Activity 1
What You Need

For each student:
☐ 1 sheet of writing paper
☐ 1 Seasons Lab Book (or just the “Seasons Game” sheet, page 3 of Seasons Lab Book)
☐ 1 pencil

For the class:
☐ a chalkboard or overhead projector
☐ Optional—some sort of prize for the winner of the Seasons Game, e.g., decorative pen or pencil, a computer diskette, paperback book.

Activity 2
What You Need—Part A

For the class:
☐ a light bulb, any size or wattage
☐ a lamp with no shade
☐ an extension cord
☐ 1 Earth globe

For each group of four to six students:
a piece of scratch paper and pencil

For each student:
☐ 1 “Seasons Survey” (p. 4 of Seasons Lab Book)
☐ 2 extra copies of the survey
☐ 1 pencil
☐ 1 pen
☐ (Optional) graph paper

What You Need
For the class:
☐ (Optional) 3 calculators

For each student:
☐ Seasons Lab Book with their own completed survey
☐ the completed surveys of their friends and family
☐ pencil
☐ graph paper
☐ colored markers

For each group of 4–6 students:
☐ a piece of scratch paper
Activity 3
What You Need

For the class:
- 1 overhead projector or CD-ROM disk used with the whole class at once (see note at right, “Get Out your CD-ROM"
- 7 pages of overhead transparencies for “Trip to the Sun” (masters on pages 31-43)
  OR
- CD-ROM disk
- 1 scale model (a car or any toy made to scale is fine)
- 1 Model Sun (28 cm diameter) drawn on manila file folder;
  to make this the first time, you need:
  - 1 manila file folder
  - 1 marking pen, wide tipped
  - 1 strip of card stock, about 1 cm x 16 cm
  - 1 pushpin
  - 1 small piece of corrugated cardboard, at least 5 cm square
- one Earth globe or large ball * (see note below)
- 1 ruler, any type

For each student:
- 1 “Trip to the Sun” worksheets (pp. 5-8 of Seasons Lab Book)
- 1 pencil
- (Optional) 1 calculator

* Inflatable globes don’t work well for the demonstration at the end of this activity. You will need a hard-surfaced Earth globe. A soccer ball, basketball, or other rigid, large ball will also work.

Activity 4
What You Need

For every pair of students:
- a 25 cm piece string or twine—not stretchy
- 1 pencil
- 3 sheets of blank paper (or 2 sheets and page 9 of Seasons Lab Books)
- 2 push pins or thumb tacks
- a stack of newspaper, at least the thickness of the pins or tacks students will use
- 1 ruler (centimeters)

For the class:
- 1 40 cm piece string or twine—not stretchy
- a bulletin board or chart paper pad
- one piece of paper at least 14 x 14 inches
- two push pins or thumbtacks
- 1 overhead transparency of 3 ellipses and comet
- 1 blank overhead transparency
- 2 different colored transparency pens
- 1 hula hoop or large round embroidery hoop
- scratch paper to draw extra ellipses
Activity 5

What You Need

For each student:
☐ 1 List of locations with latitudes and longitudes  
   (page 10 of Seasons Lab Book)
☐ 1 World Map (page 11 of Seasons Lab Book)
☐ 1 "Temperatures Around the World" data sheet  
   (page 12 of Seasons Lab Book)
☐ 1 "Temperatures Around the World" graphing sheet  
   (page 13 of Seasons Lab Book)
☐ 1 pencil

For each group of 4-6 students:
☐ 3–4 colored pens—assorted colors

For the class:
☐ 1 world globe
☐ 1 overhead transparency of World Map or a large World wall  
  map (master in Seasons Lab Book, page 11)
☐ 1 overhead transparency of Temperature Data Sample (master  
  in Getting Ready, next page)
☐ 1 overhead transparency of Temperatures Around the World  
  Graph (blank; master in Seasons Lab Book, page 13)
☐ 1 overhead transparency of Temperature Around the World  
  Graph (complete; master on page 59)
☐ 1 overhead projector
☐ 1 assortment of colored transparency pens

Activity 6

What You Need

For each student:
☐ 1 "Seasonal Changes in Day Length" data sheet (page 14 of  
   Seasons Lab Book)
☐ 1 "Day Length" graphing sheet (page 15 of Seasons Lab Book)
☐ 1 pencil

For each group of 4-6 students:
☐ 3–4 colored pens—assorted colors

For the class:
☐ 1 transparency of Day Length Data Sample (master in Getting  
  Ready; on bottom half of next page, page 66)
☐ 1 transparency of World Map or a large World wall map (mas- 
  ter in Season Lab Book, page 11)
☐ 1 transparency of Day Length Graph (blank; master in Seasons  
  Lab Book, page 15)
☐ 1 transparency of Day Length Graph (complete; master on page  
   67 in teacher ’s guide)
☐ Optional: photograph of a sunset
What You Need

For the class:
- 32 polystyrene balls
- 32 pencils
- 100 watt bulb with clip-on socket and extension cord
- Optional: 8 Earth globes

Activity 8

What You Need

For each pair of students:
- 1 piece of scrap paper or the back of the Seasons Lab Book
- 1 Sun Angle Analyzer (master for photocopying on page 82)
- one paper fastener (or brad) with flat head
- pencil
- (Optional) a short piece of tape, any kind

For the class:
- 100 watt bulb with clip-on socket and extension cord
- 1 Earth globe—at least 20 cm (8") diameter
- (Optional) 1 small paper doll cutout or model action figure—not more than a few centimeters tall
- small piece of tape—almost any kind