

# OFFICE OF K-12 SCIENCE & PLANETARIUM

### **SCIENCE PARENT NEWSLETTER**

SECOND GRADE

UNIT 3

**EARTH & SPACE SCIENCE** 

### IN SCHOOL...

Students will gain an understanding of observable properties of materials through analysis and classification of different materials. Students are able to apply their understanding of the idea that wind and water can change the shape of the land to compare design solutions to slow or prevent such change. Students are able to use information and models to identify and represent the shapes and kinds of land and bodies of water in an area and where water is found on earth. The crosscutting concepts of patterns; cause and effect; energy and matter; structure and function; stability and change; and influence of engineering, technology, and science on society and the natural world are called out as organizing concepts for these disciplinary core ideas.

#### STUDENTS WILL KNOW...

- Materials have observable properties
- Water and wind can change the shape of land
- There are many different types of bodies of water and they are located all over Earth

#### STUDENTS WILL BE ABLE TO ...

- Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence to answer a question.
- Construct an argument with evidence to support a claim.
- Develop a model to represent patterns in the natural world.

## AT HOME...

#### ASK YOUR STUDENTS...

- What makes bodies of land and water change over time?
- What causes change? How do things change over time?
- What patterns of change can I observe?
- What causes change in our world?

#### **ENGAGE YOUR STUDENTS...**

- Different kinds of matter exist and many of them can be either solid or liquid, depending on temperature.
   Matter can be described and classified by its observable properties.
- Patterns in the natural and human designed world can be observed.
- Maps show where things are located.
   One can map the shapes and kinds of land and water in any area.
- Events have causes that generate observable patterns.



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## IN THE COMMUNITY...

- Research the "Great American Dust Bowl" to discover how one of the most historic and dramatic wind erosion events impacted the United States.
- Look for evidence of wind and water erosion in your yard.
- Visit various local bodies of water like Lake Michigan, the Fox River, Poplar Creek or a detention pond. How are they similar? How are they different?

## U46 STEM Expo....

- Complete an investigation on how wind or water causes erosion.
- Test different structures or designs for controlling or reducing wind or water erosion.
- Create models of different bodies of water.
- Create a model of a watershed or a map that shows how different bodies of water connect.