

Hello Year 4!

We hope you are happy and continuing to keep safe!

We have set up your topic learning for the next week as slides for you to follow.

There will be a mixture of History, Geography, Science, P.E and weekly HeartSmart.

Miss Hill and Mrs Tally

Monday 11th May

Science!

This week starts with you being a scientist.

Let's get experimenting!

We've found a couple of cool experiments for you to try.
Have fun!!



Monday 11th May

The science bit...

Everything is made of particles which are always moving. When a soluble solid (solute) is mixed with the right liquid (solvent), it forms a solution. This process is called dissolving.

Two things that affect the speed at which the solid dissolves are temperature and the size of the grains of the solid. Caster sugar which is made of fine particles will dissolve quickly, but bigger sugar particles will take longer.

Solids dissolve faster in hot water as in hot water the water molecules are moving faster, so bump into the solid more often which increases the rate of reaction.

Monday 11th May

Experiment 1

You will need...

Dissolving

Which solids dissolve in water?

You Will Need

- Water (hot and cold)
- Transparent Containers
- Substances to try and dissolve;
sand, sugar, salt, coffee etc



Monday 11th May

Method

- 1 Add a teaspoon of whichever solid you are testing to a glass of cold water and a glass of hot water, stir and observe the difference.
- 2 Look to see if the solid dissolves in the hot water and cold water and if one is better than the other.

Monday 11th May

Conclusion

Can you design a chart to record your observation?

Write what happened and why.

Tuesday 12th May

The Science bit...

Oil and water don't mix. Also oil is less dense than water (meaning there is less of it in the same volume) and therefore floats on top of water in a nice layer. The food colouring we used was water based and therefore does not mix with the oil, instead it sinks through the oil into the water below. Since the addition of the colouring makes the food colouring heavier than the water, it sinks to the bottom leaving trails (resembling fireworks) as some of the colour diffuses into the water.

Tuesday 12th May

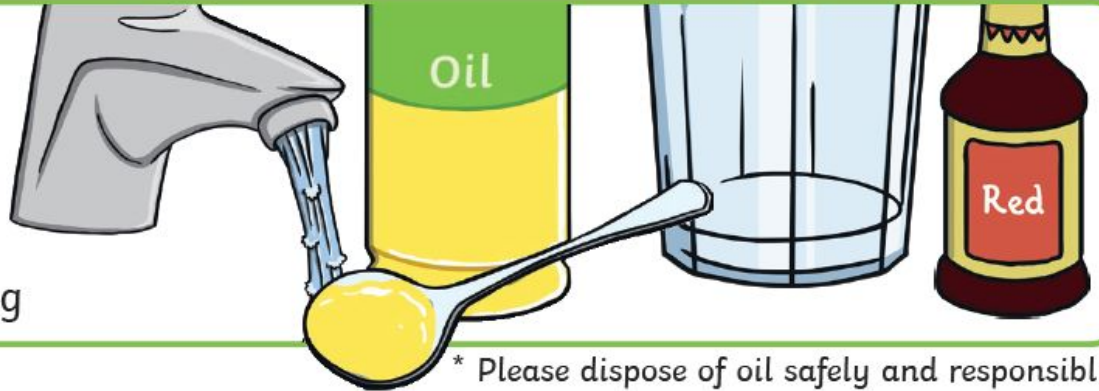
Experiment 2

You will need...

Fireworks in a Glass

You Will Need

- Warm Water
- Oil*
- A Tall Glass
- Food Colouring



* Please dispose of oil safely and responsibly.

This is a very cool, simple and fun experiment, and also completely safe, just don't drink the water!

Tuesday 12th May

Method

- 1 Fill the tall glass with warm water.
- 2 Pour a small amount of oil into another container and add a few drops of food colouring.
- 3 Give it a good stir, if it doesn't mix, add a bit of water.
- 4 Pour the food colouring and oil mixture into the warm water and watch the fireworks!

Tuesday 12th May

Conclusion

Write a conclusion that explains what happened and why.

Wednesday 13th May

Hadrian's Wall

Scotland was not part of Roman Britain. The Romans were too busy in other places to take over Scotland as well. In AD 122, Emperor Hadrian told his soldiers to build a wall to keep out the Picts who lived in Scotland. This also meant that the Romans could charge money to people who wanted to come in. The wall went from Wallsend on the east coast to Bowness on the west coast. Parts of Hadrian's Wall are still there today, and lots of people like going to see it.



Did You Know...?

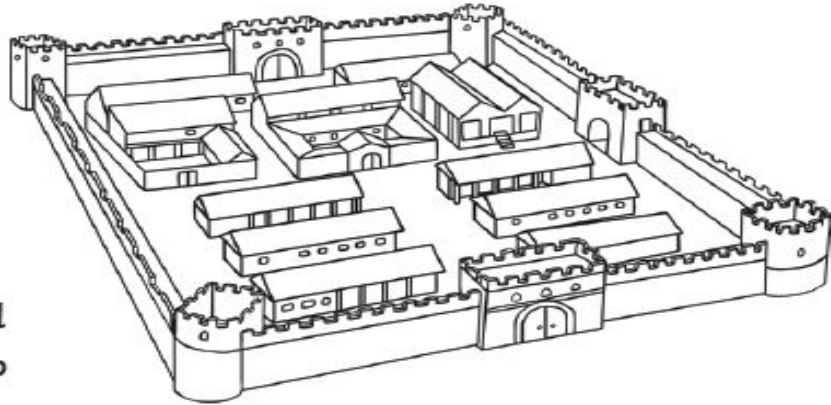
In AD 140, the Romans added another wall further north. It's called the Antonine Wall.

Wednesday 13th May

The Romans

Hadrian's Wall was built in stone. It was 117.5 kilometres long, up to 6 metres high and 3 metres wide. This meant it was wide enough for two soldiers to walk side-by-side.

It wasn't just a wall. There was a milecastle with twenty soldiers every 1.5km and a turret every 500 metres. Major forts were built along the wall every 8km. These had up to 1000 Roman soldiers in them. One of the forts was called Housesteads. It had a hospital, granary, barracks, workshop and toilets.



A Roman road called Stanegate was built. This made it easier to get food and other supplies to the soldiers based at Hadrian's Wall. Just like the Roman roads, the wall was built by the Roman soldiers. Hadrian's Wall was used for almost 250 years.

Wednesday 13th May

The Romans

Read the information about Hadrian's wall and answer these questions.

1. Why did the Romans not conquer Scotland?
2. In your own words, why did Hadrian build a wall?
3. Does the wall run from east to west or from north to south?
4. How long was the wall?
5. Why was it made three metres wide?
6. How many soldiers would you find in a milecastle?
7. Why was Stanegate road built?

The answers are on the next slide!
Don't cheat!

1. Why did the Romans not conquer Scotland?

The Romans did not conquer Scotland because they were too busy in other places and much of the army was called back home to deal with other issues.

2. In your own words, why did Hadrian build a wall?

Children's own responses, such as 'Hadrian built the wall so that the Picts, who lived in Scotland, could not get into England. It also meant that the Romans could charge taxes to people who wanted to come in'.

3. Does the wall run from east to west or from north to south?

The wall runs from east to west.

4. How long was the wall?

The wall was 117.5 kilometres long.

5. Why was it made three metres wide?

It was made three metres wide so that it was wide enough for two soldiers to be able to walk side-by-side.

6. How many soldiers would you find in a milecastle?

Twenty soldiers could be found in a milecastle.

7. Why was Stanegate road built?

The Stanegate road was built to make it easier to get food and supplies to the soldiers based along the wall.

Thursday 14th May

HeartSmart

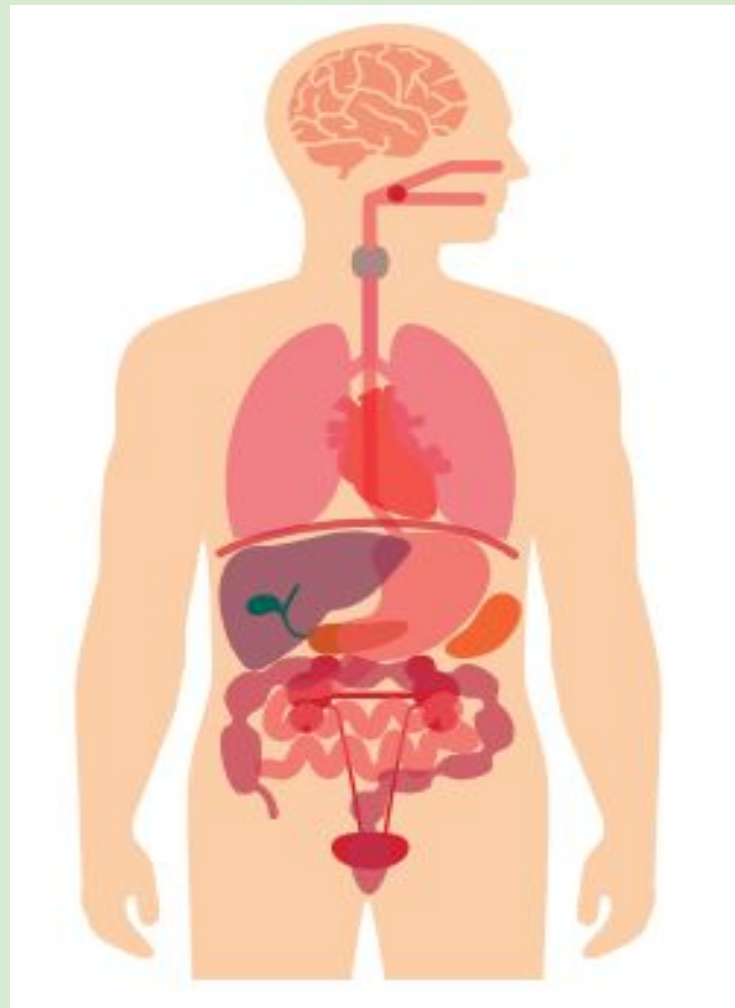
It has been known for a long time that smoking is bad for your health but there are more negative effects than people often realise.

Draw a picture on the next slide.

Watch the film clip and circle the areas of the body that are affected by smoking.

<https://www.youtube.com/watch?v=IW6hwmdZbmE>





Friday 15th May

Physical Activity

Find a time that suits you and make sure that you do some physical activity-it's good for the body and soul!

At St.Catherine's we use a resource called 'Real PE'. Please access this at home! We are sure that you'll enjoy it!

There are so many benefits to being active, not only to our physical wellbeing but also to our emotional and mental health, especially in such testing times for all of us. We hope that the ideas help support you and your family to stay fit and healthy in the coming months. Here are the details to access **real PE** at home:

The website address is: **home.jasmineactive.com**

Parent email: **parent@stcatherin-1.com**

Password: **[stcatherin](#)**