

LEANNE'S 4TH and 5TH Grade Class

2021-2022 School Year

First Semester: August 9th – December 16th

1. **Science: Renewable Energy:** any resource, such as wood or solar energy, that can or will be replenished naturally in the course of time.

Overview:

In this unit, we will take a brief look at what energy sources our world uses and the difference between renewable and non-renewable energy sources. However, we will spend a majority of our time learning about solar power, hydropower, wind power, geothermal, and biomass.

Objectives:

1. Students will be able to list a variety of different energy sources and the pros and cons of using that energy source.
2. Students will describe the differences between renewable energy sources.
3. Students will analyze different situations and environments and determine what energy source would fit best.

Field Trip:

Catamount Institute

When: First quarter

Cost: \$10.00 per student, not recommended for younger siblings: activities will be for students only.

Parent Support: We will need drivers to transport students and chaperones that can stay.

Social Studies: American Civil War

Overview:

In this unit, students will engage in an in-depth study of the causes and effects of the Civil War. We will actively learn and produce hands on projects about the major leaders of the war, major battles, the daily life of a soldier and war technology.

Unit Objectives:

1. The student will identify the causes of the Civil War.
2. The student will be able to create sequence of important events that occurred during the Civil War on a time line.
3. The student will demonstrate the ability to describe the daily life of a civil war soldier
4. The student will be able to discuss the effects of major battles that took place during the Civil War.
5. The student will be able to explain the meaning and impact of the Emancipation Proclamation.
6. The student will identify and describe the importance of war technology
7. The student will critique the short- and long-term effects of the war

Second Semester: January 11th – May 26nd

Social Studies: Continuation of the Civil War

Science: Architecture

Overview:

Students will demonstrate their understanding of the basic physical science of large structures. They will actively participate in numerous hands on inquiry lessons around the topics of bridges, domes, skyscrapers, dams and tunnels.

Unit Objectives:

1. Students will design and conduct a scientific investigation.
2. Students will use appropriate tools and techniques to gather, analyze, and interpret data.
3. Students will develop descriptions, explanations, predictions, and models using evidence.
4. Students will think critically and logically to make the relationships between evidence and explanations.
5. Students will design/create a solution or product within a certain time frame using an assigned list of materials
6. Students will analyze and evaluate completed designs or products.
7. Students will develop an understanding of engineering design.
8. Students will develop an understanding of the role of troubleshooting, research and development, invention and innovation, and experimentation in problem solving.

Field Trip: TBA

Possibly a field trip to a dam in Denver's Waterton Canyon: this will tie in our Hydroelectricity unit in the Fall and our architecture unit on dams in the Spring

Or

Colorado Springs Fine Arts Center (to go with the Art we learn about all year)