

# The physics of water

## First experiment

### Materials

---

- A tub of cold water
- Food coloring (red for example)
- A small bottle or vial
- A kettle

1. Take out the tub of water.

2. Put a few drops of food colouring in the vial and add hot water from the kettle. The hot water will be visible in red for the rest of the experiment.

3. Put the open vial in the bottom of the tub.

### Observations

Where is the hot water flowing to?

### Discussion

Is hot water more or less dense than cold water?

## Second experiment

### Materials

---

- A tub of salted water (add table salt)
- Food coloring (green for example)
- A small bottle or vial

1. Take out the tub of saltwater.

2. Put a few drops of food colouring in the vial and add water. The freshwater will be visible in green for the rest of the experiment.

3. Put the open vial in the bottom of the tub.

### Observations

Where is the freshwater flowing to?

### Discussion

Is freshwater more or less dense than salted water?