

Primary Science

Resource Pack for Year 5 and Year 6

This Primary Science Resource Pack includes resources on topics from Year 5 and Year 6 Learning Outcomes.

Exploring Magnets

Complete the sentences using the word bank below.

Magnets have two _____. One is called the _____ pole and the other is the _____ pole. When opposite poles are near one another, they _____ together. This means the two poles _____. When two of the same poles are near one another, they _____ away from one another. This means the two poles _____ each other.

Word bank

repel

north

attract

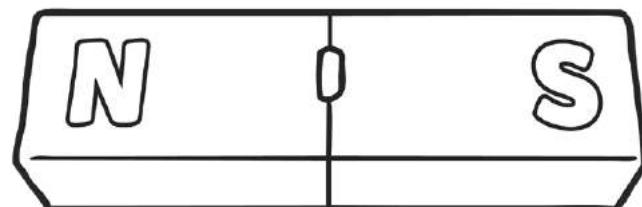
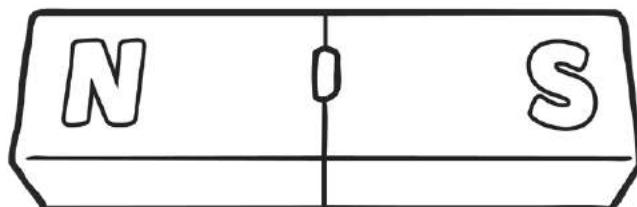
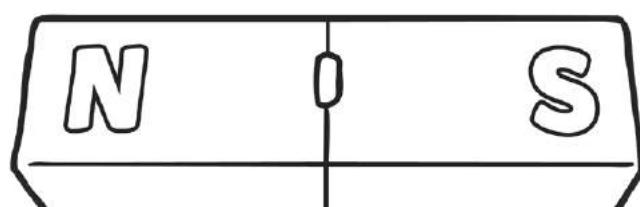
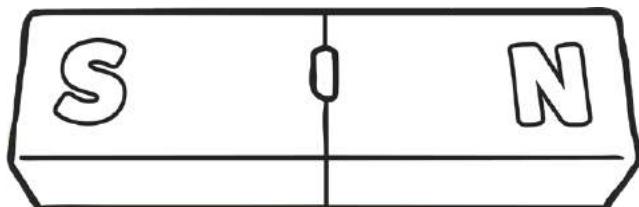
south

pull

push

poles

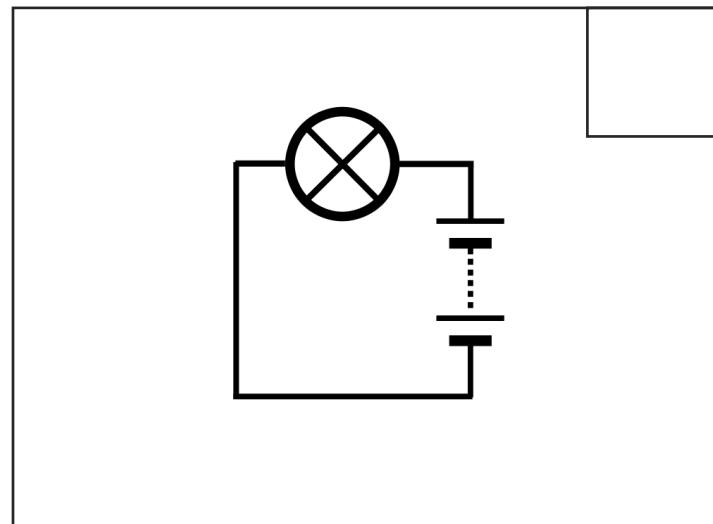
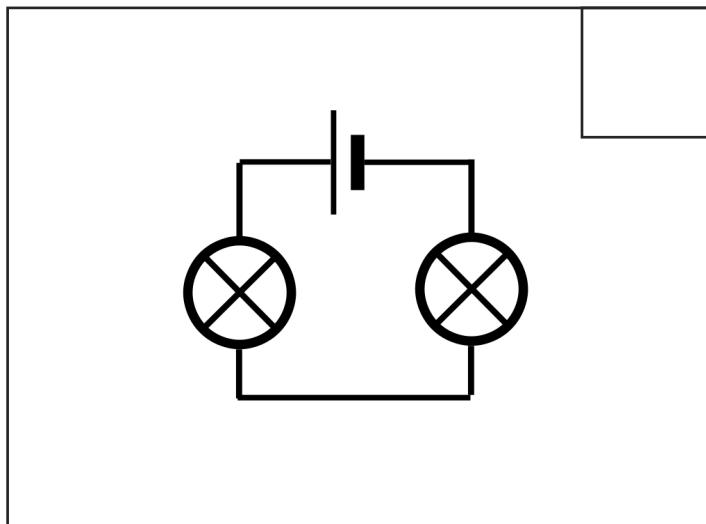
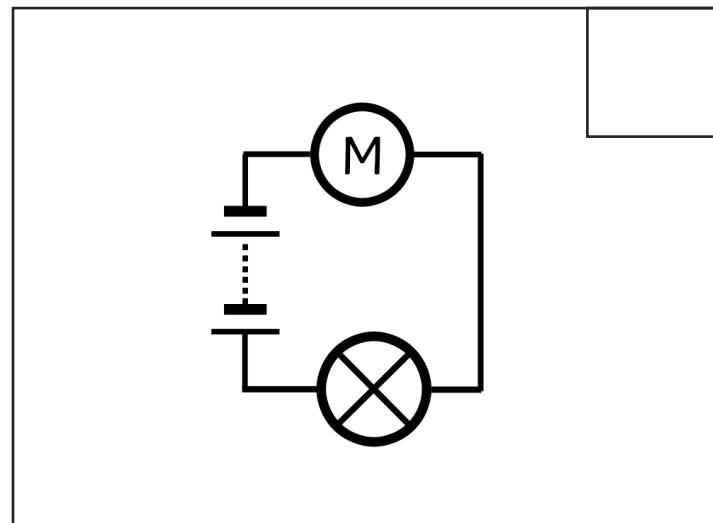
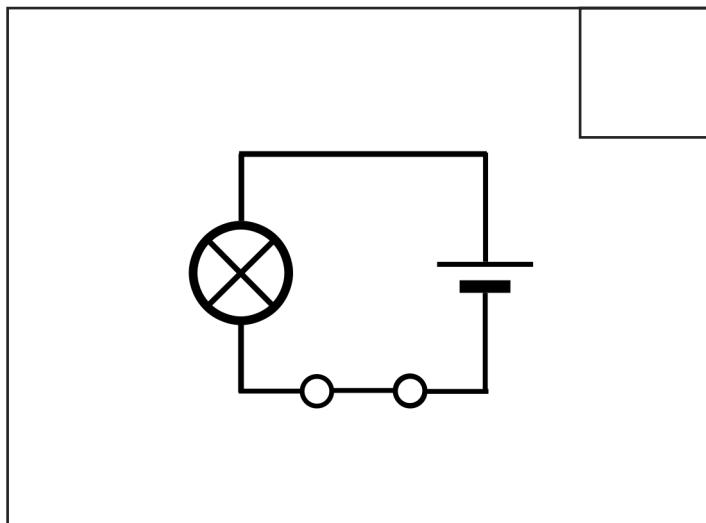
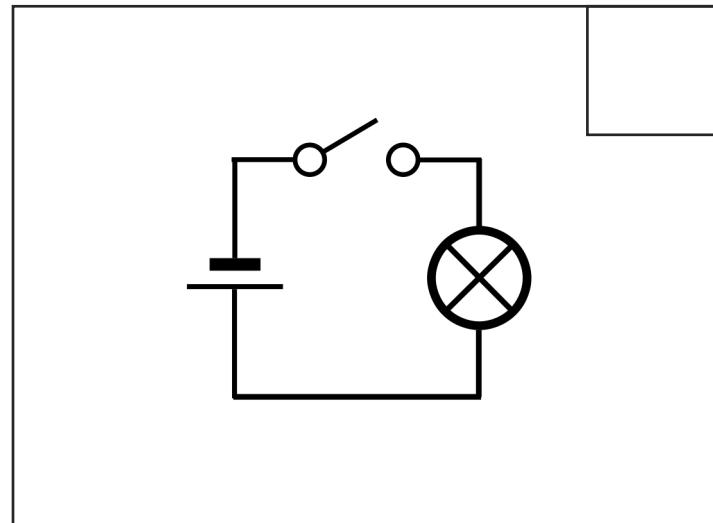
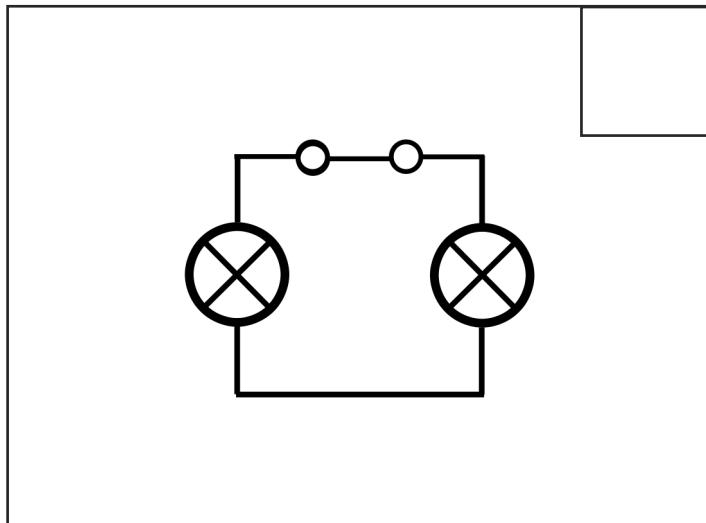
Draw arrows to show what force happens in these pictures.



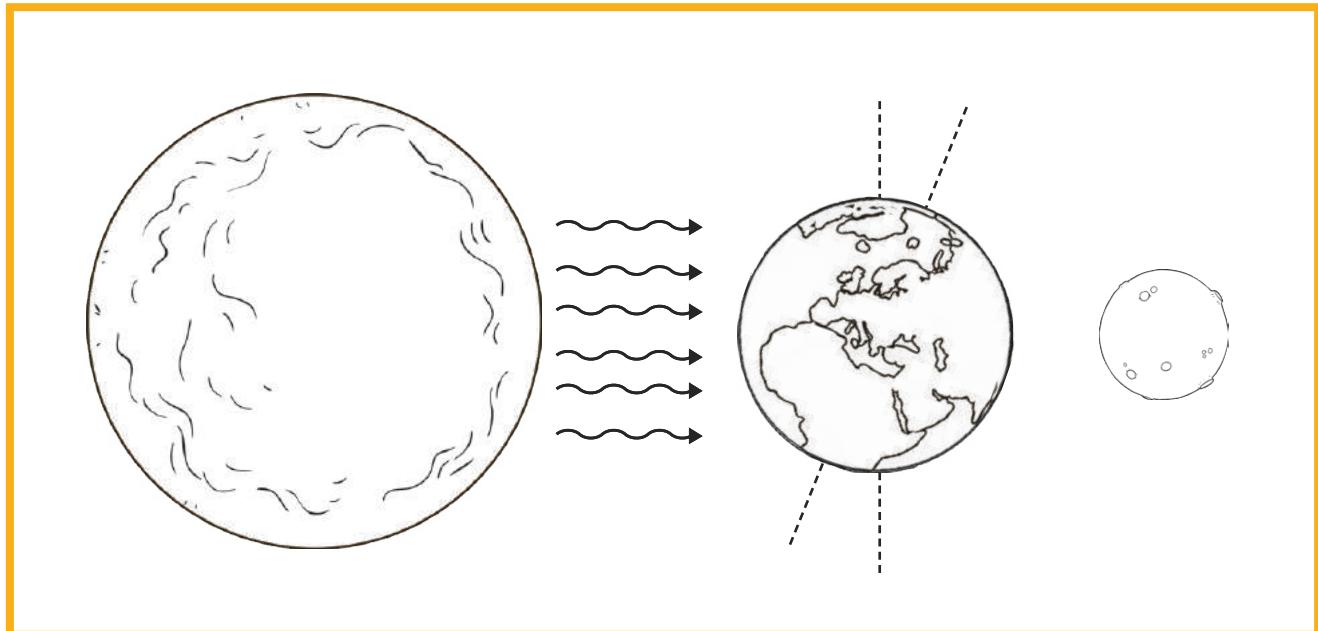
Circuits

Mark the circuit diagrams with a tick if you think the bulb will light.

Put a cross if you think the bulb will not light.



Why Do We Have Day and Night?



1. Label the **Earth**, **Sun** and **Moon** on the picture.
2. Can you explain why we have day and night by using the words in the box to complete each sentence?

We live on the planet _____.

Light comes from the _____.

The Earth _____ on its axis once each day.

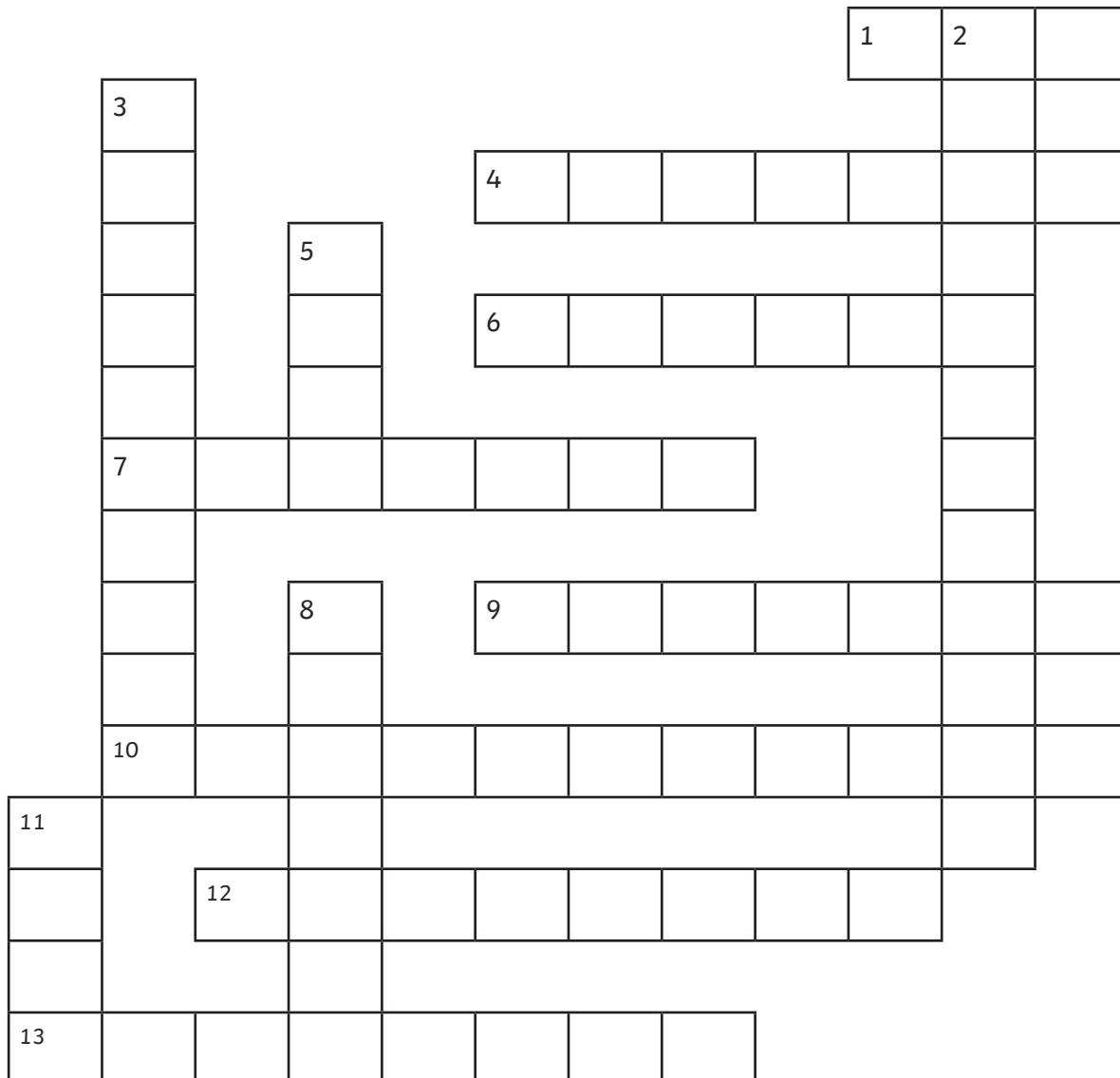
When the Sun shines on our part of the Earth, we are in _____.

When our part of the Earth spins away from the Sun we are in _____.

spins	night-time	daytime	Sun	Earth
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3. Colour in the picture to show which part of the Earth is in daytime and which part is in night-time.

British Science Week 2017 Changes



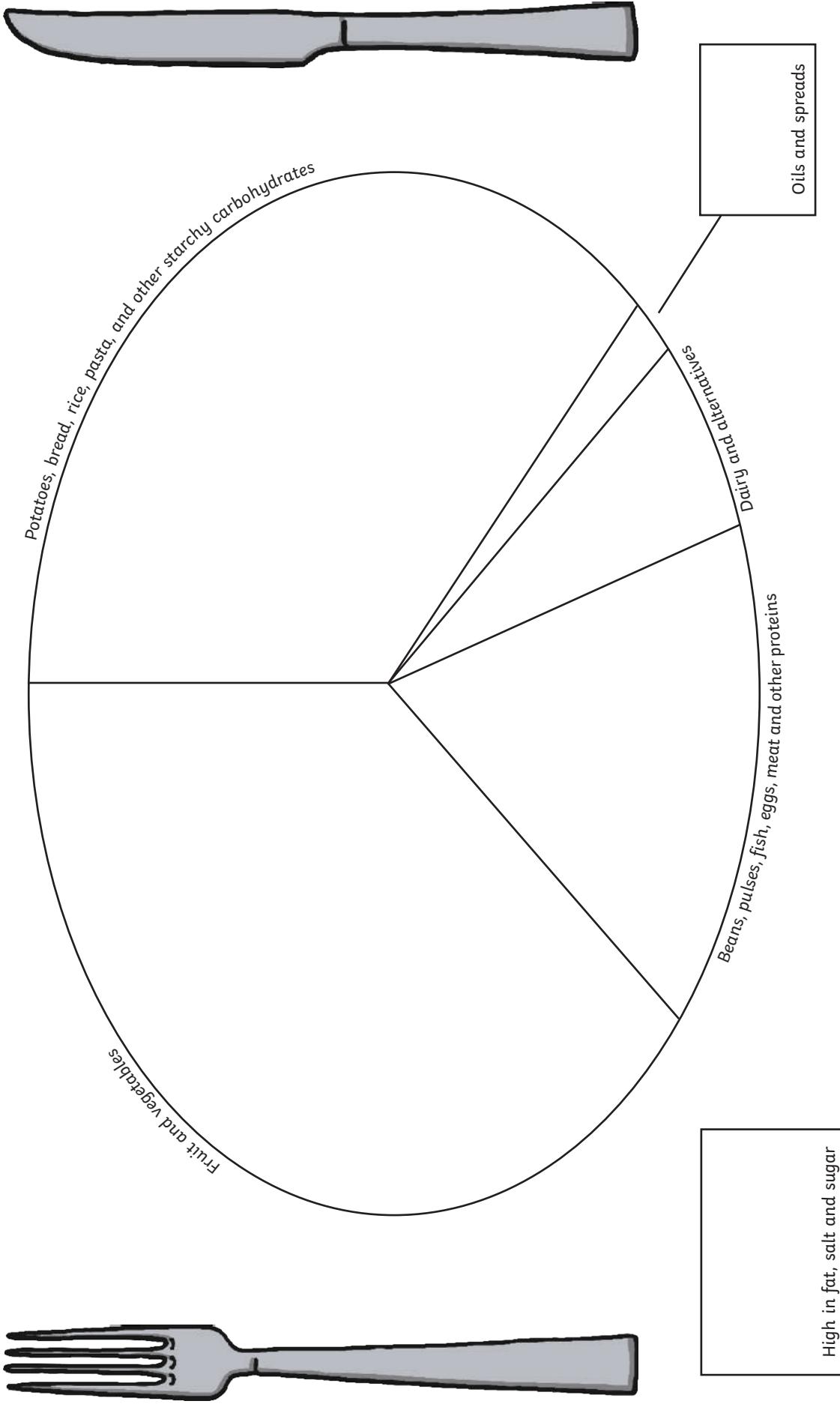
Across

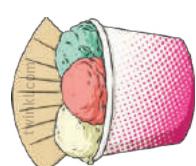
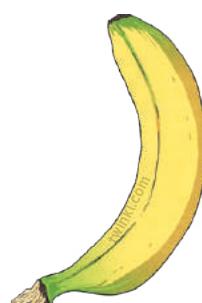
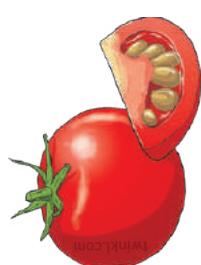
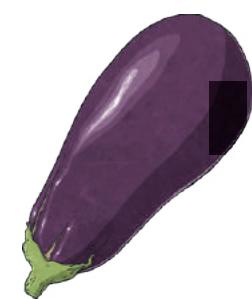
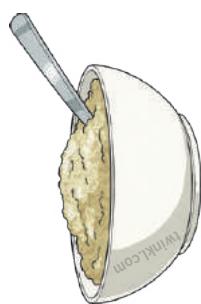
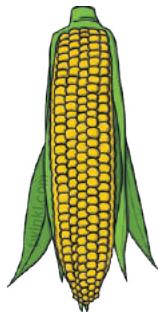
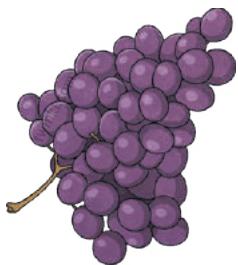
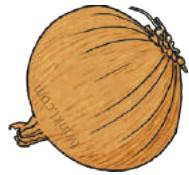
1. Frozen water makes this. (3)
4. The process of making a solid into a liquid. (7)
6. What you need to do to make water into ice. (6)
7. A word that means 'dissolvable'. (7)
9. Rising weather temperatures point to _____ change. (7)
10. The process of a liquid changing to a gas. (11)
12. What spoons of sugar do when put them into hot tea. (8)
13. A lamp shines _____ when more batteries are added to a circuit. (8)

Down

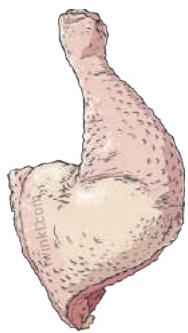
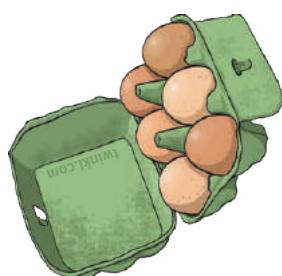
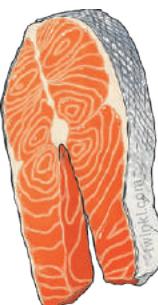
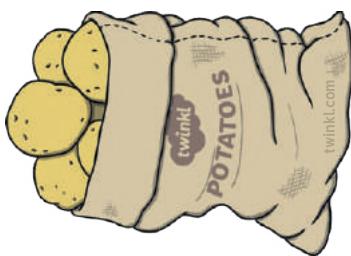
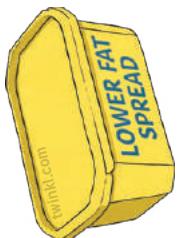
2. The process of turning a gas back into a liquid. (12)
3. A change that can be undone. (10)
5. What you need to do to a gas to make it into a liquid. (4)
8. Doing this can melt something. (7)
11. Another name for a lamp in a circuit or something you plant to grow into a flower. (4)

Healthy Eating Meal





Cut out the food to sort and put on your plate.



Make Your Own Gong

Resources required:

Ruler, different sized metal spoons (e.g. teaspoon and serving spoon), fork, ladle, about 120cm of string (depending on height of person)

Description of investigation:

1. Tie a loop in the middle of the string.
2. Insert the handle of the spoon and pull tightly. The spoon should now be hanging in the centre of the length of string with two long pieces of string of approximately equal length hanging.
3. Take the two ends of the string and wrap them around your pointer finger on each hand.
4. Use your pointer fingers to plug your ears (don't put fingers in ears but just outside).
5. Make sure the spoon is hanging just below the waist once both ends of the string are placed against the outside of the ears.
6. Once you're holding the string against your ears, ask someone to gently tap the ruler against the rounded part of the spoon.
7. Listen to the sound produced.
8. Repeat the procedure using different sized spoons, fork and ladle.

Investigation Questions:

- What did you hear?
- Does the sound produced change if you place the spoon at a higher or lower height?
- What happens to the sound if you hit the spoon harder?
- What happens when you use the other utensils?
- Will it make a difference if you use a different type of string, for example you use yarn instead?



More info:

<https://www.kcedventures.com/blog/the-science-of-sound-waves-an-awesome-experiment-for-kids>

When the ruler hits the spoon, vibrations are created. These are sound waves. They travel up the string and directly to your ear instead of spreading out into the air. The string conducts the sound waves straight to your ear. The size of the spoon changes the sound. Only the person with the string against their ear will be able to hear the bell or gong sound while everyone else will only be able to hear a 'tink' when the ruler hits the spoon.



SCIENCE CENTRE
DEM BOKE MALTA



Table Hovercraft

Resources required:

A ballpoint pen, a plastic plate, a small canister, a balloon and a blue tack.

Description of investigation:

1. Use the point of the pen to make a small hole in the centre of the plate.
2. Make another small hole in the bottom of the canister.
3. Put some blue tack around the top of the film canister.
4. Stick the film canister to the middle of the plate upside down. Try to line up the holes in the plate and the canister.
5. Blow up the balloon, twist the end and pinch it shut.
6. Work with someone to put the balloon on the canister, one person can hold the neck of the balloon so no air escapes and the other person can stretch the end of the balloon over the canister.
7. Place your hovercraft on a smooth surface like a table or the floor.
8. Let go of the balloon and gently tap the side of the plate.

Investigation Questions:

- What happens when you tap the plate of the hovercraft?
- Why does your hovercraft glides easier than a plate on its own?
- How can you make your hovercraft travel a longer distance in one tap?
- Can you think of a way to steer your hovercraft?

More info:

Friction is a dragging force that happens when objects slide against each other. When a cushion of air is present between the surfaces of two objects, friction is eliminated.

<https://www.pbslearningmedia.org/resource/phy03.sci.phys.matter:how-air-power-making-a-hovercraft/support-materials/>

