

Teacher Commentary

Equipment List for Chapter Two:

Materials needed for each group per activity.

Activity 1

- Your local topographic map (7.5 minute quadrangle). It is suggested that these maps be laminated if possible to help keep replacement costs at a minimum.*
- World Outline Map—one for each student or Relative Motions of Plates (page 68 or **Blackline Master Plate Tectonics 1.1**)
- Metric ruler
- Calculator
- Protractor
- Internet access (if unavailable during class, obtain the GPS time series from the station nearest your community and the results from the Relative Plate Motion Calculator. Photocopy the printouts and make them available for students. See further instructions provided in this guide in the description of the activity)*

Activity 2

- Three wooden dowels: 3/4 inch or 1 inch in diameter and about 12 inches long
- 2 pieces of 2 x 4 lumber, each about 12 inches long
- A length of fan-fold computer paper, about four feet long, cut in half lengthwise to make two long pieces, each about 6 inches wide
- Scotch tape
- Straightedge ruler
- Marker pens
- Stapler
- Blank world map
- Markers or colored pencils of two different colors
- Map of *This Dynamic Planet* (USGS)*

Activity 3

- 30 mL water
- 30 mL pancake syrup
- 30 mL vegetable oil
- Graduated cylinder (at least 10 mL)
- Balance scale
- Calculator
- Corn syrup
- Pyrex® beaker or wide aluminum pan
- Heat source, like a hot plate
- 3 pieces of balsa wood
- Rock samples from your community
- Samples of granite, basalt, and sandstone
- Large, rectangular tub
- Liquid dish detergent
- Mixing spoon
- Sponge
- Vinyl plastic
- Flat, clear plastic ruler
- Tape

Activity 4

- Tall, transparent jar with a lid
- Honey
- Vegetable oil
- A topographic map of the Andes Mountains*
- Length of string or thread
- Globe
- 2 pieces of lumber: (1) 2 x 4, (1) 2 x 6
- Plastic sheet
- Table knife
- Cream cheese
- Cheese spread

Activity 5

- Sheet containing outlines of continents—4 copies per student
- Blank paper (three sheets per student)
- Scissors

* The *EarthComm* web site www.agiweb.org/earthcomm provides suggestions for obtaining these resources.