# **SLIME!**

### WHAT YOU'LL NEED

64 Jell-O cubes, approx. 1"x1"x1" (Use four packets of Jell-O with 2 cups hot tap water, Pour in pan coated with vegetable oil. Refrigerate 3-4 hours until firm.)



- 2 Bowls
- Stop watch
- Vegetable oil
- Liquid dish soap

### WHAT TO DO

- 1. Place 15 cubes in one bowl. Place second bowl 6 inches away.
- Ask for a volunteer to transfer the cubes one at a time to the second bowl with their thumb and index finger. (No squeezing!)
- 3. On the count of three, the volunteer should begin transferring cubes. Use the stopwatch to record how many cubes are transferred in 15 seconds.

#### **HYPOTHESIS**

Ask the children to predict how the addition of liquids to the cubes will change the outcome of the experiment. Which liquids will enable more cubes to be transferred? 4. Put all the cubes back in the first bowl. Pour 1/4 cup of detergent over the cubes and mix so all the cubes are well coated. Repeat steps 2 and 3. Record how many were transferred.

5. Throw away the cubes and detergent and wash and dry

both bowls. Put 15 new cubes into one bowl and pour 1/4 cup of water over them. Again, mix to make sure the cubes are well coated. Repeat steps 2 and 3. Record how many were transferred.

6. Throw out the cubes and water. Put 15 new cubes into one bowl and pour 1/4 cup of vegetable oil over them. Make sure they are well coated. Repeat steps 2 and 3. Record how many were transferred.

## DISCUSSION

Friction and application of lubricants: Explain how cars, airplanes, and machines all have moving parts that rub against each other. These parts will wear out, heat up, and fail to work without the aid of lubricants to reduce the friction between surfaces. Mention some house-hold uses of lubricants such as chapstick on lips, oil on door hinges, etc...

This activity provided by the Wisconsin Section of the Society of Women Engineers.