

## Teacher Preparation for “Waves in or on the Water”

**Part 1A:** Put the following materials on a tray for each group of students:

Glass jar (1 pint to 1 quart size) with tight-fitting lid

Mineral Oil: ½ cup to 1 cup depending on jar size

Rubbing Alcohol: ¼ cup to ½ cup

Water: ¼ cup to ½ cup

Blue Food Coloring: 6-10 drops

Glue



Students mix the ingredients and cap the jar tightly. The cap can be glued for extra safety. Move jar ends slowly up and down to make the motion of a wave.

**Part 1B:** Put the following materials on the table for each group of students:

Plastic Tub or 5 gal Aquarium

Baking Dish

Water source

Ruler

One way to make waves is just to move the tank back and forth. Students can also put the ruler in the baking dish set-up, moving it up and down without taking it out of the water, to make waves.

**Part 2:** Put the following materials on the table for each group of students:

Plastic Tub, 5 gal Aquarium, Baking Dish

Corks

Fishing Line

Ruler

Water source

Thumbtacks

Metal Washers

Ground Pepper

Corks and pepper can be the floating objects. Students make waves and watch to see that the objects do not move if the waves are done as waves, not as a “storm”.