

Mr Holland's Science Challenges



Floating Ice Cube

You will need:

- A cup of cold water
- salt
- an ice cube
- 20cm of sewing thread



1. Float the ice cube in the water.
2. Lay one end of the thread on top of the ice cube.
3. Sprinkle a little salt over the top.
4. Wait one minute and then lift the thread carefully.

What do you notice? Why do you think this has happened?

The Straw Gun

You will need:

- a drinking straw
- a ruler
- scissors
- sellotape
- bowl of water

Challenge: Can you make the water lift from the water without sucking through the straw?

1. Cut your straw in to two pieces, one measuring 3cm and the other measuring 5cm
2. Join the pieces together with the sellotape along one side so they form a 90 degree angle, leaving both ends open.
3. Stand the smaller end of the straw in the bowl of water.
4. Blow throw the larger straw.

What did you notice? What happened?



Musical Coat Hangers

You will need:

- a metal coat hanger
- two pieces of string
- a fork

1. Tie a piece of string to each corner of the coat hanger.
2. Place the other end of the string around your fingers.
3. Place your fingers in your ears.
4. Ask someone to use the fork and tap the coat hanger.

What do you notice? Why do you think this has happened?



You will need:

- a nylon comb
- a water tap

The Forceful Comb

1. Turn on the tap until you have a very thin flow of water.
2. Grab your comb and run it through your hair several times.
3. Slowly move the comb towards the water, roughly 10cm below the tap.
4. As you move the comb closer, watch the water bend towards the comb!

