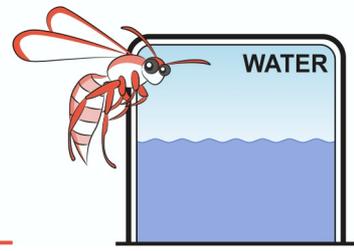


## Breaking Surface Tension - Student Activities



### Pepper Plummet

Equipment required per student or per group:

- 1 Pasteur pipette/transfer pipette
- Small container of detergent
- Small beaker of water
- Finely ground black pepper



Half fill the beaker with water. Sprinkle the ground pepper over the surface of the water.

What happens to the pepper when it is sprinkled over the water? \_\_\_\_\_

\_\_\_\_\_

Why did this happen? \_\_\_\_\_

\_\_\_\_\_

Using the pipette drop a very little detergent onto the centre of the pepper

What happened to the pepper? \_\_\_\_\_

Why did this happen? \_\_\_\_\_

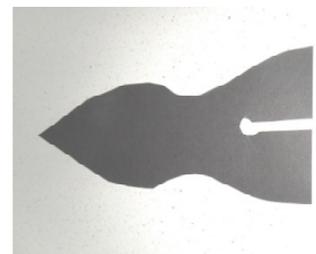
\_\_\_\_\_

***Fascinating fact***      ***Wasps and other insects can walk on the surface of water. Their weight is not sufficient to break surface tension***

### Racing fish

Equipment required per student or per group:

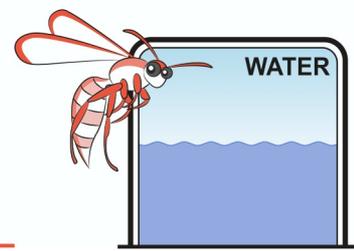
- Large flat tray of water.
- Thin cardboard and scissors
- 1 Pasteur/transfer pipette with a few drops of detergent



Cut cardboard into the shape of a fish or boat. At one end slice a channel. Place the "fish" at one end of the tray and carefully drop a little detergent into the channel hole.

What happened to the fish? \_\_\_\_\_

## Breaking Surface Tension - Student Activities



Why did this happen? \_\_\_\_\_

\_\_\_\_\_

Return the fish to the end of the tray and drop more detergent into the channel hole

Explain what happened \_\_\_\_\_

\_\_\_\_\_

**Extension:** Why should you not touch the walls of a tent when it is raining? \_\_\_\_\_

\_\_\_\_\_