

Los Angeles Unified School District
Office of Curriculum, Instruction and School Support
Elementary History-Social Science and
Elementary Science Divisions

Day 5
Economic Purpose

ESSENTIAL QUESTION: What do human beings need to survive and thrive in a new environment?

FOCUS QUESTION: How is economic purpose important to a colony?

Objective

Students will complete a Primary Source Activity: Historic Economic Reasons for Colonization. In addition students will determine the economic purpose for their space colony choosing from wind energy, solar energy, mining Helium-3, or hazardous (nuclear) waste disposal.

Quick Look

- **Conceptual Flow:** After learning what survival needs must be met in a new environment, we now begin to look at the economic issues that face a new colony.
- **Summary:** This lesson is designed to help students understand that a colony usually has an economic purpose. The space colony will need to establish a way to be self-supporting as well as repay the initial start-up funding. Students will learn about the economic purpose of the Jamestown and Plymouth colonies. Then they will read about possible economic purposes for their colony and choose one.
- **Time:** Approximately 3 ½- 4 hours
- **History Content Standards:**
 - 5.4 Students understand the political, religious, social, and economic institutions that evolved in the colonial era.
- **Science Content Standards:**
 - ES 5.5a Students know the Sun, an average star, is the central and largest body in the solar system and is composed primarily of hydrogen and helium.
 - ES 5.4.a Students know uneven heating of Earth causes air movements (convection currents).
- ***Common Core Standards:**
 - Writing Grade 5: 1, 2, 7, 8, 9
 - Reading Informational Texts Grade 5: 1,3 9, 10
 - Speaking & Listening: Grade 5: 1, 2, 3, 4a

- Language Grade 5:6
*see Appendix A
- Student Products:
 - Graphic organizer on the “Economics of Jamestown” video
 - Entry on Historical Colony Chart
 - Chart describing the benefits and challenges of 4 sources of energy.
 - Written presentation to share with the class about their chosen economic purpose.
 - Oral presentation of their economic purpose to the class.
 - Journal Entries
 - Entry on NASA application

BACKGROUND

Historically there was a financial motivation to colonization. Originally, colonists in the New World were searching for precious metals and a passage to the Orient. In addition, the financiers of the Virginia Company and the Plymouth Colony were hoping to make a profit from lumber and farming. If the United States were to fund a colony on another planet or the moon they would probably seek to make the colony financially profitable. This lesson requires the students to do a close reading of informational text that describes four types of methods for making a space colony profitable. All of these methods of creating a profit are tied to finding a viable source of energy to be used here on earth. The four energies discussed are solar power, wind energy, nuclear fusion using Helium-3 and disposing of nuclear waste now being generated on earth. These options for an economic purpose are described in informational texts provided to the students.

Vocabulary

solar power, solar radiation, photovoltaic panels, electrons, satellite, wind turbine, generator, substation, renewable, fission, fusion, extract, superheat

Materials

For Each Group

- “The Economics of Jamestown” Video Questions (Student Handout 5.1)
- Purpose of Plymouth Document (Student Handout 5.2)
- Energy Cards (Student Handout 5.5 – 5.8)

For Each Student

- Economic Purpose/ Energy Resources Organizer (Student Handout 5.3)
- Economic Purpose Presentation Guide (Student Handout 5.4)

For the Classroom

- Video “The Economics of Jamestown”: <http://historyisfun.org/jamestown-economy.htm>

PART I LOOKING BACK

Engage/Introduction

- **Teacher will ask**
 - *What are some reasons you might move to a new place?*
 - *Why did the early US colonists want to establish new colonies?*
- Teacher leads a discussion making sure students know that among many reasons for colonization, the colonists hoped to make a profit.
 -  Create a skit that defines the terms 'economics' and 'profit'. Demonstrate how one 'makes a profit'.

Explore/Analysis Activity

- Give students the graphic organizer "The Economics of Jamestown" Video Questions. (Student Handout 5.1) Instruct students to respond to questions as they watch the video.
- Show the video "The Economics of Jamestown" <http://www.historyisfun.org>.
- Allow students time to complete the graphic organizer after watching the video.
 -  Using a graphic organizer together with a video provides comprehension support for students.
- Facilitate a discussion of student responses on the chart.
- Hand out the Purpose of Plymouth document page. (Student Handout 5.2) Allow students to work in groups to discuss the questions.
 -  Group discussion with other students offers students on opportunity to practice listening and speaking skills.
- Facilitate a discussion about the Purpose of Plymouth document.
- Entry on Historical Colony Chart under "Economic Purpose"

Explain/Conclusion

- Facilitate a class discussion about the purposes of colonization. Make sure students understand the idea of economic purpose. Help students recognize the economic purposes behind both the Jamestown and Plymouth Colonies.
- **Journal Entry**
 - Have students complete a journal entry that answers the following questions:
How did having an economic purpose motive the colonists at Jamestown and Plymouth?
How did having an economic purpose help them to survive?

PART II LOOKING FORWARD

Engage/Introduction

- Facilitate a discussion about sources of energy available on Earth and the problems we face in terms of running out of fossil fuels. Refer back to the video shown on Day 1 “Earth’s Resources”. Make sure students understand how we get energy to power our houses and cars.

Explore/Analysis Activity

- Create 4 energy expert groups taking 1-2 students from each colony to become a member of an expert group.
- Give one copy of one Energy Card (Student Handouts 5.5 – 5.8) to each group.
- Give each student a copy of Economic Purpose/ Energy Resources Organizer (Student Handout 5.3)
- Explain the three sections of the chart.
Instruct the students to read the card aloud as a group and use the information they learn to fill in their section of the Economic Purpose/ Energy Resources Organizer.
 Read the cards aloud to students prior to the activity, discussing vocabulary.
- Allow the students time to read the informational text, summarize the text, and fill in the chart. Encourage the students to annotate the text as they read a second time. Circulate and help students.
 As the teacher circulates, notice the annotations and stop to clarify and answer questions regarding the text.
- When the students have finished, ask them to return to their original colony group now as an energy expert. Summarize their specific type of energy for the group. Group members then fill in the other sections of their Economic Purpose/ Energy Resources Organizer.
 *By serving in the role of an expert, students have opportunities to both clarify information in the expert group and then orally share that information with their colony group.*
- When students have finished debrief whole group. As the students debrief, make sure they understand each energy source and how each source could be used as an economic purpose for their colony.

Explain/Conclusion

- After thoroughly debriefing, allow groups time to determine which economic purpose their group will choose for their colony.
- Pass out Economic Purpose Presentation Guide (Student Handout 5.4). Allow groups time to complete the Guide.
- Have each group present which energy source they have chosen as their economic purpose.

PART III BRINGING IT ALL TOGETHER

- **Group Discussion**

Facilitate a discussion about the Focus Question for this lesson, (*How is economic purpose important to a colony?*), the Essential Question for the unit, (*What do human beings need to survive and thrive in a new environment?*) and how the day's activities have changed their ideas about their colony.

- Allow time for groups to discuss their answers before participating in a group discussion.

Teacher will ask:

- *How does having an economic purpose help you survive and thrive? What evidence can you give to support your answer?*
- *What do human beings need to survive and thrive in a new environment? What evidence can you give to support your answer?*
- *How did today's activities change your ideas about your colony?*

- **Journal Entry**

- Each student will write a journal responding to today's focus question in their journals:

How is economic purpose important to a colony?

 *Journal entries provide an opportunity for students to develop organizational skills in writing after having experienced oral practice with other students and the teacher.*

- **Space Colonization Application entry (Teacher Resource 1.2):**

Teacher will say:

- *All **Space Colony Teams** will review the application that will be submitted to Congress.*
- *Work with your team to prepare the information to enter in the section: "**Economic Purpose/Energy Source**".*
- *In preparation for filling out this section, consider the various economic opportunities and/or energy sources your space colony can use in order to survive and thrive in a new environment.*

- **Extensions**

Have students take on the role of a newspaper reporter. Write an article comparing the reasons why the two colonies were established stating if they think either was successful in achieving their purposes.