

## Game Design, Ancient Civilizations and a Modern World

School District: Chambersburg Area School District

Course: Game Design, Ancient Civilizations, and a Modern World

Date: 11/15/17

Topic: Games, Sports and the Development of the Modern World

Days: 15-20

Subject Area: Development of Civilizations through Gaming

Grade: 10-12

**Key Learning:** The students will be able to analyze the role that sports and games have played in the development of the Ancient world and the social implications of those advancements.

Unit Essential Question:

**Unit Essential Question:**

How have sports and games influenced the development of the ancient world?



<p>Concept: 1.1</p> <p>History of Games in Ancient Civilizations</p> <p>Standards:  <span style="background-color: #FFC0CB;">1.2.11-12 A, C</span>  <span style="background-color: #FFC0CB;">1.4 11-12 A, B</span>  <span style="background-color: #90EE90;">3.4.12.C2</span>  <span style="background-color: #FFFF00;">8.6.9-10 H</span>  <span style="background-color: #FFFF00;">8.5.9-10.E</span></p>	<p>Concept: 1.2</p> <p>Application of Gaming Philosophy on Society</p> <p>Standards:  <span style="background-color: #90EE90;">3.4.12.E4</span>  <span style="background-color: #90EE90;">3.4.10.A3</span>  <span style="background-color: #90EE90;">5.1.9.B</span>  <span style="background-color: #FFFF00;">5.2.9. B,D</span>  <span style="background-color: #FFFF00;">8.6.11-12. E,F</span></p>	<p>Concept: 1.3</p> <p>Social Advancements of Ancient Civilization</p> <p>Standards:  <span style="background-color: #FFC0CB;">1.2.11-12 A, B, C</span>  <span style="background-color: #FFC0CB;">1.4 11-12 F, H</span>  <span style="background-color: #90EE90;">3.4.12.C2</span>  <span style="background-color: #FFFF00;">5. 2.9.B</span>  <span style="background-color: #FFFF00;">8.6.11-12.E</span></p>
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<p>Lesson Essential Question:</p> <p>How have games evolved over time?</p> <p>Why have sports evolved over time?</p> <p>Explain historic influences in the advancement of gaming and sport.</p>	<p>Lesson Essential Question:</p> <p>How do sports and games differ between societies?</p> <p>What is indicative of societies who utilizes games and sports in regards to culture and expansion?</p> <p>Explain the differences between sport and game design.</p>	<p>Lesson Essential Question:</p> <p>How has sport created social advancements?</p> <p>How has sport and games helped to create the establishment of a majority?</p> <p>How has the advancement of sport created the haves and the have less?</p>
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## Game Design, Ancient Civilizations and a Modern World



<ul style="list-style-type: none"> <li>• Senet</li> <li>• Mancala</li> <li>• TAFL</li> <li>• Chess</li> </ul>	<ul style="list-style-type: none"> <li>• Game Design</li> <li>• Sport Design</li> <li>• 5 Themes of World History</li> <li>• Government</li> <li>• Civilization</li> </ul>	<ul style="list-style-type: none"> <li>• Equality under law</li> <li>• Hammurabi's Code</li> <li>• Justinian Law</li> </ul>
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School District: Chambersburg Area School District

Course: Game Design, Ancient Civilizations, and a Modern World

Date: 11/15/17

Topic: Genres of Board Games and the Ancient World

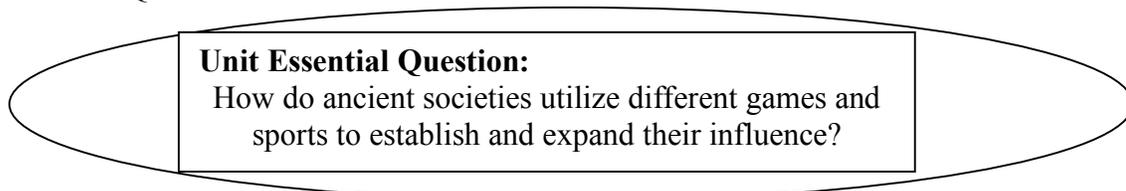
Days: 20-25

Subject Area: Development of Civilizations through Gaming

Grade: 10-12

Key Learning: The students will be able to analyze an ancient society with respect to its sports and board games.

Unit Essential Question:



<p>Concept: 2.1</p> <p style="text-align: center;">Genres of Games</p> <p>Standards: 1.2.11-12 A, B, C 1.5.11-12 A, B, C, D 3.4.10.A2 3.4.12.E6 8.6.9-10 H 8.6.11-12.C 8.5.9-10 E, H, I</p>	<p>Concept: 2.2</p> <p style="text-align: center;">Psychology of gaming in and ancient society</p> <p>Standards: 1.2.11-12 A, B, C 1.4.11-12 A, C 3.4.12.E4 6.1.9.A 5.1.9 A, B 8.6.11 E, F</p>	<p>Concept: 3.3</p> <p style="text-align: center;">Natural Resources and limitations on society</p> <p>Standards: 1.2.11-12 A, C, D, H 1.5.11-12 A 3.4.10.C3 6.1.9.D 8.5.11-12 B, C 8.6.11 E, F</p>
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## Game Design, Ancient Civilizations and a Modern World

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<p>Lesson Essential Question:</p> <p>How do genres of game design differ in ancient civilizations?</p> <p>How has technology impacted the evolution of gaming genre throughout history?</p> <p>How have civilizations designed games to better themselves?</p>	<p>Lesson Essential Question:</p> <p>What roles do various types of games and sports play in the ancient world?</p> <p>How have games impacted a societies psyche?</p> <p>How has sport created new public spheres?</p>	<p>Lesson Essential Question:</p> <p>Explain the impact of sport on the collection and distribution of natural resources.</p> <p>How is a societies wealth a direct result on its ability to collect natural resources?</p> <p>How have civilizations used to sport to fuel the collection of natural resources?</p>
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<ul style="list-style-type: none"> <li>• Action Adventure</li> <li>• LARP</li> <li>• Patolli</li> <li>• Pre-dynastic Egypt</li> </ul>	<ul style="list-style-type: none"> <li>• Go</li> <li>• The Mansion of Happiness</li> <li>• Diplomacy</li> <li>• Democracy</li> <li>• Creation of new public spheres</li> </ul>	<ul style="list-style-type: none"> <li>• The history of Senet</li> <li>• Shax</li> <li>• The Game of Pope/Pagan</li> <li>• Bao and Somalia</li> <li>• Egyptian Pharaohs</li> </ul>

School District: Chambersburg Area School District

Course: Game Design, Ancient Civilizations, and a Modern World

Date: 11/15/17

Topic: Board Game Design in Theory and Practice

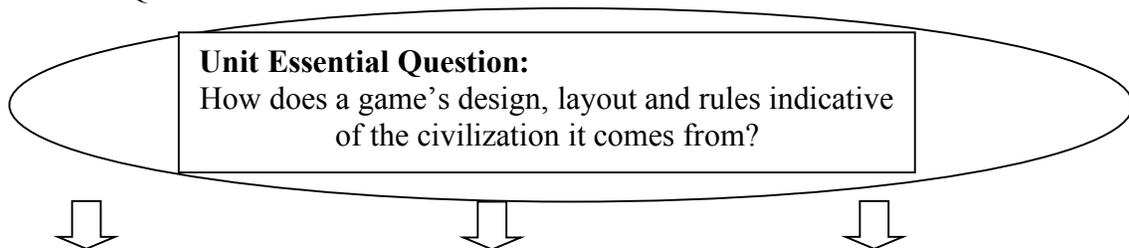
Days: 25-30

Subject Area: Development of Civilizations through Gaming

Grade: 10-12

Key Learning: The students will be able to analyze and describe the principles behind styles of games and the civilizations in which they are found.

Unit Essential Question:



## Game Design, Ancient Civilizations and a Modern World

<p>Concept: 3.1</p> <p>Luck Vs. Skill</p> <p>Standards:  <span style="background-color: #FF00FF;">1.2.11-12 A, B, H</span>  <span style="background-color: #00FF00;">1.4.11-12 J</span>  <span style="background-color: #00FF00;">3.4.12.C3</span>  <span style="background-color: #FFFF00;">6.1.9.A</span>  <span style="background-color: #FFFF00;">5.1.9 A, B</span>  <span style="background-color: #FFFF00;">8.6.11 E, F</span></p>	<p>Concept: 3.2</p> <p>Competitive Vs. Cooperative</p> <p>Standards:  <span style="background-color: #FF00FF;">1.2.11-12 A, B, C</span>  <span style="background-color: #00FF00;">1.4.11-12 A, B</span>  <span style="background-color: #00FF00;">3.4.12.C2</span>  <span style="background-color: #FFFF00;">6.1.9.D</span>  <span style="background-color: #FFFF00;">5.2.9. B,D</span>  <span style="background-color: #FFFF00;">8.6.11-12. E,F</span></p>	<p>Concept: 3.3</p> <p>Abstract Vs. Simulation</p> <p>Standards:  <span style="background-color: #FF00FF;">1.2.11-12 A, B, C</span>  <span style="background-color: #00FF00;">1.4.11-12 C, J</span>  <span style="background-color: #00FF00;">1.5.11-12 B</span>  <span style="background-color: #FFFF00;">5.2.12.D</span>  <span style="background-color: #FFFF00;">5.1.9.B</span>  <span style="background-color: #FFFF00;">6.1.9.D</span>  <span style="background-color: #FFFF00;">8.6.11 E, F</span></p>
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<p>Lesson Essential Question:</p> <p>Explain how history has encouraged the development of games of luck?</p> <p>Explain how history has encouraged the development of games of skill?</p> <p>Explain the function of games of chance versus games of skill.</p>	<p>Lesson Essential Question:</p> <p>How have societies utilized competitive games as a tool to aide in their expansion?</p> <p>Why would a society choose cooperative games over competitive games?</p> <p>How has sport helped to define our understanding of the ancient world?</p>	<p>Lesson Essential Question:</p> <p>Explain historically how societies have emphasized abstract gaming.</p> <p>How has simulation gaming helped in the ancient world's expansion?</p> <p>Explain the difference between Abstract and Simulated games and sport.</p>
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<ul style="list-style-type: none"> <li>• Game of Chance</li> <li>• Odds and Probabilities</li> <li>• War</li> <li>• Chess</li> </ul>	<ul style="list-style-type: none"> <li>• Olympics</li> <li>• Marathon</li> <li>• Gods and Goddesses</li> <li>• Royal Game of Ur</li> <li>• Empathy</li> </ul>	<ul style="list-style-type: none"> <li>• Turn Based Systems</li> <li>• 26 Soldiers of Lead</li> <li>• Cribbage Vs. Whist</li> <li>• Axis Vs. Allies</li> <li>• The Nature of Reality</li> </ul>
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## Game Design, Ancient Civilizations and a Modern World

School District: Chambersburg Area School District

Course: Game Design, Ancient Civilizations, and a Modern World

Date: 11/15/17

Topic: Board Game Design in Application

Days: 30-35

Subject Area: Development of Civilizations through Gaming

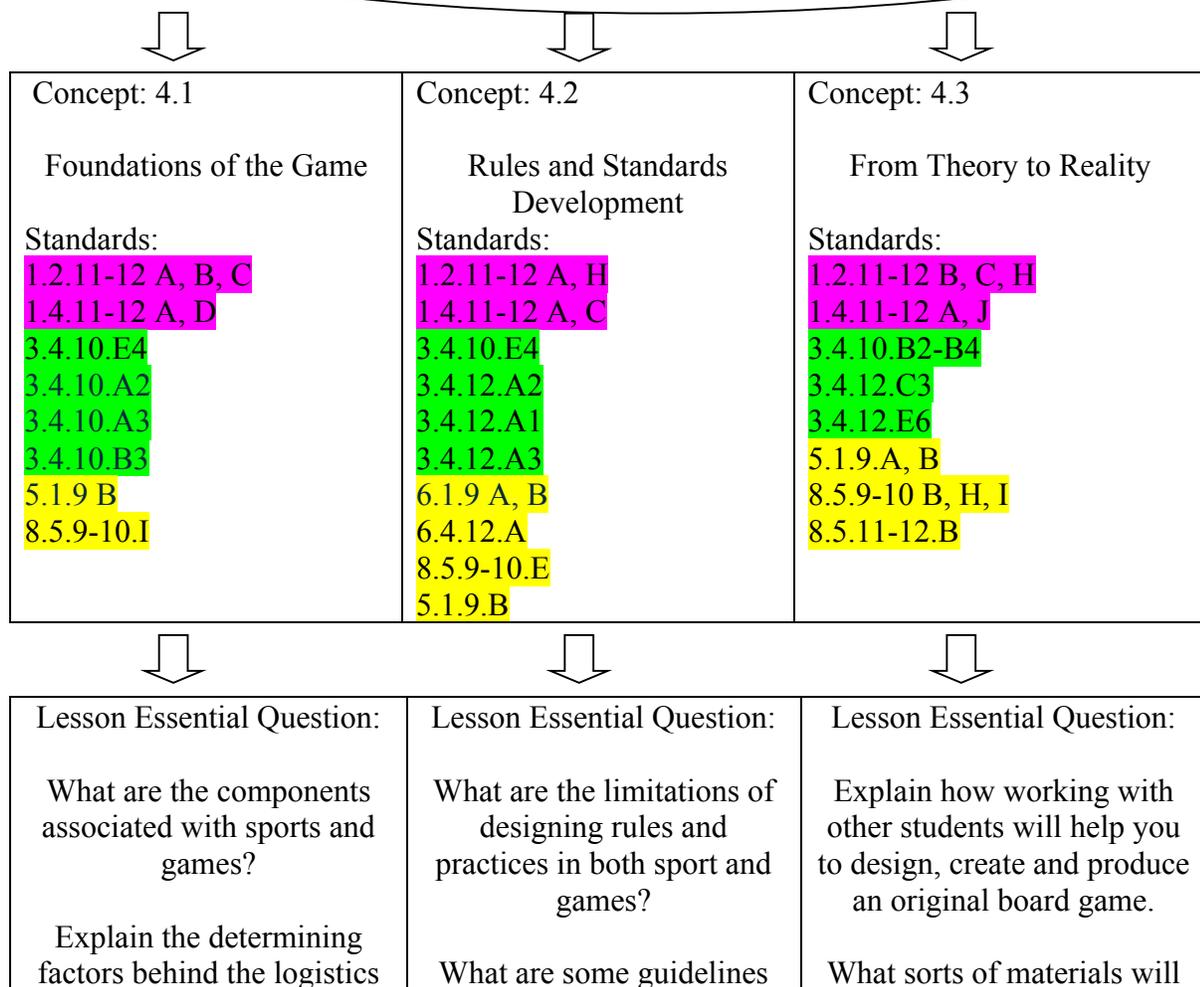
Grade: 10-12

Key Learning: The students will be able to design, define and produce an original board game utilizing STEM technologies while highlighting an ancient society's history.

Unit Essential Question:

**Unit Essential Question:**

What would a board game about the ancient society look like in a STEM based learning environment?



## Game Design, Ancient Civilizations and a Modern World

<p>of historical games and sports.</p> <p>Explain how the physical nature a game or sport is indicative of the society it comes from.</p> <p>How has the creation of games directly benefited a studied civilization?</p>	<p>used to define rules to a game or sport?</p> <p>How will you design your rules to accurately depict the limitations placed upon an ancient civilization?</p>	<p>you need to create your original board game?</p> <p>How can you use 3D printing and other modern technologies to aide in the development of a game?</p> <p>What limitations need to be predicted and addressed in order to produce your game?</p>
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<ul style="list-style-type: none"> <li>• Acceptable Use</li> <li>• Game Logic</li> <li>• Design Acuity</li> <li>• Logistics in Gaming</li> <li>• Game Mechanics</li> <li>• Empathy for the User</li> <li>• Flow or Story</li> </ul>	<ul style="list-style-type: none"> <li>• Game Production Processes</li> <li>• What is Play?</li> <li>• Hero's Tale</li> <li>• Role Playing Games</li> <li>• Prototyping</li> <li>• Resolution</li> </ul>	<ul style="list-style-type: none"> <li>• CAD</li> <li>• Scheduling and Conflict Resolution</li> <li>• MMO's</li> <li>• 3D printing Slicer Software</li> <li>• G Code</li> <li>• Scaling of Objects</li> <li>• 3D Modeling</li> </ul>
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### STANDARDS

#### ***ELA***

Standard - CC.1.2.11-12.A

Determine and analyze the relationship between two or more central ideas of a text, including the development and interaction of the central ideas; provide an objective summary of the text.

Standard - CC.1.2.11-12.B

Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences and conclusions based on and related to an author's implicit and explicit assumptions and beliefs.

Standard - CC.1.2.11-12.C

Analyze the interaction and development of a complex set of ideas, sequence of events, or specific individuals over the course of the text.

Standard - CC.1.2.11-12.D

Evaluate how an author's point of view or purpose shapes the content and style of a text.

Standard - CC.1.2.11-12.E

Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.

Standard - CC.1.2.11-12.F

Evaluate how words and phrases shape meaning and tone in texts.

## Game Design, Ancient Civilizations and a Modern World

Standard - CC.1.2.11-12.G

Integrate and evaluate multiple sources of information presented in different media or formats (e.g. visually, quantitatively) as well as in words in order to address a question or solve a problem.

Standard - CC.1.2.11-12.H

Analyze seminal texts based upon reasoning, premises, purposes, and arguments.

Standard - CC.1.2.9-10.A

Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.

Standard - CC.1.2.9-10.B

Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences and conclusions based on an author's explicit assumptions and beliefs about a subject.

Standard - CC.1.4.11-12.A

Write informative/ explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately.

Standard - CC.1.4.11-12.B

Write with a sharp distinct focus identifying topic, task, and audience.

Standard - CC.1.4.11-12.C

Develop and analyze the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic; include graphics and multimedia when useful to aiding comprehension.

Standard - CC.1.4.11-12.D

Organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create whole; use appropriate and varied transitions and syntax to link the major sections of the text; provide a concluding statement or section that supports the information presented; include formatting when useful to aiding comprehension.

Standard - CC.1.4.11-12.F

Demonstrate a grade appropriate command of the conventions of standard English grammar and spelling.

Standard - CC.1.4.11-12.H

Write with a sharp distinct focus identifying topic, task, and audience. • Introduce the precise, knowledgeable claim.

Standard - CC.1.4.11-12.J

Create organization that logically sequences claim(s), counterclaims, reasons, and evidence; Use words, phrases, and clauses as well as varied syntax to link the major sections of the text create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims; provide a concluding statement or section that follows from and supports the argument presented.

Standard - CC.1.5.11-12.A

Initiate and participate effectively in a range of collaborative discussions on grades level topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.

Standard - CC.1.5.11-12.B

## Game Design, Ancient Civilizations and a Modern World

Evaluate how the speaker's perspective, reasoning, and use of evidence and rhetoric affect the credibility of an argument through the author's stance, premises, links among ideas, word choice, points of emphasis, and tone.

Standard - CC.1.5.11-12.C

Integrate multiple sources of information presented in diverse formats and media (e.g. visually, quantitative, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

Standard - CC.1.5.11-12.D

Present information, findings, and supporting evidence, conveying a clear and distinct perspective; organization, development, substance, and style are appropriate to purpose, audience, and task.

### **STEM**

Standard - 3.4.10.A1

Illustrate how the development of technologies is often driven by profit and an economic market.

Standard - 3.4.10.A2

Interpret how systems thinking applies logic and creativity with appropriate comprises in complex real-life problems.

Standard - 3.4.10.A3

Examine how technology transfer occurs when a new user applies an existing innovation developed for one purpose in a different function.

Standard - 3.4.10.B1

Compare and contrast how the use of technology involves weighing the trade-offs between the positive and negative effects.

Standard - 3.4.10.B2

Demonstrate how humans devise technologies to reduce the negative consequences of other technologies.

Standard - 3.4.10.B3

Compare and contrast how a number of different factors, such as advertising, the strength of the economy, the goals of a company and the latest fads, contribute to shaping the design of and demand for various technologies.

Standard - 3.4.10.B4

Recognize that technological development has been evolutionary, the result of a series of refinements to a basic invention

Standard - 3.4.10.C1

Apply the components of the technological design process.

Standard - 3.4.10.C2

Analyze a prototype and/or create a working model to test a design concept by making actual observations and necessary adjustments.

Standard - 3.4.10.C3

Illustrate the concept that not all problems are technological and not every problem can be solved using technology.

Standard - 3.4.10.D3

Synthesize data, analyze trends, and draw conclusions regarding the effect of technology on the individual, society, and the environment.

Standard - 3.4.12.A1

## Game Design, Ancient Civilizations and a Modern World

Compare and contrast the rate of technological development over time.

Standard - 3.4.12.A2

Describe how management is the process of planning, organizing, and controlling work.

Standard - 3.4.12.A3

Demonstrate how technological progress promotes the advancement of science, technology, engineering and mathematics (STEM).

Standard - 3.4.12.C2

Apply the concept that engineering design is influenced by personal characteristics, such as creativity, resourcefulness, and the ability to visualize and think abstractly.

Standard - 3.4.12.B2

Illustrate how, with the aid of technology, various aspects of the environment can be monitored to provide information for decision making.

Standard - 3.4.12.C3

Apply the concept that many technological problems require a multi-disciplinary approach.

Standard - 3.4.10.E7

Evaluate structure design as related to function, considering such factors as style, convenience, safety, and efficiency.

Standard - 3.4.12.E2

Compare and contrast the technologies of biotechnology, conservation, bio-fuels, and ecosystems as they relate to managing Earth's resources effectively.

Standard - 3.4.12.E4

Synthesize the effects of information and communication systems and subsystems as an integral part of the development of the Information Age.

Standard - 3.4.12.E6

Compare and contrast the importance of science, technology, engineering and math (STEM) as it pertains to the manufactured world.

## ***Social Studies***

Standard - 5.1.9.A

Apply examples of the rule of law as related to individual rights and the common good.

Standard - 5.1.9.B

Analyze the major arguments advanced for different systems of government.

Standard - 5.2.9.B

Analyze strategies used to resolve conflicts in society and government.

Standard - 5.2.12.D

Evaluate and demonstrate what makes competent and responsible citizens.

Standard - 6.1.9.A

Analyze how choices are made because of scarcity.

Standard - 6.1.9.D

Explain how incentives cause people to change their behavior in predictable ways.

Standard - 6.4.12.A

Evaluate the comparative advantage of nations in the production of goods and services.

Standard - CC.8.5.9-10.B

Determine the central ideas or information of a primary or secondary source; provide an accurate summary of how key events or ideas develop over the course of the text.

Standard - CC.8.5.9-10.E

## Game Design, Ancient Civilizations and a Modern World

Analyze how a text uses structure to emphasize key points or advance an explanation or analysis.  
Standard - CC.8.6.9-10.H

Draw evidence from informational texts to support analysis, reflection, and research.  
Standard - CC.8.5.9-10.I

Compare and contrast treatments of the same topic in several primary and secondary sources.  
Standard - CC.8.5.11-12.B

Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.  
Standard - CC.8.6.11-12.C

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.  
Standard - CC.8.6.11-12.E

Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.  
Standard - CC.8.6.11-12.F

Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.