

Chapter 9

Use with Section 3

ENRICHMENT**• Wind****Wind**

In the text, you learned how dunes are formed. This activity demonstrates how the speed of the wind affects the amount of erosion.

Materials  

large cardboard box
sand
one or more large rocks

hair dryer
safety goggles

Safety Procedures

1. Wear safety goggles when blowing the sand with the hair dryer.
2. Make sure the hair dryer is properly plugged in and do not place it too close to the sand.

Procedure

1. Fill a box about one third full of sand.
2. Put the rock or rocks about one third of the way from the back end of the box.
3. Put on the safety goggles.
4. Set the dryer on low and aim the air flow toward the sand at the front of the box.
5. Observe what happens as the air flow blows the sand against the rocks.
6. Smooth out the sand in the box so it is distributed evenly, and repeat steps 3–6, but this time operate the dryer at high speed.

If possible, perform the activity. Then base your answers to the following questions on your observations. If you cannot perform the activity, hypothesize your answers.

Conclude and Apply

1. What happened to the sand when the dryer was at a low speed? _____

2. What happened to the sand when the dryer was at high speed? _____

3. What caused the sand to pile up? _____

4. How does an increased wind affect erosion? _____
