Oobleck
What Do Scientists Do?
GEMS® Teacher’s Guide for Grades 4-8

Updated and Expanded!
WHAT YOU NEED FOR THE WHOLE UNIT

For the class:

☐ lots of old newspapers
☐ 1 roll of masking tape
☐ 1 small squeeze bottle of green food coloring *
☐ 1 extra 16-oz. box of cornstarch
☐ 1 measuring cup (1–4 cup capacity)
☐ 1 large mixing bowl or small bucket (6–8 liters)
☐ water
☐ paper towels
☐ markers or chalk for whiteboard or chalkboard
☐ whiteboard, chalkboard, or overhead projector
☐ overhead transparencies of Mars exploration, pages 40–44
☐ (optional, but highly recommended) selection of small wood, paper, plastic, Styrofoam, and metal items (e.g., toothpicks, popsicle sticks, plastic utensils, packing “peanuts,” small paper cups, paper clips, straws, etc.)
☐ (optional) hot plate and saucepan

* You'll also need a medicine dropper if the food coloring is not in a squeeze bottle.

For each team of 4–6 students:

☐ 1 deep plastic bowl (at least two quarts)
☐ 1 box of cornstarch (16 oz.)
☐ 1 felt-tipped marker or crayon
☐ 2 large sheets of paper (at least 16" x 20") or at least 10 sentence strips

Note: Although pie pans may appear in older photographs for this guide, plastic bowls work well and are more durable. Plastic bowls are used in the Oobleck GEMS Kit.

For the optional Microscope Eyes activity you will also need:

For the class:

☐ Two clear containers filled with at least 2 cups of water. All students in the class should be able to easily see them.
☐ sugar
☐ stirrer
☐ spoon
☐ overhead transparencies of pages 52–54

For each student:

☐ Microscope Eyes worksheet

Quantities are based on a class size of 32 students. Please also refer to the "What You Need" and "Getting Ready" sections for each activity. Options for gathering materials for this unit:

• Some teachers prefer to gather materials needed to teach a GEMS unit themselves at local stores.

• Others prefer to purchase a ready-made GEMS Kit.

For more information on GEMS Kits, visit the web at lhsgems.org/gemskits.html or contact GEMS.