



SCIENCE PARENT NEWSLETTER

FIFTH GRADE

UNIT 3

EARTH SCIENCE

IN SCHOOL...

In Unit 3 students will seek to answer, “How much water can be found in different places on earth?” and “How do lengths and directions of shadows or relative lengths of day and night change from day to day, and how does the appearance of some stars change in different seasons?” Through the development of a model and using an example, students are able to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact. They describe and graph data to provide evidence about the distribution of water on earth.

STUDENTS WILL KNOW...

- The movement of the Earth and Moon around the Sun causes observable patterns.
- The Earth has different layers or spheres
- The Earth has patterns of weather
- The ocean is essential in many different ways.
- Gravity is a force that pulls all matter together

STUDENTS WILL BE ABLE TO...

- Represent data in graphical displays (bar graphs, pictographs and/or pie charts) to reveal patterns that indicate relationships.
- Support an argument with evidence, data, or a model.
- Develop a model using an example to describe a scientific principle
- Describe and graph quantities such as area and volume to address scientific questions

AT HOME...

ASK YOUR STUDENTS...

- How much water can be found in different places on Earth?
- How does matter cycle through ecosystems?
- How do lengths and directions of shadows or relative lengths of day and night change from day to day, and how does the appearance of some stars change in different seasons?

ENGAGE YOUR STUDENTS...

- The sun is a star that appears larger and brighter than other stars because it is closer. The orbits of Earth around the sun and of the moon around Earth, together with the rotation of Earth about an axis between its North and South poles, cause observable patterns.
- The Earth's water is distributed among different compartments.

IN THE COMMUNITY...

- Go to the U46 Planetarium for public shows on a wide variety of topics including stars and planet orbits.
http://www.u-46.org/pages/SDU46/Departments_Programs/ObservatoryPlanetarium
- Design a model to show patterns of daily changes in length and direction of shadows, day and night, seasonal changes of stars in the night sky.
- Map the water reservoirs in your community. Are they connected to each other?
- Puddles form after a rain and then disappear- where do they end up?

STEM Expo...

- Design a model to show patterns of daily changes in length and direction of shadows, day and night, seasonal changes of stars in the night sky.
- Map the water compartments in your community and show how they are connected.
- What is your local hydrological cycle? Are there human activities that alter the local water cycle?