

IAL: what causes tooth decay

Watch these videos about tooth decay.

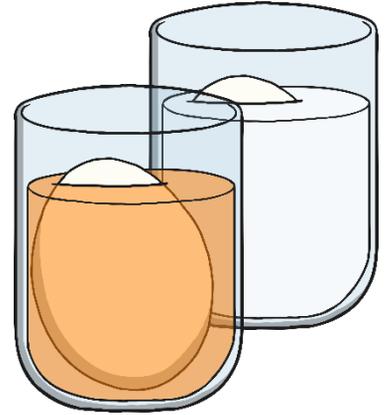
Operation Ouch: <https://www.youtube.com/watch?v=iAQUCF9n3HU>

SciShow Kids: <https://www.youtube.com/watch?v=aOebfGGcjVw>

Carry out this investigation to see which foods cause the most tooth decay.

You will need:

- Some eggs or egg shells.
- Some liquids
 - water
 - milk
 - tea/coffee
 - orange juice
 - fizzy drink
 - or any other liquid you'd like to investigate
- Cups/containers.



Setting up the investigation

- 1) Put a liquid in each container.
- 2) Observe the eggs/egg shells. What do they look like? What do they feel like?
- 3) Place an egg/piece of egg shell in each container.
- 4) Make observations every day for the next five days. What do they look like? What do they feel like?
- 5) Complete the observation table and answer the questions.

Prediction

Make a prediction about which liquid will cause the most decay to the egg/egg shell.

Explain why you think that.

Various answer possible. Should include reasons for predictions

Complete the table with your observations.

Day 5					
Day 4	↑	↑	↑	↑	↑
Day 3	↑	↑	↑	↑	↑
Day 2	↑	↑	↑	↑	↑
Day 1					
Liquid					

Answer these questions based on your observations.

A Was your prediction correct? _____

Conclusion

Write here about what you found out from your observations, what effects the drink(s) had and what you learnt from this investigation.

Conclusion depends on liquids tested.

Eg: My results show that orange juice caused the egg shell to soften. Tea/coffee caused the egg shell to change colour and turn darker. Milk and water caused no visible changes to the egg shell. It tells me that some liquids cause more damage to teeth than others. Water and milk are the best liquids for keeping teeth healthy.

B What further predictions could you make as a result of your findings?

Think about other drinks or foods. Which ones would cause the most decay according to what you have found out?

Many possibilities, based on their conclusions.

Eg. Other fruit juices might cause tooth decay.

Yoghurt might not cause much tooth decay.

C What questions do you still need to ask or could ask to conduct another investigation on drinks and tooth decay?

Many possibilities, based on their conclusions.

E.g. Why does orange juice cause more tooth decay?

IAL: how artefacts inform our view of history

Discover some of the artefacts from the tomb of Tutankhamun

<https://tutankhamun-london.com/see-do/>

Artefacts are important sources of information about the past.

Archaeologists piece together clues to form a picture about what life was like in the past. Imagine that the room you are in is an archaeological jigsaw. What objects can you see that might help people in the future form picture of what life is like today?

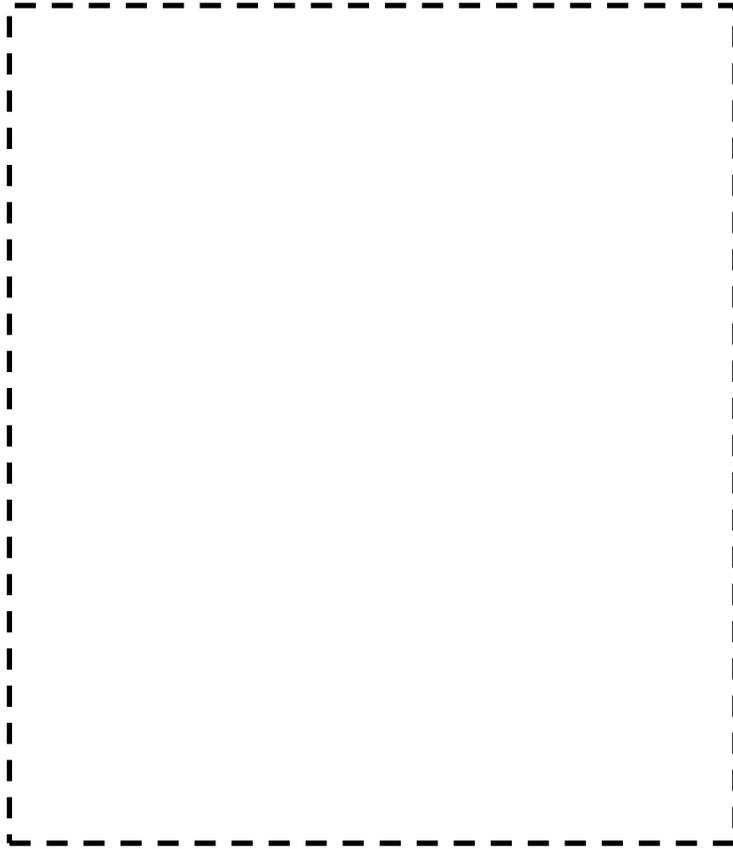
For example: I can see a telephone. It tells people in the future that we talked to each other over long distances.

Object	What people in the future might learn.

Lots of objects could be used. The things people might learn could be various. The answers could lead to discussions about why children think that and how people from the future would see our world today.

Draw a picture of yourself wearing the clothes you are wearing. Include any objects that you have with you, like a pencil case.

Lots of objects could be used. The things people might learn could be various. The answers could lead to discussions about why children think that and how people from the future would see our world today.

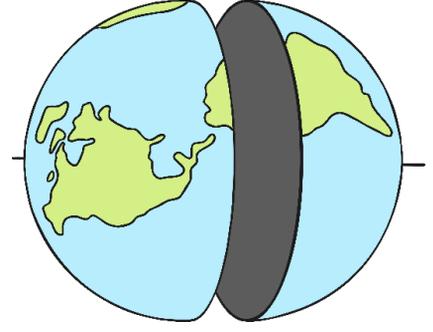
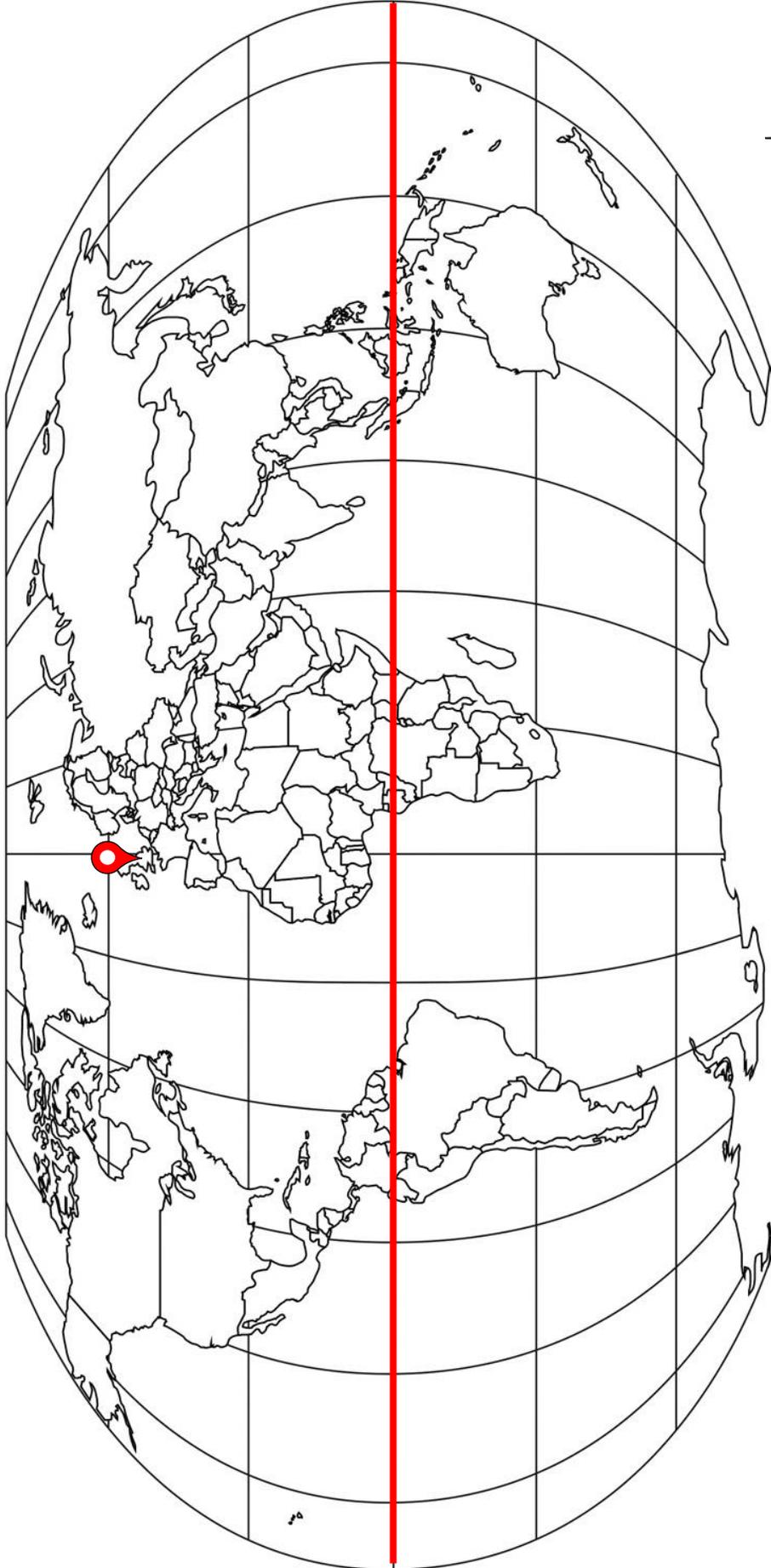


From your drawing, make a list of all the things that might survive 5000 years into the future (e.g. skeleton, plastic buttons, metal zips). Write a list of five objects from your drawing and write what you think someone in the future might learn from that object.

Object	What people in the future might learn.

IAL: about the position of the equator, northern and southern hemisphere

Here is a map of the world.



How would you describe the position of the UK, where we live?

The Earth is made of two hemispheres (half a sphere). The top half is the **Northern Hemisphere** and the bottom half is the **Southern Hemisphere**.

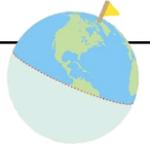
The line that divides the two hemispheres is called the **Equator**. Can you locate the Equator on the map?

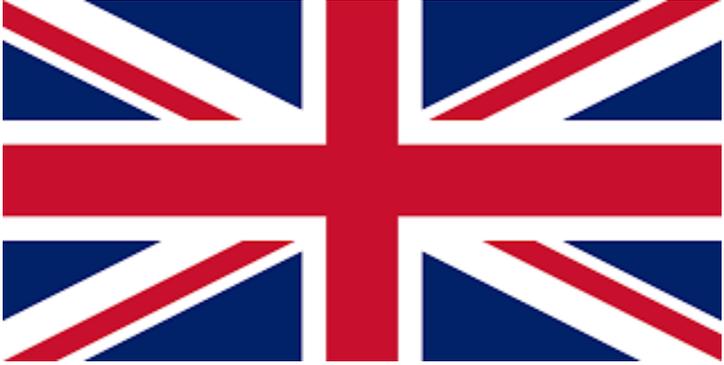
Now how would you describe the position of the UK?

Find out about countries in the different hemispheres of Earth.

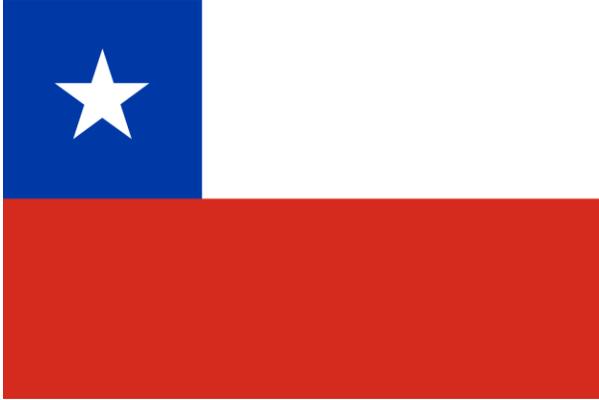
Countries of the Northern Hemisphere

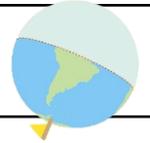
Example answers:



Name of Country: United Kingdom	Flag:
Capital city: London	
Population: 67 million	
Official language(s): English, Welsh	
Average rainfall: 885 mm	

Countries of the Southern Hemisphere

Name of Country: Chile	Flag:
Capital city: Santiago	
Population: 19 million	
Official language(s): Spanish	
Average rainfall: 1118 mm	



Countries of the Equator

Name of Country: Democratic Republic of Congo	Flag:
Capital city: Kinshasa	
Population: 84 million	
Official language(s): French	
Average rainfall: 1070 mm	

