unit 10

Wind and Water Change the Earth
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DESIGN CHALLENGE:
How can we design, test, and improve structures to prevent wind erosion?

Visit the Unit 10 Curriculum Page for more resources: http://schoolpartnership.wustl.edu/instructional-materials/mysci-unit-10/.
Click the lesson numbers below to navigate through the curriculum.

**section 1**
What can we find on Earth’s surface?

- **Total Time:** 7 days + extra time for the landform to dry
- **LESSON 1**
  What can we learn about Earth’s surface from a globe?
- **LESSON 2**
  What are the bodies of water on Earth’s surface?
- **LESSON 3**
  What are the landforms on Earth’s surface?

**section 2**
How does Earth’s surface change?

- **Total Time:** 9 days
- **LESSON 4**
  What are landforms made of?
- **LESSON 5**
  How is the Earth changed by wind and water?
- **LESSON 6**
  Does the surface of the Earth change quickly or slowly?

**section 3**
How can we design, test, and improve structures to prevent wind erosion?

- **Total Time:** 4 days
- **LESSON 7**
  What do we need to know to prevent wind erosion?
- **LESSON 8**
  What can we learn from testing and comparing ideas to improve our projects?

**STORYLINE**

In this unit, students will learn about the surface of the Earth, including what covers the surface of the Earth, how the surface of the Earth is changed by wind and water, and what engineers can do to help solve problems related to wind erosion. This unit emphasizes the Crosscutting Concepts of Stability and Change and Patterns.

First, students will seek evidence about what covers the surface of the Earth using a globe game and creating graphs of the class findings. Then, they will explore various landforms and bodies of water that make up Earth’s landscapes.

Then, students will learn about changes to the surface of the earth, including the creation and erosion of soil. They will learn to recognize both fast and slow changes to the Earth’s surface.

Finally, students will discover problems caused by wind erosion and use the engineering design cycle to design, test, and improve solutions to wind erosion.