

Year 1 - We are scientists and Autumn

Autumn 1 Knowledge Organiser



Heathfield Schools' Partnership

In the first half of the Autumn term we will be learning carrying out a variety of experiments. The children will be taught to observe over time, make predictions, gather and record data and talk about what they have observed/evaluate what they have done. Towards the end of the half term we will draw the children's attention to the change in seasons and teach the children about the signs of Autumn.

Key Skills and knowledge

- Observing over time—What can you see?
- Pattern seeking—Can you spot any patterns?
- Researching—Can you use a book or the internet to find an answer to your question?
- Testing—What have you changed in your test?
- Identifying and classifying—Can you name/sort/organise these items?

Our Experiments will include:



How can we make a volcano erupt?



What germs live on our hands?



What happens when you put a gummy bear in water?



What happens when you put felt tip ink in water?

Autumn

Months of Autumn- September, October, November

Days begin to get shorter and nights begin to get longer.

The temperature begins to fall; therefore, you might wear long sleeved tops and trousers.

Leaves on some trees change colour and fall to the ground.

Some animals may hibernate- hedgehogs, dormouse and tortoise.

Conkers fall from some trees.

Harvest- farmers harvest their crops.



Key Vocabulary

We are scientists

Predict— say what you think will happen.

Observe— look at what is happening over time.

Explain— tell others what you have found out.

Data— information you have collected.

Record— write down or draw what you have observed.

Fair test— experiments are carried out in the same way.

Germs— bugs that can make you unwell.

Volcano—something that produces lava.

Autumn

Weather is the state of the air and atmosphere at a specific time and place.

Temperature – how hot or cold it is. A **thermometer** to measure the temperature.

Sunshine – how sunny it is.

Rainfall – how much rain there is. A **rain gauge** to measure the rainfall.

Wind direction – which way the wind is blowing. A **weather vane** to measure the wind direction

Wind force – how strong the wind is.

Cloud cover – how thick the clouds will be.

Key Questions

- What do you think will happen?
- What has happened?
- Why do you think that happened?
- How can you record that?
- When is autumn?
- What are some of the characteristics of Autumn?

Year 1 - Everyday Materials

Autumn 2 Knowledge Organiser



Heathfield Schools' Partnership

In the 'Everyday Materials' topic the children will learn to distinguish between an object and the material from which it is made. They will learn to identify and name a variety of everyday materials including wood, plastic, glass, metal, water and rock. The children will learn about the simple physical properties of a variety of everyday

Key knowledge

Predict— say what you think will happen.

Observe— look at what is happening over time.

Explain— tell others what you have found out.

Data— information you have collected.

Record— write down or draw what you have observed.

Fair test— experiments are carried out in the same way.

Key Questions

- What is the difference between a material and an object?
- What are the names of everyday materials?
- What does a property of a material mean?
- What are the physical properties of wood, plastic, glass, metal, water or rock?
- Can you compare materials based on their simple physical properties?
- Can you group together a variety of everyday materials based on their simple physical properties?

Key Vocabulary

Material: The matter from which something can be made.

Object: An object is made out of a material and has a use.

Wood: A hard substance that forms the branches and trunks of trees and can be used as a building material.

Plastic: An man-made substance that can be shaped when soft into many different forms and has many different uses.

Glass: A hard **transparent** material used to make windows, bottles and other objects

Metal: A material that is generally hard and strong and through which electricity and heat can travel.

Water: A clear liquid without colour or taste, that falls the sky and is necessary for animal and plant life

Rock: The dry solid part of the Earth's surface

Stem Sentences

The property of a material is?

An example of a material/object is___

