

LESSON PLANS for CE-MIST Interdisciplinary Unit: A Gebra Named AL

Interdisciplinary Unit Title: *A Gebra Named AL*

Theme: Journeys

Developed by: Jennifer Craig

Content Area: English Language Arts

Grade Level: 7th

School: A.L. Corbett Middle School

Unit Objective(s): The student will analyze the theme, character development, plot, and author's craft used in, Jules Verne's *Journey to the Center of the Earth*.

The student will respond to a literary text in a variety of ways.

The student will create a variety of responses for a variety of audiences to a literary text.

Standards Correlations for two (2) or more content areas: Science, Social Studies, and Math

Duration: three weeks

Materials: Class set of *Journey to the Center of the Earth*, calculators, poster board, markers, notebooks for journals

Procedures:

1. Students will read *A Gebra Named Al* in math class and discuss the journey theme in ELA.
2. Students will complete a pre-reading by using the internet to research the novel's historical context. Students will be working in pairs and looking for scientists, new scientific theories, explorers, available technologies of the time and what was in the works, etc. The students will present their findings to the class. (Science and Social Studies)
3. Another pre-reading strategy will tackle some of the vocabulary found within the text. Several methods will be used, including; power vocabulary, word wall, creating illustrated words and keeping a running list of terms that need to be defined or clarified. (ELA)
4. Students will keep a Reader's Response Journal which will contain their inferences, impressions, unfamiliar words, connections (text to text, text to self and text to world). (ELA and writing)

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5. Students will create a travel guide to the center of the Earth in the form of a pamphlet or brochure using details and events from the novel.
6. Students will create diagrams/illustrations of the bisected Earth, including the descent and subsequent discoveries. Students will use ratios and proportion formulas to assure the illustration is accurate.

Assessment: *Journey to the Center of the Earth* Portfolio, containing pieces completed prior to, during and after the reading.

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Interdisciplinary Unit Title: *A Gebra Named AL*

Content Area: Mathematics

Developed by: Jeni Lambert

Grade Level: 7th

School: A.L. Corbett Middle School

Unit Objective(s): The student will demonstrate through the mathematical processes an understanding of the representation of rational numbers, percentages, and square roots of perfect squares; accurate, efficient, and generalizable methods for operations with integers; the multiplication and division of fractions and decimals; and the inverse relationship between squaring and finding the square roots of perfect squares. The student will demonstrate through the mathematical processes an understanding of proportional relationships.

Standards Correlations for two (2) or more content areas: Math, Science, & ELA

Duration: two weeks

Materials: *A Gebra Named Al* (and other supporting books listed on the inventory sheet), Pi chart, Algebra posters

Procedures:

1. Students will read *A Gebra Named Al* in math class.
2. Students will use the Pi chart to guide them as they determine Pi using circumference and diameter.
3. Students will use “Algebra Posters” to race against the clock in a Round Robin “I Have, Who Has” game to help them understand algebra rules, and real-life applications of the rules.
4. Students will write a math story or poem with algebra topics.

Assessment: Algebra quiz

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Interdisciplinary Unit Title: *A Gebra Named AL*

Developed by: Erria Daniels

Content Area: Science

Grade Level: 7th

School: A.L. Corbett Middle School

Unit Objective(s): The student will demonstrate an understanding of the classifications and properties of matter and the changes that matter undergoes & use the periodic table to identify the basic organization of elements and groups of elements.

Standards Correlations for two (2) or more content areas: Science, Social Studies, & ELA

Duration: one week

Materials: Periodic Table card deck, Elements Challenge game, Periodic Table Toss-Up Ball

Procedures:

1. Students will read *A Gebra Named Al* in math class.
2. Students will use “Periodic Table Card Deck” to form a periodic table as a class that will be over 7 feet long.
3. Students will use “Elements Challenge” to race against the clock in a Round Robin “I Have, Who Has” game to help them understand common elements, their chemical symbols, and real-life applications of the elements.
4. Students will practice naming element symbols by tossing the ball to each other, giving the element name for the number and symbol on which their left thumb lands.

Assessment: Periodic Table quiz

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Interdisciplinary Unit Title: A Gebra Named Al

Content Area: Social Studies

Developed by: Marianne Berst

Grade Level: 7th

School: A.L. Corbett Middle School

Unit Objective(s): The student will demonstrate knowledge of the growth and impact of global trade on world civilizations after 1600.

Duration: one week

Materials:

STANDARD SUPPORT DOCUMENT

http://www.ed.sc.gov/apps/cso/standards/socsd_k8.cfm?#grade_7

Websites:

This site is a colored map of the Americas showing the extent of European colonization.

http://www.shmoop.com/pictures/index/history/hist00038/1750_european_colonization_of_america01.html

This site shows which European powers colonized in each part of the Americas.

<http://encarta.msn.com/encnet/refpages/RefMedia.aspx?refid=461517442&artrefid=761576293&pn=3&sec=-1>

www.scdiscus.org

click on History Resource Center: World History

ETV StreamlineSC

www.sctv.org/education/StreamLineSC

map of world, map of Europe

Procedures:

1. Have the students identify which European powers colonized in each of the different colored areas on the map at the website:
http://www.shmoop.com/pictures/index/history/hist00038/1750_european_colonization_of_america01.html
2. Have the students label a map of Europe on a blank world map or on a dry erase map if available. Have them draw lines from European countries to their respective colonies. Then have them interpret the influence of each European country based upon their spread across the globe either through discussion or in written form.

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3. Have the students color code a blank map of the Americas to represent the European powers that colonized there.
4. Have students write a letter back home as if they were an explorer describing their experiences.

Assessment: Maps, letter