



## Year 2

# Knowledge Organiser Booklet

This booklet can be used along with the weekly booklets and online resources to practice the key facts from our curriculum themes from the year so far.

'Knowledge Organisers' are sent home each half term. Below is a series of tips and information to help your child learn the key content, vocabulary, spellings which are contained in the Knowledge Organiser

## What are knowledge organisers?

A knowledge organiser is a set of key facts or information that pupils need to know and be able to recall in order to master a unit or topic. Typically, an organiser fits onto one page of A4 or A3 – this helps pupils to remember the layout of the page, which helps them to memorise the information better. The secret to success is to regularly visit the knowledge to be learned (known as 'spaced retrieval'). This helps transfer the knowledge from the short-term memory to the long term memory. This not only helps to make 'learning stick' but it also frees up our short-term memory for day to day learning and experiences.

## How will a knowledge organiser help my child?

Knowledge organisers will be made available at the start of each half term for our curriculum theme to help children remember what they are learning and see the bigger learning journey in their subjects. Instead of forgetting previous learning, pupils continually revisit and retrieve prior learning from their memories.

## How will a knowledge organiser help me to help my child?

Many of you ask us how you can help to support your children at home. Some of you are worried that you don't have all of the subject specific knowledge to be able to help your children. Some of you worry how to check that your children have done their homework and revision. The knowledge organisers will help you to do this easily.








## Suggested activities for parents

### Top tips

- Make your practice active-don't just read it. Try **flash cards**, **mind maps** or use **post it notes** to **cover sections** and **try and remember them**,
- Watching videos online can really help to bring your facts alive!
- Test yourself by asking your parents or asking a friend to test you! This will show you what you know and what you still need to learn.



Here are some strategies that might help you to do this:

Strategy	Description	Image
Reading it	Read through the organiser with your child – if you don't understand the content then ask them to explain it to you – 'teaching' you helps them to reinforce their learning.	
Change it	Try changing the information into a mind map or make your own version using clip art imagery if the organiser contains a lot of text. Display on the wall or the fridge door until the memory 'sticks'.	
Test it- Spelling	Test them regularly on the spellings of key words until they are perfect. Make a note of the ones they get wrong – is there a pattern to the spelling of those words or a song you can make up to help?	
Test it- Facts	Read sections out to them, missing out key words or phrases that they have to fill in. Miss out more and more until they are word perfect.	
Record it	Try recording the knowledge from the organiser as an mp3 sound file (most phones have this as a free app) your child can listen to and speak along with.	
Research it	Once they can remember all of the knowledge on the organiser, use the internet or a book to find out more.	
Glossary	Make a glossary (list) of key words with definitions or a list of formulae.	

# TRANSPORT INVENTIONS

**Inventor/Pioneer/Innovator/ Trailblazer** – someone who is the first to think of or make something.

**Invention** – a creation made after studying and experimenting.

## Land Transportation

**Road** – Many different types of vehicles use roads such as cars, buses, motorbikes, lorries, trucks and cans. Cars are the most popular. These vehicles have motors to make them move.

**Rail** – Trains can be powered by steam, diesel or electricity. They travel along a track known as a railway or railroad. They are sometimes called locomotives.

Some types of land transportation use humans or animals to make them move – bicycles, horse and carts or dog sleds.

## Air Transportation

**Aeroplanes** (or airplanes) are more commonly known as planes. They use jet engines or propellers to make them move. They come in a variety of shapes and sizes. They can be used for transport, fun or warfare. They can travel great distances over land and water.

**Helicopters** use rotors to help them take off and land vertically. They can also fly forwards, backwards and hover. They could be used by police, fire-fighters, news teams or hospitals.

**Hot air balloons** have a large bag or balloon that contains heated air, a basket to carry passengers and a source of heat. As the air inside the balloon is heated it expands and gets lighter which makes the balloon rise. They are mostly used for fun.

**Transport** means a way of moving people or goods from place to place. There are many different types of transport that travel across land, across water and through the air.

## Water Transportation

The main types of water transportation are **ships, boats and hovercraft**. They can be used to travel across **seas, oceans, lakes, rivers or canals**.

**Submarines** are a type of underwater craft. They can go underwater for long periods of time. They usually have a periscope so that they can see above the water.

A famous ship known as '**The Titanic**' sank in 1912.

**Amelia Earhart**. A pilot who attempted to fly around the world in 1937.

**Neil Armstrong**. The first astronaut to land on the Moon in 1969.

The hot air balloon was invented in 1783.

George Stephenson invented the famous steam train the 'Rocket' in 1829.

The first bicycle was made in 1816. There are now around 1 billion bicycles in the world.

Karl Benz invented the first petrol engine car in Germany in 1886.

In 1903, the Wright Brothers invented and flew the first aeroplane.

## **Heritage and Values Workspace for learning facts or additional research.**

Make notes/drawings here to help you learn the facts from the knowledge organiser or add in extra research.



# AFRICA



Africa is the second largest **continent** in the world. There are 7 continents in the world.

The northern half of the continent is mainly desert. The southern half is mostly made up of jungle, rainforest and plains.



1. There are 54 countries in Africa.
2. Africa is the hottest continent in the world.
3. There are over 1500 different languages spoken in Africa.
4. Africa has the world's largest desert - the Sahara.



## KEY PEOPLE



**Maasai Tribe** – an indigenous ethnic group, in Africa, of semi-nomadic people settled in Kenya and northern Tanzania.



## CAN YOU ....?

- Make your own African masks.
- Learn some of the Zulu language.
- Look at an atlas and explore the different countries in Africa.

## KEY PLACES

**Mount Kilimanjaro** - the highest mountain on the continent.



**Victoria Falls** - the largest waterfall in Africa.



**The River Nile** - the longest river in the world and runs through several countries in Africa.

**1400's** - Maasai began to migrate south from the lower Nile Valley.

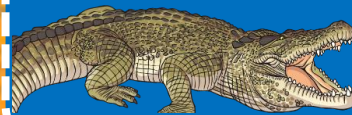
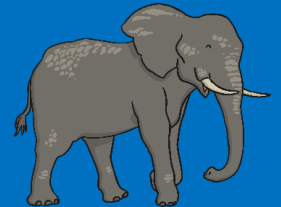
**1600's** – late 1700's - The Maasai settled on land stretching from Kenya to central Tanzania.

The cheetah is the fastest land animal in the world and lives in Africa.



The world's tallest animal is the giraffe and lives in Africa.

The African elephant is the largest living land mammal in the world.



Africa is home to the world's largest reptile, the Nile crocodile.

## **Citizens and Culture Workspace for learning facts or additional research.**

Make notes/drawings here to help you learn the facts from the knowledge organiser or add in extra research.

# GOING GREEN

All the physical surroundings on Earth are called the **environment**. The environment includes everything living and everything non-living. Many people work to protect the environment. These people try to conserve, or save, natural resources.



## Why is recycling important?



If materials are recycled it saves natural resources having to be taken from the earth to make new things.



Recycling saves energy and stops pollution like gases which can harm animals and plants.



Land which is used to store rubbish can be used for other things and poisonous liquids which could leak from rubbish are destroyed.

## Can you ....?

- Use less water - Help your school save water by switching off taps properly and using the water fountain for drinking water. Use less power - Switch off the light and TV when you leave a room to save electricity.
- Help make a compost heap or start a worm farm to use up food scraps.
- Sort out the rubbish into what can be recycled and what can't.
- Recycle clothes, toys, books and games by giving them to another family, charity shop or putting into a charity recycle bin at the supermarket.



## KEY PEOPLE



**Greta Thunberg** – a Swedish environmental activist, born in 2003, who campaigns for climate change.

**Sir David Attenborough** – a British broadcaster who works on natural history documentaries. He does a lot of work to raise the awareness of the impact of humans on the environment.

## KEY VOCABULARY

**Pollution** – introducing something to the environment which is harmful.

**Habitat** – a natural home of a plant or animal.

**Global warming** – a gradual increase of the temperature of the world.

**Conserve** – to protect something from harm and damage.

**Recycle** – to convert rubbish into a reusable item.

**Biosphere** – the areas on earth that are occupied by living creatures and plants.

**Ecosystem** – a biological community.



**Paper** is washed in soapy water. It is then mixed and rolled out before being left to dry. It is then turned into different types of new paper and card, such as newspapers.



Some **plastic** can be recycled. They are first crushed into very small pieces. These pieces are melted and turned into new things, such as T-shirts, carpets and new plastic bottles.



**Glass** and **metal** are washed and then broken into small pieces. The pieces are then melted and made into new things, such as glass bottles, glass jars, metal cans or even metal parts for cars!





## **Enterprise Workspace for learning facts or additional research.**

Make notes/drawings here to help you learn the facts from the knowledge organiser or add in extra research.

# HUFF, PUFF, DON'T BLOW MY HOUSE DOWN!

A material is any substance that has a name. Everything is made of materials and when we make something we need to make sure we are using the best materials for the job.



## WHY ARE WE LEARNING THIS?

We are learning to identify and compare suitability of everyday materials and comparing materials around school and at home.

- Plastic is made from oil and we now use about 20 times more plastic than we did 50 years ago.
- Wool is a good insulator and is used for making warm blankets and clothes.
- We can use many natural materials and by working with them change them into man-made materials. For example paper is made from wood.
- The most common metal on our planet is iron.

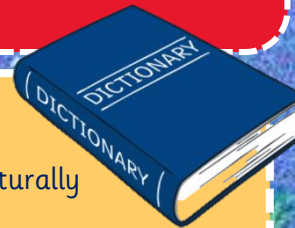
## BOOK FOCUS

### THE THREE LITTLE PIGS



General description:

The Three Little Pigs is a fable about three pigs who build three houses of different materials: straw, sticks and bricks. The Big Bad Wolf comes to blow them down but which material will be the strongest?



## KEY VOCABULARY

**man-made** - made by human beings and not occurring naturally

**natural** - present in or produced by nature, not artificial or synthetic

**flexibility** - able to bend or be bent repeatedly without damage or injury.

**malleable** - describes a metal or other substance that can be shaped or bent without breaking

**property** - a characteristic quality or distinctive feature of something

## CAN YOU ...?



- Gather a mixture of materials and do some junk modelling.
- Go on a material hunt in your house.  
How many different materials can you find?

## MATERIALS



Different types of matter have different **material properties** that make them useful for different jobs. A plastic hosepipe is **flexible**, so it can be pointed in any direction. A perspex visor is **transparent**, so the wearer can see straight through it. A firefighter's suit is **shiny** so it can reflect heat and light. Flexibility, transparency, and shininess are three examples of material properties.

**Some materials can be changed.** They can be mixed with other materials (for example when the ingredients are mixed together to make a cake) and then changed again by heating. Because this change cannot be 'undone' we say that it is **irreversible**. Some changes, though, are **reversible**. For example, when ice is heated it melts and becomes water, but this change can be reversed by re-freezing the water into ice.

## **STEM Workspace for learning facts or additional research.**

Make notes/drawings here to help you learn the facts from the knowledge organiser or add in extra research.





## FOOD AND NUTRITION



There are 5 main food groups – Dairy, Fruit, Grains, Meat and Vegetables.

7 year olds should only have 5 to 6 cubes of sugar a day.

Most exotic fruits are grown abroad and transported to England



## HEALTH

**Fight germs by washing your hands.**

1. Wet your hands and use soap.
2. Lather and scrub for 20 seconds.
3. Rinse for 10 seconds.
4. Turn off tap.
5. Dry your hands.



**Watch out!** Head lice can make your head itchy. They lay eggs and drink your blood!

**Top tips:** Keep your hair tied up.

Use a nit comb on wet hair with conditioner. Comb from the roots to the tips of your hair. Repeat every day for two weeks.



**Keeping Safe!**

Before your cross the road remember to ...

**STOP!**



**LOOK!**

**LISTEN!**



## FUTURES AND CAREERS



Males and females are both able to do any job.

A judge normally earns over £200,000.

Different jobs have different **wages**.

A **wage** is how much you will get paid for doing your job.



## HUMAN RIGHTS AND LAWS

We are all born free and equal.

A manifesto is a public declaration of policy

Our prime minister is Theresa May.

A law starts as a bill and then the government look at the bill before the Queen decides if it should become legal



## HOW TO COOK AN OMELETTE

1. Beat eggs, water, salt and pepper in a small bowl until blended.
2. Heat the butter in a pan over medium heat until hot.
3. Carefully pour in egg mixture.
4. Place filling on one half of the omelette.
5. Quickly fold the omelette.
6. Serve and enjoy!





## **Self Workspace for learning facts or additional research.**

Make notes/drawings here to help you learn the facts from the knowledge organiser or add in extra research.