

THE SOLAR SYSTEM FOR KIDS (REVISED)

WHAT'S UP IN SPACE SERIES (7-PART)

- EARTH
- EXPLORING SPACE
 - MARS
 - MOON
 - PLANETS
 - STARS
 - SUN

AVAILABLE
DVD & VHS



Film ideas, inc.

308 N. Wolf Rd.
Wheeling, IL 60090

Tel: 1-800-475-3456
E-mail: filmid@ais.net
Web Site: www.filmideas.com

Copyright © 2004

WHAT'S UP IN SPACE?



EARTH

MEETS NATIONAL
SCIENCE STANDARDS

STUDY GUIDE

INTRODUCTION TO SERIES

What's UP In Space? Is a refreshingly new series that introduces young learners to the solar system. These fascinating topics are presented at a developmentally appropriate level, using a combination of live action footage, illustrations and computer animation. Each program answers important questions in space science using the latest research and in line with the American National Science Education Standards.

As a complementary device with each program, an instructional guide suggests exercises to enhance the learning for teachers, parents and students. These interactive exercises will reinforce and further develop a student's level of comprehension.

TABLE OF CONTENTS:

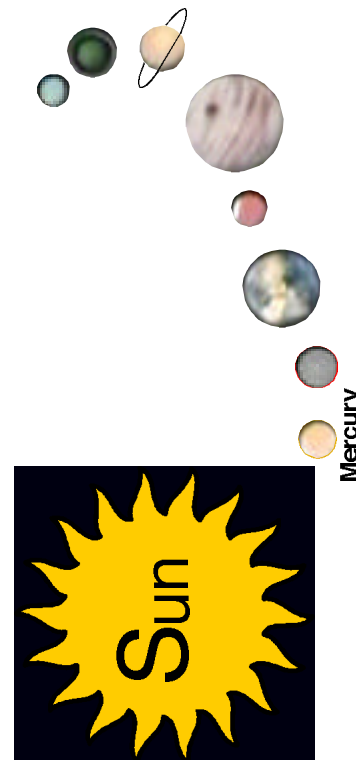
| | |
|--|---|
| <i>Additional Resources</i> | 1 |
| <i>Prior Knowledge / Discussion Questions / Follow Up Activities</i> . . . | 2 |
| <i>Vocabulary</i> | 3 |
| <i>Comprehension Questions</i> | 4 |
| <i>Diagram</i> | 5 |

Permission granted to copy the exercises provided in this guide. For educational use ONLY.

E-Guides available at www.filmideas.com

DIAGRAM:

Study the diagram of the solar system below. Knowing that planet Mercury is closest to the sun and planet Neptune is farthest from the sun, where is planet Earth in the solar system?



EARTH

COMPREHENSION QUESTIONS:

Where is Earth located in the solar system?

How does our location in the solar system affect Earth? How does it make Earth special?

What accounts for day and night on Earth?

What is the Earth's crust made of? Why is some of the crust underwater?

What is the Earth's mantle?

What happens when molten rock from volcanoes meets the cold water of the ocean?

How is the Earth's outer core different from the inner core?

What are the two elements that make it possible for life to survive on Earth?

How much of the Earth is covered with water? Why do living things need water to survive?

Aside from providing oxygen, what else does the atmosphere do to help Earth?

What is a continent? How many continents are there?

How is a continent different from a country?

"EARTH" introduces students to the planet where we live. In addition to discussing Earth's place in the solar system, this program explains the basics of Earth Science, including atmosphere, weather, rock cycle, erosion and the water cycle.

ADDITIONAL RESOURCES:

<http://www.cybrary.org/space.htm>

<http://earth.jsc.nasa.gov/sseop/efs/>

<http://kids.earth.nasa.gov/>

<http://www.earthsky.com/>

[Magic School Bus: Inside the Earth](#)

by Joanna Cole

[Janice VanCleave's Earth Science for Every Kid :](#)

[101 Easy Experiments that Really Work](#)

by Janice VanCleave

[What Is the World Made Of? All About Solids, Liquids, and Gases \(Let's-Read-and-Find-Out Science, Stage 2\)](#)

by Kathleen Weidner Zoehfeld

[A Drop Around the World](#)

by Barbara Shaw McKinney

ASSESSMENT OF PRIOR KNOWLEDGE:

What do you know about our planet, Earth?

How do you think it is like other planets in our solar system? How is it different?

DISCUSSION QUESTIONS:

What are the four main layers of the Earth? How is each layer different from the others?

Explain the water cycle.

You can imagine that people have not been able to dig through the Earth. How do you think scientists have learned about the layers of the Earth?

Knowing what makes life possible on Earth, which other planets do you think would be the most likely to be able to support life?

FOLLOW UP ACTIVITIES:

Students can create scale models of the Earth's cross section using paper mache, clay and tin foil. This will give them perspective on the size and density of the Earth's different layers.

VOCABULARY:

Year – The time it takes Earth to make one complete rotation, or orbit, around the sun.

Day - The time it takes Earth to spin once around on its own axis.

Molten – Nearly melted, as in molten rock that oozes from volcanoes.

Atmosphere - The name for the layers of gases and clouds that surround the Earth.

Evaporate – When water appears to dry up.

Vapor – The gas form of water.

Precipitation – Rain and snow.