

## MATERIALS AND EQUIPMENT

The unit requires a variety of materials to support various ways of learning (including doing, discussing, listening, watching, reading, and writing). Prepare in advance by collecting the materials and equipment needed for all the demonstrations and hands-on investigations.

### Part A: Earth's Atmosphere

#### Lesson 1

- water
- playing card
- large test tube or small beaker
- bucket or wash pail
- paper towels
- small pieces of clay rolled into ball shapes (2)
- several textbooks
- index cards for student vocabulary deck (3 per student)

#### Lesson 2

- hot plate
- pot of water
- pot of ice
- index cards for student vocabulary deck (5 per student)

#### Lesson 3

- shallow dish or pie pan (a glass dish is best)
- water
- food coloring
- candle and matches or lighter
- beaker
- balloon slightly inflated and tied
- plastic cup
- piece of newspaper
- bucket of water
- glass of ice water
- dropper of water

### Part B: Wind: The Movement of Air

#### Lesson 4

- paper plate (1 per group)
- marker (1 per group)
- ruler (1 per group)
- straw (1 per group)
- tissue paper streamers (1 per group)
- tape (1 roll per group or enough for efficient sharing)
- compass (1 per group or enough for efficient sharing)
- sharp pencil (1 per group)
- pinwheel
- candle
- piece of clay
- picture of a hot-air balloon and a windsurfer
- internet access and the means to project images for whole-class viewing

#### Lesson 5

- cup or pan of warm water with a cover (1 per group)
- index cards for student vocabulary deck (5 per student)

#### Lesson 6

- internet access
- colored pencils

### Part C: Weather and Climate

#### Lesson 7

- ruler
- yardstick

## Lesson 7, continued

- internet access and the means to project images/video for whole-class viewing
- index cards for student vocabulary deck (3 per student)

### Lesson 8

- electric table lamp
- large grapefruit
- small sticker
- bamboo skewer
- blue, green, pink, and yellow highlighter pens
- internet access and the means to project images/video for whole-class viewing
- index cards for student vocabulary deck (1 per student)

### Lesson 9

- highlighters in four colors
- internet access and the means to project images/video for whole-class viewing

### Lesson 10

- stapler
- scissors
- stamp(s) and ink pad, or stickers
- internet access and the means to project images/video for whole-class viewing

## Part D: Reducing the Impacts of Hazardous Weather

### Lesson 11

- internet access and the means to project images/video for whole-class viewing
- index cards for student vocabulary deck (2 per student)

### Lesson 12

- index cards for student vocabulary deck (3 per student)

### Lesson 13

- internet access
- classroom computers

### Unit Review

- internet access and the means to project images/video for whole-class viewing