

Apophis Comic Strip

Objectives

- Students will create a comic strip on the premise of stopping asteroid Apophis
- Students will write appropriately for their audience
- Students will study and understand current science technology in order to create a solution to a problem

Suggested Grade Level

5th-8th

Subject Areas

Science

Language Arts

Timeline

One to two class periods

Standards

Science as Inquiry

- Abilities necessary to do scientific inquiry
- Understandings about scientific inquiry

Physical Science

- Properties and changes of properties in matter
- Motion and forces
- Transfer of Energy

Earth and Space Science

- Structure of the Earth system
- Earth's history
- Earth in the solar system

Science and Technology

- Abilities of technological design
- Understandings about science and technology

Science in Personal and Social Perspectives

- Populations, resources, and environments
- Natural hazards
- Risks and benefits
- Science and technology in society

History and Nature of Science

- Science as a human endeavor
- Nature of science
- History of science

Language Arts

- Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics)
- Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes
- Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes
- Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language, and genre to create, critique, and discuss print and non-print texts
- Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge
- Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information)

Background

Now that students have completed the Virtual Lab on stopping Apophis, this lesson gives them a chance to express, visually, their thoughts of the project. Students will read a comic strip about Apophis. Their task is to make their own comic strip about stopping Apophis. If students want to use the same ideas from the virtual lab, that is acceptable. The hope is that they will be creative and come up with a new idea. This gives students who excel at drawing and writing an opportunity for success.

Materials

Comic strip, paper, colored pencils

Lesson

1. After completing the Virtual Lab, discuss with students their concepts, ideas, thoughts, and feelings about solving the Apophis issue.
2. Discuss what they thought of the solutions presented in the Virtual Lab.
3. Give students the Apophis comic strip.

4. Discuss with students that the possibility of Apophis hitting the Earth, now, is very remote.
5. Tell them they will create a comic strip of how they would save the Earth from Apophis if it were to hit the Earth. They can use the ideas from the Virtual Lab or they can come up with some of their own.
6. Give them a piece of paper and tell them that there must be at least six frames to their comic strip.
7. The comic strip may be in color or black & white.
8. The students must have captions for each picture and students must take into account for whom they are writing, and must use proper grammar.
9. Appropriate language and pictures are required.

Extensions

You can change the premise of the assignment by having students do a comic strip of what they would do **after** Apophis hits the Earth. What things would need to be done in preparation of the disaster and what things would need to be accomplished after the impact?

Evaluation/Assessment

Grade students on ideas presented. Have students completely thought through their solution? Has the student done research into the realistic possibilities of their solution? Has the student used proper grammar?

Resources

National Science Standards: <http://www.nap.edu/readingroom/books/nses/>

National Language Arts Standards:

<http://www.ncte.org/about/over/standards/110846.htm>

National History Standards: <http://nchs.ucla.edu/standards/toc.html>

NASA: <http://www.nasa.gov>

BBC: <http://www.bbc.co.uk>

CBS: <http://www.cbs.com>