



Plants and Dunes

Procedure

- 1. Collaborate** Work with a partner. You will make models of mounds of sand called **dunes**. Cover your work area with newspaper. Stand up a box and place a rectangular pan in it, as shown in your book. The box will act as a shield for blowing sand.
- 2. Use Models** Use sand to build two sand dunes in the pan. Build one dune in front of the other. The dunes should be the same size and shape.
- 3. Observe** Use a hair dryer to produce “wind.” As your partner times you, aim the “wind” at the dunes. Move the dryer slowly from side to side for 15 seconds. On the lines below, record the results. Include a drawing.
Safety: Wear goggles when the hair dryer is on.

A large, empty rectangular box with a black border, intended for students to draw or record their observations from the experiment.

Name _____ Date _____

4. **Compare** Rebuild the dunes. Push plastic grass plants into both dunes. Make sure that the base of each plant is buried in the sand. Then repeat step 3.

Conclusion

1. **Hypothesize** In which step, 3 or 4, did the sand move the most? Hypothesize the reason for this difference.

2. **Infer** In step 4, which dune lost more sand, the one in front or the one in back? Explain why.

Ask Questions Talk with other groups about your experiment. Ask questions about the role of sand dunes and plants in protecting beaches.

Guided Inquiry