

OCEAN CURRENTS

MARINE SCIENCE ACTIVITIES FOR GRADES 5-8



What You Need for the Whole Unit

Nonconsumables

- 30–60 ocean-related pictures clipped from magazines or calendars
- 8–16 (12") inflatable globes showing currents if possible
- 8 shallow (1½" to 2" deep) clear trays or clear salad containers
- 17 rocks (about ¼ brick size) or upside down cups
- 2 large clear deli salad containers or glass baking pans no larger than your overhead can project: about 8" x 8"
- Pacific Rim Map to make transparency, page 45
- world map that includes the Pacific Rim (large inflatable globe is best)
- 1 each of 1A and 1B Station directions, page 63
- 1 each of 2A and 2B Station directions, page 64
- 1 each of 3A and 3B Station directions, page 65
- 4 (12–16 oz.) clear plastic, straight-sided identical water bottles with threaded mouths about 1" in diameter
- 4 tornado tubes (or Vortex Tubes)
- 4 dish towels (white preferred)
- 4 yogurt lids with the rims cut off
- 4 (6–8 oz.) paper or Styrofoam cups
- 2 containers—approximately six quart, clear, rectangular, such as a plastic shoe box
- 4 thermoses with at least 3-cup capacity each
- 1 sharp knife for slicing potatoes
- clear measuring cup (1- or 2-cup size)
- 32 insulated containers—Styrofoam cups with lids or other containers
- 32 medicine droppers
- 8 (16 oz.) cottage cheese-style containers
- 9 cafeteria trays
- 4 (9 oz.) wide-mouthed, clear plastic cups
- pouring container with 3–4 cups of water
- graduated cylinder or other measuring device
- 2 identical plastic jars
- 16 overhead transparencies, pages 109–124
- damp cloth to erase transparency pens
- posters, charts, and Key Concepts from previous sessions of the *Ocean Currents* unit

Optional Nonconsumables

- large (24"–36") inflatable globe
- pump to inflate large globe
- audiotape of ocean sounds and tape player
- videotape of ocean scenes and VCR or slides and projector
- miscellaneous posters showing marine life and ocean scenes
- world atlas or other geography resources
- 2 funnels
- spring or balance scale

Consumables

- 8–16 Global Exploration student sheets, pages 22–24
- 8 World Map of Currents data sheets, page 27
- 32 Waste Disposal data sheets, page 44
- tap water
 - __ hot water (about 100°F–110°F, which is not quite the hottest available from a home faucet)
 - __ very, icy-cold, refrigerated water
 - __ room temperature water
- vials of food coloring: 1 each of yellow and green, 2 each of red and blue
- 24–26 ice cubes
- 8 Student Explorations with Waste Disposal student sheets, page 43
- 64 Prediction data sheets, page 66
- 32 Current Trends data sheets, pages 67–69
- 1 box of salt (kosher preferred)
- less than a tablespoon of oil
- 8 medium-sized, raw potatoes
- 16 Density Layers Plan student sheets, page 82
- 16 Density Layers data sheets, page 83
- station sheets 1–11, pages 125–135
- student maps, pages 105–108
- 32 Surface Currents maps, page 109, or Deep Currents maps, page 110

General Supplies

- about 40 sheets of 27" x 34" chart paper
- masking tape
- markers (wide tip, water-based: yellow, black, brown, blue, green, orange, red, blue)
- overhead projector
- newspaper
- 8 sheets of 8½" x 11" white paper
- about 70 drinking straws
- 1 sandwich baggie
- 1 blue permanent marker
- scissors
- 2 tablespoons
- 4 push pins
- more than 20 marbles
- 11 stir sticks
- paper towels
- transparency pens
- several sheets of 8½" x 11" paper
- pens or pencils

Optional General Supplies

- 6–10 sentence strips or cards