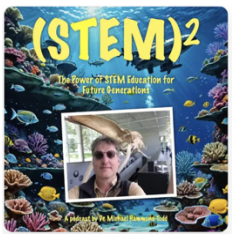

The Power of (STEM)² Podcast Lessons

Dear STEM Teachers – This free lesson plan comes from the educational podcast (STEM)² on NASA's Artemis 2 program and is designed for 3rd-8th Grade learners with a sample NGSS standard. Click here for more Artemis lessons & resources.

(STEAM)² Sample Lesson #1: Science & Society - Exploring the Artemis Accords

Grade Levels: 3-8
Subject Areas: Science, Social Studies, and Language Arts
Duration: 30 minutes to 1 hour (single session or two days)
Next Generation Science Standards (NGSS):

- **5-ESS3-1:** Obtain and combine infomation about ways individual communities use science to protect the Earth's resources and environment.

Objectives:

1. **Understand the Artemis Accords:** Students will learn about the Artemis Accords and their significance for space exploration and international cooperation.
2. **Team Collaboration:** Students will work in teams to explore and present different aspects of the Accords.
3. **Critical Thinking:** Students will discuss the implications of space exploration on Earth and in space.

Materials Needed:

- Printed copies of the Artemis Accords summary (simplified language)
- Chart paper and markers
- Access to a projector or smartboard (optional)
- Sticky notes
- Art supplies (crayons, colored pencils, etc.)

Lesson Outline:

Introduction (5-10 minutes)

1. **Hook:** Ask students, "What do you think it's like to live on the Moon or Mars?" Encourage a brief discussion.

2. **Introduction to the Artemis Program:** Provide a brief overview of NASA's Artemis Program, explaining its goal to return humans to the Moon and explore Mars.
3. **What are the Artemis Accords?** Introduce the Artemis Accords as a set of principles for international collaboration in space exploration, emphasizing peace, safety, and sustainability.

Team-Based Activity (15-20 minutes)

1. **Form Teams:** Divide the class into small teams of 4-5 students.

2. **Assign Topics:** Each team will receive a different aspect of the Artemis Accords to explore (recommend teachers use AI to summarize accords to grade level and use poster of participating nations as a visual reference):

    - Team 1: Peaceful exploration
    - Team 2: Safety in space
    - Team 3: Sustainability and protecting celestial bodies
    - Team 4: International cooperation
    - Team 5: Benefits to Earth from space exploration

3. **Research and Discuss (10-20 minutes):**

    - Provide teams with printed summaries and art supplies.
    - Instruct teams to read their assigned section, discuss its importance, and brainstorm ideas on how they can illustrate or present their findings on chart paper.

Presentations (5-10 minutes)

1. **Share Findings:** Each team will take 1 minute to present their topic to the class. Encourage creativity in presentations, such as drawing a poster or acting out a scenario related to their topic.

Reflection and Discussion (5 minutes)

1. **Class Discussion:** Use sticky notes for students to write one question or one thing they learned about the Artemis Accords. Collect the sticky notes and read a few aloud.
2. **Wrap-Up Questions:**
    - Why is it important for countries to work together in space?
    - How can the principles of the Artemis Accords apply to our lives on Earth?

- What role do you think scientists and engineers play in space exploration?

Assessment:

- **Participation in Team Activity:** Observe teamwork and engagement during group discussions and presentations.
- **Exit Ticket:** Collect sticky notes to assess understanding and curiosity about the topic.

Extensions:

- **Art Project:** Students can create a poster or model representing one aspect of the Artemis Accords or an imagined future mission.
- **Research Project:** Students can research different countries' roles in space exploration and present findings in a follow-up lesson.

This lesson combines scientific principles with social responsibility, promoting critical thinking and collaboration among students as they explore the exciting possibilities of space exploration.

This lesson was created using a blend of AI and editing by the podcast and is free and open for public and educational use. Click the icon below more information on the podcast (STEM)2 or contact us by email: stemsquarred@gmail.com.