How can the knowledge of 1st 2nd and 3rd class levers be used to launch lego bricks into other team's 10 x 10 stud baskets?</p>
Motor Building 101/ Electromagnetism	<p>Cycles: An understanding of the world's Cycles helps us to understand the intricacies of how things work.</p>	<p>Human Ingenuity</p> <p>Awareness and understanding of</p> <ul style="list-style-type: none"> The process involved in innovation, creation, development and change things The individual desire to create, develop or change things How systems or products develop or change over time <p>Taking action to:</p> <ul style="list-style-type: none"> Create solutions and products to solve own and others problems Think creatively 	<p><u>EQ:</u> How can different forms of energy be transformed into useful forces? <u>CQ:</u> How are electromagnetic forces cycle off and on to make a motor spin?</p>
Robotics 101/ Sensor Networking/4 Lessons	<p>Perception: The world can be perceived differently depending on the Sensory systems available to each organism.</p>	<p>Environments</p> <p>Awareness and understanding of:</p> <ul style="list-style-type: none"> The roles our environment plays in the lives and well -being of human kind The effects of one environment on the other Physical, social, political, economic and cultural dimensions The effects of our actions, attitudes, and constructs, such as sustainable development and conservation <p>Reflection on:</p> <ul style="list-style-type: none"> Our responsibility to the environments The role of virtual environments in modeling other environments <p>Taking Action on:</p> <ul style="list-style-type: none"> A range of issues related to environment 	<p><u>EQ:</u> How do we perceive our world differently than other people, organisms, or computers? <u>CQ:</u> How do robots utilize an array of sensors to perceive their world and problem solve/ make decisions.</p>

IV. Text and Resources

V. Methodology

The course utilizes several methodologies included, but not limited to: project-inquiry based learning, teacher-led inquiry, collaborative teams, independent study, hands-on science activities and demonstration, computer models and simulations, and other technologies.

Students will be primarily be learning by the use of inquiry in class discussions, and other hands on activities. Students will ask questions to address challenges and big questions, reflect in many different ways and collaborate together to address challenges and questions.

VI. Methods of Assessment

Students will be assessed on MYP Criteria for year 1 throughout each unit. To demonstrate their understanding students will have formative assessments such as quizzes, journal entries, and reflections. To assess students learning at the end of each unit there will be a culminating assessment linked to the NET-S and Design Cycle Criteria.

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Technology. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress

MYP Technology– Grade 7

MYP Level 2

I. Course Description:

MYP technology aspires to develop creative problem solvers who are caring and responsible individuals, able to respond critically and resourcefully to the demands of the increasingly technological society and to appreciate the importance of technology for life, society and the environment.

The MYP technology course intends to:

- challenge all students to apply practical and creative-thinking skills to solve problems in technology
- encourage students to explore the role of technology in both historical and contemporary contexts
- raise students’ awareness of their responsibilities as world citizens when making decisions and taking action on technology issues.

II. National Technology Education Standards and MYP Aims and Objectives

NETS-T CONTENT STANDARDS	MYP AIMS & OBJECTIVES:
<p>1. Facilitate and Inspire Student Learning and Creativity</p> <p>a. promote, support, and model creative and innovative thinking and inventiveness</p> <p>b. engage students in exploring real-world issues and solving authentic problems using digital tools and resources</p> <p>c. promote student reflection using collaborative tools to reveal and clarify students’ conceptual understanding and thinking, planning, and creative processes</p> <p>d. model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments</p> <p>2. Design and Develop Digital-Age Learning Experiences and Assessments</p> <p>a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity</p> <p>b. develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress</p> <p>c. customize and personalize learning activities to address students’ diverse learning styles, working strategies, and abilities using digital tools and resources</p> <p>d. provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching</p> <p>3. Model Digital-Age Work and Learning</p> <p>a. demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations</p> <p>b. collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation</p> <p>c. communicate relevant information and ideas effectively to students, parents, and peers using a</p>	<p>The aims of the teaching and study of technology are to encourage and enable students to:</p> <ul style="list-style-type: none"> • develop an appreciation of the significance of technology for life, society and the environment • use knowledge, skills and techniques to create products/solutions of appropriate quality • develop problem-solving, critical- and creative-thinking skills through the application of the design cycle • develop respect for others’ viewpoints and appreciate alternative solutions to problems • use and apply information and communication technology (ICT) effectively as a means to access, process and communicate information, and to solve problems. <p>The objectives define what the learner will be able to do, or do better, as a result of studying the subject. The design cycle model is used in technology. It is intended to be the central tool to help students create and evaluate products/solutions in response to challenges. The MYP technology design cycle consists of four major stages and these relate to the objectives of the course.</p> <p>Investigate</p> <p>Students identify the problem to be solved. At the end of the course, they should be able to:</p> <ul style="list-style-type: none"> • evaluate the importance of the problem for life, society and the environment outline the design brief. <p>Students should develop the design brief. At the end of the course, they should be able to:</p> <ul style="list-style-type: none"> • formulate and discuss appropriate questions that guide the investigation • identify and acknowledge a range of appropriate sources of information • collect, analyse, select, organize and evaluate information and sources. <p>Students formulate a design specification. At the end of the course, they should be able to:</p> <ul style="list-style-type: none"> • list the specific requirements that must be met by the product/solution • design tests to evaluate the product/solution against the design specification. <p>Plan</p> <p>Students design the product/solution. At the end of the course,</p>

variety of digital-age media and formats
d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

4. Promote and Model Digital Citizenship and Responsibility

a. advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources

b. address the diverse needs of all learners by using learner-centered strategies and providing equitable access to appropriate digital tools and resources

c. promote and model digital etiquette and responsible social interactions related to the use of technology and information

d. develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools

5. Engage in Professional Growth and Leadership

a. participate in local and global learning communities to explore creative applications of technology to improve student learning

b. exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others

c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning

d. contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community

they should be able to

- generate several feasible designs that meet the design specification
- evaluate the designs against the design specification
- select one design and justify its choice.

Students **plan the product/solution**. At the end of the course, they should be able to:

- construct a plan to create the product/solution that has a series of logical steps
 - construct a plan to create the product/solution that makes effective use of resources and time
- evaluate the plan and justify any modifications to the design.

Create

Students **use appropriate techniques and equipment**. At the end of the course, they should be able to:

- use a range of appropriate techniques and equipment competently
- ensure a safe working environment for themselves and others.

Students **follow the plan**. At the end of the course, they should be able to:

- follow the plan to produce the product/solution
- evaluate the plan and justify any changes to the plan

Students create the product solution:

- create a product/solution of appropriate quality.

Evaluate

Students **evaluate the product/solution**. At the end of the course, they should be able to

- carry out tests to evaluate the product/solution against the design specification
- evaluate the success of the product/solution in an objective manner based on testing, their own views and the views of the intended user
- evaluate the impact of the product/solution on individuals and on society explain how the product/solution could be improved.

Students **evaluate their use of the design cycle**. At the end of the course, they should be able to:

- evaluate their performance at each stage of the design cycle
- suggest ways in which their performance could be improved.

Attitudes in technology

Encouraging attitudes and dispositions that will contribute to students' development as caring and responsible individuals and members of society. Includes notions of safety and responsibility when working in technology as well as respect for and collaboration with others and their shared environment.

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will learn about the processes and real world applications of science. It will also help them acquire 21st Century learning skills that can be used to tackle both general and subject-specific tasks.

Throughout the course, students will experience different *Areas of Interaction* which provide a lens for them to view the curriculum and encourage reflection on the area of study in that unit.

The Area of Interaction, *Approaches to Learning*, is integrated in all science units and provides students an opportunity for development of skills and attitudes necessary for learning. ATL skills should enable students to become competent in identifying, monitoring, and managing their own learning

Unit	Concept/Enduring Understanding	Area of Interaction	Essential/Content Questions
Structural Design A. Build crush resistant matrix. B. Identify, measure, and state the relationship between amount of structural stress and amount of weight on structure.	Models: Models can be used to plan, construct, test, evaluate, and reconstruct in response to a problem.	Health and Social: Awareness and understanding of: <ul style="list-style-type: none"> • Ourselves in a wider society including issues such as government building codes as they pertain to structures, roads, and public transportation. Making choices in terms of: <ul style="list-style-type: none"> • Ourselves and others including personal values and taking responsibility 	<u>EQ:</u> How will I work together with others to generate a successful product that is SAFE for my society to use?
Mechanical Energy Storage/Transfer Quantify and log input and output energy data of a system.	Manipulation of Materials: Energy and materials can be manipulated for a variety of purposes. Evolution & Systems: The evolution of systems improve the efficiency of society as a whole.	Human Ingenuity: Awareness and understanding of: <ul style="list-style-type: none"> • How systems or products develop and change over time. Reflect on: <ul style="list-style-type: none"> • A range of systems, solutions or products 	<u>EQ:</u> How does transforming input energy affect the output?
Electron Storage and Transfer Design and construct homemade flashlights and energy maps for various household devices.	Energy & Systems: Energy can be transformed and is conserved in any closed system. The efficiency of a system is limited to its design and actual use.	Environments: Awareness and understanding of: <ul style="list-style-type: none"> • The effects of our actions, attitudes, and constructs such as sustainable development of vehicles, lighting, heating/cooling 	<u>EQ:</u> What effect does design have on operation cost?
Robotics 201 Utilizing Sensor Arrays Theorize, design, test and redesign a Sumo Robot that uses a light sensor to avoid the circumference (black circle) of the game-board.	Logic & Systems: Logic systems are affected most greatly when multiple sensors are integrated such that the robot can perceive the environment more effectively.	Human Ingenuity: Awareness and understanding of: <ul style="list-style-type: none"> • The meaning of the word ingenious • A range of sensors, solutions, and products 	<u>EQ:</u> How can technology utilized to benefit society? How has technology damaged society/Environment? How will technology change the way humans live our lives

IV. Text and Resources

V. Methodology

The course utilizes several methodologies included, but not limited to: project-inquiry based learning, teacher-led inquiry, collaborative teams, independent study, hands-on science activities and demonstration, computer models and simulations, and other technologies.

Students will be primarily be learning by the use of inquiry in class discussions, and other hands on activities. Students will ask questions to address challenges and big questions, reflect in many different ways and collaborate together to address challenges and questions.

VI. Methods of Assessment

Students will be assessed on MYP Criteria for year 1 throughout each unit. To demonstrate their understanding students will have formative assessments such as quizzes, journal entries, and reflections. To assess students learning at the end of each unit there will be a culminating assessment linked to the NET-S and Design Cycle Criteria.

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Technology. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress

MYP Technology– Grade 8

MYP Level 3

XI. Course Description:

MYP technology aspires to develop creative problem solvers who are caring and responsible individuals, able to respond critically and resourcefully to the demands of the increasingly technological society and to appreciate the importance of technology for life, society and the environment.

The MYP technology course intends to:

- challenge all students to apply practical and creative-thinking skills to solve problems in technology
- encourage students to explore the role of technology in both historical and contemporary contexts
- raise students' awareness of their responsibilities as world citizens when making decisions and taking action on technology issues.

II. National Technology Education Standards and MYP Aims and Objectives

NETS-T CONTENT STANDARDS	MYP AIMS & OBJECTIVES:
<p>1. Facilitate and Inspire Student Learning and Creativity</p> <p>a. promote, support, and model creative and innovative thinking and inventiveness</p> <p>b. engage students in exploring real-world issues and solving authentic problems using digital tools and resources</p> <p>c. promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes</p> <p>d. model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments</p> <p>2. Design and Develop Digital-Age Learning Experiences and Assessments</p> <p>a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity</p> <p>b. develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress</p> <p>c. customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources</p> <p>d. provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching</p> <p>3. Model Digital-Age Work and Learning</p> <p>a. demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations</p> <p>b. collaborate with students, peers, parents, and community members using digital tools and resources</p>	<p>The aims of the teaching and study of technology are to encourage and enable students to:</p> <ul style="list-style-type: none"> • develop an appreciation of the significance of technology for life, society and the environment • use knowledge, skills and techniques to create products/solutions of appropriate quality • develop problem-solving, critical- and creative-thinking skills through the application of the design cycle • develop respect for others' viewpoints and appreciate alternative solutions to problems • use and apply information and communication technology (ICT) effectively as a means to access, process and communicate information, and to solve problems. <p>The objectives define what the learner will be able to do, or do better, as a result of studying the subject. The design cycle model is used in technology. It is intended to be the central tool to help students create and evaluate products/solutions in response to challenges. The MYP technology design cycle consists of four major stages and these relate to the objectives of the course.</p> <p>Investigate Students identify the problem to be solved. At the end of the course, they should be able to:</p> <ul style="list-style-type: none"> • evaluate the importance of the problem for life, society and the environment outline the design brief. <p>Students should develop the design brief. At the end of the course, they should be able to:</p> <ul style="list-style-type: none"> • formulate and discuss appropriate questions that guide the investigation • identify and acknowledge a range of appropriate sources of information • collect, analyse, select, organize and evaluate information and sources. <p>Students formulate a design specification. At the end of the course, they should be able to:</p> <ul style="list-style-type: none"> • list the specific requirements that must be met by the product/solution • design tests to evaluate the product/solution against the

to support student success and innovation

c. communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital-age media and formats

d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

4. Promote and Model Digital Citizenship and Responsibility

a. advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources

b. address the diverse needs of all learners by using learner-centered strategies and providing equitable access to appropriate digital tools and resources

c. promote and model digital etiquette and responsible social interactions related to the use of technology and information

d. develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools

5. Engage in Professional Growth and Leadership

a. participate in local and global learning communities to explore creative applications of technology to improve student learning

b. exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others

c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning

d. contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community

design specification.

Plan

Students **design the product/solution**. At the end of the course, they should be able to

- generate several feasible designs that meet the design specification
- evaluate the designs against the design specification
- select one design and justify its choice.

Students **plan the product/solution**. At the end of the course, they should be able to:

- construct a plan to create the product/solution that has a series of logical steps
 - construct a plan to create the product/solution that makes effective use of resources and time
- evaluate the plan and justify any modifications to the design.

Create

Students **use appropriate techniques and equipment**. At the end of the course, they should be able to:

- use a range of appropriate techniques and equipment competently
- ensure a safe working environment for themselves and others.

Students **follow the plan**. At the end of the course, they should be able to:

- follow the plan to produce the product/solution
- evaluate the plan and justify any changes to the plan

Students create the product solution:

- create a product/solution of appropriate quality.

Evaluate

Students **evaluate the product/solution**. At the end of the course, they should be able to

- carry out tests to evaluate the product/solution against the design specification
- evaluate the success of the product/solution in an objective manner based on testing, their own views and the views of the intended user
- evaluate the impact of the product/solution on individuals and on society explain how the product/solution could be improved.

Students **evaluate their use of the design cycle**. At the end of the course, they should be able to:

- evaluate their performance at each stage of the design cycle
- suggest ways in which their performance could be improved.

Attitudes in technology

Encouraging attitudes and dispositions that will contribute to students' development as caring and responsible individuals and members of society. Includes notions of safety and responsibility when working in technology as well as respect for and collaboration with others and their shared environment.

III. MYP Units of Study & the Role of the Areas of Interaction in the Course

Through the *Areas of Interaction* students will learn about the processes and real world applications of science. It will also help them acquire 21st Century learning skills that can be used to tackle both general and subject-specific tasks.

Throughout the course, students will experience different *Areas of Interaction* which provide a lens for them to view the curriculum and encourage reflection on the area of study in that unit.

The Area of Interaction, *Approaches to Learning*, is integrated in all science units and provides students an opportunity for development of skills and attitudes necessary for learning. ATL skills should enable students to become competent in identifying, monitoring, and managing their own learning.

Unit	Concept/Enduring Understanding	Area of Interaction	Essential/Content Questions
<p>Structural Design A. Utilize Solid Works CAD software to construct a hollow cubical box with a hinged lid. B. Emphasize the Design Cycle such that each stage of the project can be illustrated sequentially. C. Understand a range of methodologies for modeling our Ideas, well, at least our physical ones.</p>	<p>Models: Computer Modeling can be used to plan, construct, test, evaluate, and reconstruct in response to a design challenge.</p>	<p>Health and Social: Awareness and understanding of:</p> <ul style="list-style-type: none"> • Ourselves in a wider society including issues such as government building codes as they pertain to structures, roads, and public transportation. <p>Making choices in terms of:</p> <ul style="list-style-type: none"> • Ourselves and others including personal values and taking responsibility 	<p><u>EQ:</u> What are the 21st century skills required to design 3D structures?</p>
<p>Mechanical Energy Storage/Transfer Quantify and data log input and output energy of system. Input = Height of marble at beginning of roller coaster Output= maximum amount of: 1. Height on the output side 2. Amount of loops</p>	<p>Systems and Energy: Energy and materials can be manipulated for a variety of purposes. The evolution of systems, improve the efficiency of Society as a whole.</p>	<p>Human Ingenuity: Awareness and understanding of:</p> <ul style="list-style-type: none"> • How systems or products develop and change over time. <p>Reflect on:</p> <ul style="list-style-type: none"> • A range of systems, solutions or products. 	<p><u>EQ:</u> How does transforming input energy affect the output?</p>
<p>Electron Storage and Transfer A.Design and construct a Spool-mobile that transfers torque from an electric motor to spool used as a drive wheel. Transfer electrons through a switched circuit. B.Produce an Energy Transfer map for one electrical device that is used on a daily basis.</p>	<p>Systems and Energy: Energy can be transformed and is conserved in any closed system. The efficiency of a system is limited to its design and actual use.</p>	<p>Environments: Awareness and understanding of:</p> <ul style="list-style-type: none"> • The effects of our actions, attitudes, and constructs such as sustainable development of vehicles, lighting, heating/cooling 	<p><u>EQ:</u> How can technology utilized to benefit society? How has technology damaged society/Environment? How will technology change the way humans live our lives</p>
<p>Robotics 201 – Utilizing Sensor Arrays Theorize, design, test and redesign a Sumo Robot that uses a light sensor to avoid the circumference (black circle) of the game board.</p>	<p>Systems and Logic: Logic systems are affected most greatly when multiple sensors are integrated such that the robot can perceive the environment more effectively.</p>	<p>Human Ingenuity: Awareness and understanding of:</p> <ul style="list-style-type: none"> • The meaning of the word ingenious. • A range of sensors, solutions, and products. 	<p><u>EQ:</u> How can technology be utilized to benefit society? How has technology damaged society &/or the environment? How will technology change the way humans live their lives?</p>

IV. Text and Resources

V. Methodology

The course utilizes several methodologies included, but not limited to: project-inquiry based learning, teacher-led inquiry, collaborative teams, independent study, hands-on science activities and demonstration, computer models and simulations, and other technologies.

Students will be primarily be learning by the use of inquiry in class discussions, and other hands on activities. Students will ask questions to address challenges and big questions, reflect in many different ways and collaborate together to address challenges and questions.

VI. Methods of Assessment

Students will be assessed on MYP Criteria for year 3 throughout each unit. To demonstrate their understanding students will have formative assessments such as quizzes, journal entries, and reflections. To assess students learning at the end of each unit there will be a culminating assessment linked to the NET-S and Design Cycle Criteria.

VII. Grading Policy

The majority of grades this year will be assessed by using rubrics that align to meeting Colorado State Academic Standards in Middle School Technology. Students scoring on the rubric will then be converted to a numeric grading system. Please be patient as we transition to using standards to measure student's progress