

MATERIALS LIST

Lesson 1.1:

For each group of students: one ice cube and one ziplock plastic bag. For the class: one balance (optional).

Lesson 1.2:

One hot plate, one small Erlenmeyer flask with a one hole stopper, glass tubing including two right angles, one test tube, and one beaker

Lesson 1.3:

Transparency I

Lesson 1.4:

None

Lesson 2.1:

Transparency 2

Lesson 2.2:

For each group:

1. six plastic cups
2. salt
3. pepper
4. sugar
5. syrup
6. dirt or soil
7. water
8. Transparency 3

Lesson 2.3:

Transparency 4

Lesson 3.1:

For each student group:

1. a small plastic bag
2. a plastic cup or small jar
3. a large container of water
4. a 2-ft length of plastic or rubber tubing
5. a grease pencil for marking water levels of cup

Lesson 3.2:

1. Transparencies 5 and 6
2. perfume to be released in the classroom

Lesson 3.3:

For each student group:

1. a plastic cup
2. a soda straw
3. BTB solution

Lesson 4.1:

1. ping-pang ball
2. inflated ball
3. hair dryer
4. wind-chimes—optional

Lesson 4.2:

For each group of students:

1. syringe
2. a plastic cup
3. water
4. Transparency 7

Lesson 4.3:

aerosol cans or CO fire extinguisher (optional)

2

pictures of scuba divers or mountain climbers (optional)

Lesson 4.4:

1. (optional) A bicycle pump and tire (or entire bicycle)
2. Transparency 8
3. Poster I

Lesson 5.1:

For each student or each group:

1. magnifying glass
2. sugar
3. empty tea bag
4. plastic cup
5. water
6. Transparency 9

Lesson 5.2:

For each group of students:

1. two tumblers
2. two spoonfuls of salt (Kosher salt or canning salt)
3. two plastic cups
4. a coffee stirrer

If you do the optional activity suggested in question 6 or the Activity Book, you will need a large pan or container to allow the salt solution to evaporate.

Lesson 5.3

Cups of:

- | | | |
|--------------|------------------|--------------------------|
| 1. soda | 5. syrup | 9. liquid dish detergent |
| 2. mouthwash | 6. kool-aid | 10. hair color dye |
| 3. catsup | 7. clear shampoo | 11. dish water |
| 4. honey | 8. apple juice | 12. transparency 3 |

Lesson 6.1:

- | | |
|-----------------------------|--------------------|
| 1. two plastic cups | 4. Transparency 10 |
| 2. two pieces of hard candy | 5. Poster 2 |
| 3. hot and cold water | |

Lesson 6.2:

For this demonstration:

1. a ball and ring apparatus
4. a heat source such as a propane burner or candle
5. Transparency 11

Lesson 6.3:

For each group of students:

1. one thermometer
2. two plastic cups
3. hot and cold water

Lesson 6.4:

1. one large soda bottle, cold
2. one dime
3. one balloon for optional activity

Lesson 7.1:

1. Transparency 12
2. Poster 3

Lesson 7.2:

1. one hot plate
2. two beakers
3. olive oil, shortening, chocolate, and paraffin
4. four test tubes
5. test tube rack
6. ice

Lesson 7.3:

None

Lesson 8.1:

1. paper towels and water
2. Transparency 13

Lesson 8.2:

world map or globe (optional)

Lesson 8.3:

1. for the activity: for each student, 2 ml of alcohol
2. For the demonstration: You will need a pre-heated hot plate and 2 beakers, one with 2 ml of alcohol, the other with a larger amount so that students can view the bubbles. Caution: There should be no open flames in the room when you boil alcohol.
3. Transparency 14

Lesson 8.4

1. Transparency 6
2. for demonstration (optional): bottle of perfume, vinegar, or ammonia
3. Bartholomew and the Oobleck by Dr. Seuss (optional)

Lesson 9.1:

You will need the distillation apparatus:

1. hot plates
3. Erlenmeyer flask
4. glass tubing
4. test tube
5. water, food coloring or dye, and salt
6. Transparency 15

Lesson 9.2:

1. overhead projector
2. two gallon aquarium/terrarium
3. two cups
4. 'dirty water'--water, salt, food coloring
5. clear plastic wrap
6. rubber band
7. a weight (coin)

Lesson 9.3:

Videotape: Episode "Making Dew" from "The Voyage of the Mimi"

To obtain, contact:

Sam Gibbon
"Voyage of the Mimi"
Bank Street College
610 W. 112th St.
New York, NY 10025(212) 663-7200

Lesson 9.4:

1. glass and ice water
2. Transparency 16

Lesson 9.5:

Transparency 17

Lesson 9.6:

None