Woodthorpe Primary School

Head of School: Mrs Charlotte Grason-Taylor
Associate Head of School: Mrs Helen Elsworth

Year group:	Year 4	Term:	Autumn 2

We hope you have had a wonderful, restful half term; we are very excited for the half term ahead!

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Our term ahead:

Core Subjects:

Maths

We will begin the term by looking at a wider area of maths: area. Here we will explore what area is and make and compare shapes based on their area. After this, we will spend the remainder of the term developing our knowledge of multiplication and division, where we will use our known facts to help further our understanding.

English and guided reading

This half term, these lessons will be linked to our geography topic of rainforests. We will begin by writing a Biography about the life and works of Sir David Attenborough, before moving onto a setting description, using our knowledge of the vast ecosystem to bring our descriptive writing to life. To support our understanding, we will read a range of fiction and non-fiction texts linked to the rainforest, including *Emerald Forest* by Catherine Ward.

Science

During our science lessons, we will be learning all about electricity and its many uses. We will use our scientific thinking to make predictions about whether an electrical circuit is correctly connected and consider what makes an effective insulator or conductor.

Wider Curriculum

In **music**, we are learning how to sing in parts, including in loops and layers. Our **DT** topic looks at mechanical systems, where we will design our own mechanical cars and in **RE**, we will explore whether all religions are equal and what it is that makes a text sacred.

Making school unmissable for Year 4

This half term, we are lucky enough to visit the cinema to watch Paddington in Peru! This will help us with our geography topic of rainforests.

We will also be receiving a visit from Father Luke, from the local church, who will support us with our RE topic and YoYo will also be in school, sharing with us their *'It's Christmas'* programme for year 4!

Once we have learnt how to sing in parts, as part of our music topic, we will then have the opportunity to perform these to other children in school.

As the festive season approaches, there will also be many other exciting opportunities coming up so keep your eyes out for these too.

Things to do at home:

Each child has their own reading record, which should be brought into school daily. It would be brilliant if you could listen to your child read at least three times a week. Please make sure these are then signed in the reading record every time that they have read so that it can be ticked off on our school reading chart. Spending time reading a book with your child is not only incredibly beneficial for them but it is also a lovely opportunity to spend some quality time together. In addition to this, every child will have the opportunity to choose a 'gold' reading book, a book which can be of their choice, from a story book, poetry, magazine or facts - the choice is theirs!

The children should also have access to a number of online programmes that can also be used at home to support their learning. We will continue to use **Times Tables Rockstars** in order to support their knowledge of times tables. The

children also have logins for **Spelling Shed**, which they can use to practise their current spelling lists by completing different activities and games. Each week, we will be celebrating successes and participation across these platforms.

Homework will be set on a **Friday** and this will need to be in by the following **Thursday.** Each week, the children will receive spelling homework along with either maths or reading, which will alternate each week. **Spellings** will be set on a **Friday** and tested the **following Wednesday.**

Other information:

PE
Owls will be taking part in PE on a Tuesday and Thursday afternoon.
Ospreys will be taking part in PE on a Monday and Friday afternoon.
Children will be expected to have a full PE kit (a white t-shirt with blue/black shorts, leggings or joggers) in school for these sessions along with appropriate footwear. For safety reasons, children are required to remove earrings and to tie their hair back.

Class teachers:
Owls - Miss Britland
Osprey - Miss Davis (Monday, Tuesday and Wednesday) and Mrs Atkinson (Thursday and Friday).

Please can we kindly remind our children and families that toys and fidget toys are to remain at home unless it has been agreed by class teachers, Mrs Grason-Taylor or Mrs Elsworth for these items to come into school. Thank you for your support with this.

If you require any further information, we can also be contacted by phoning or emailing the school office. We are really looking forward to this half term!

Thank you for your support,

Miss Britland, Miss Davis and Mrs Atkinson

Knowledge mats

To help support learning and the retention of key knowledge, we embed knowledge mats for each new unit of learning. Children are familiar with these within school and they are displayed in classrooms. The knowledge mats are used as a teaching tool to help children remember key facts, vocabulary and other important information. To help support your child at home, we will send out the knowledge mats for the forthcoming half term. The knowledge mats for the first part of the Autumn Term can be found below - if you have any questions, please do not hesitate to speak to your child's class teacher, or Mrs Grason-Taylor (Head of School).

Science - Electricity and circuits

Electrical appliances

Electrical appliances are found all around us.





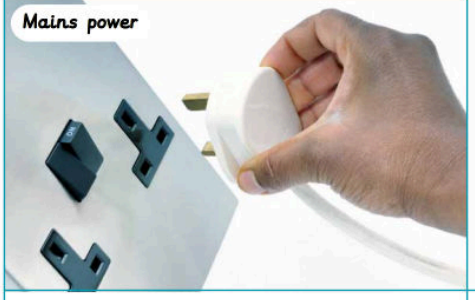



An electrical circuit is the pathway through which electrical charge flows in an appliance.

For a circuit to work, it must include:
- A power source.
- A complete pathway.
- A device or component, such as a bulb.

Power source: something that transfers electrical energy to make an appliance work.

Mains power



- Provides high power for larger appliances.
- Requires access to an electrical socket.
- Appliances are fixed in place.

Batteries



- Allows an appliance to be portable and used anywhere.
- Allows an appliance to be used where no electrical sockets are available.
- Batteries run out and need replacing.
- Batteries are harmful and must not go to landfill.

Science - Electricity and circuits

A **component** is a part of an electrical circuit.

Symbols are often used to represent the components so they are easy to draw and recognise.

battery/cell



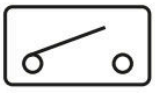
wire



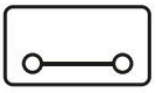
bulb



open switch



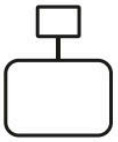
closed switch



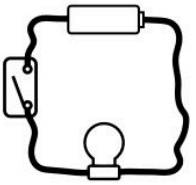
buzzer



motor



A **circuit diagram** is a simple line drawing that represents how the components in an appliance join together.



Electrical conductors are materials that allow electrical charge to flow through quickly.



Metals are good electrical conductors.

Electrical insulators are materials that do not allow electrical charge to flow easily.



Plastics are good electrical insulators.

Electrical safety



- Do not use electrical appliances or switches with wet hands.
- Do not put anything other than a plug in an electrical socket.
- Let an adult know if electrical appliances or wires appear damaged.
- Do not leave electrical wires laying across the floor or on hot surfaces.

PSHE

RSE & PSHE Knowledge organiser | How can we respect each other? | Connecting with others | KAPOW

Words you will learn:

assertive
Speaking up for yourself clearly and politely without being rude or bossy.

compromise
Each person giving up a little of what they want to find a fair solution.

disrespect
Not being thoughtful in the way you think, speak and act.

manners
Every day polite habits.

self-respect
Treating yourself with care.

Words you may know:

bullying
Unkind behaviour several times on purpose.

loneliness
Feeling that you are on your own, even when others are around.

Respect	Disrespect
kind words	unkind words
calm voice	shouting
listening	interrupting
respecting **boundaries**	ignoring **boundaries**

Good **manners** are everyday ways of showing **respect**.
We can show good manners through:

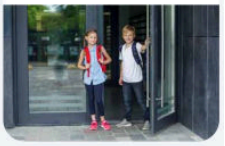
saying please and thank you



waiting your turn



holding the door open for someone



sharing equipment



tidying up shared spaces



knocking before entering someone's room



RSE & PSHE Knowledge organiser | How can we respect each other? | Connecting with others | KAPOW

Positive self-talk is one way of showing ***self-respect***.
You can practise positive self-talk by saying:


I can do hard things.


I'm proud I tried and gave it my best.


It's normal to need help.


I've worked really hard on this problem.


Mistakes help me learn.

You can build friendships by:

- being kind and honest
- saying sorry if trust is broken
- finding a fair **compromise**
- respecting **boundaries**
- listening
- including others

Healthy friendships might make you feel:	Unhealthy friendships might make you feel:
valued	left out
supported	worried
included	lonely
safe	unsafe


If a friendship feels unhealthy, talk to a **trusted adult**.

If you see **bullying** or unfair treatment, you can start telling other people, like a **trusted adult**.



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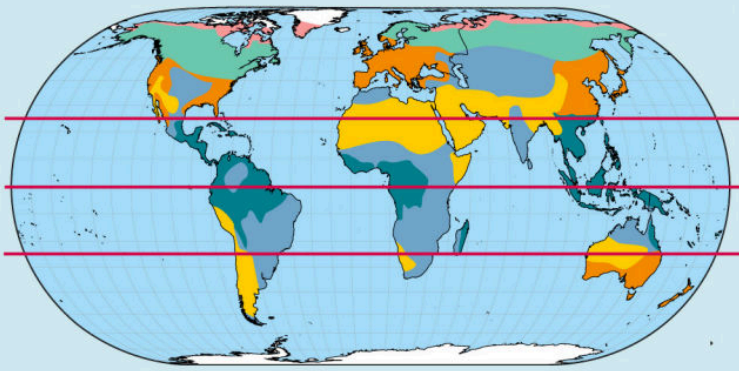
Geography - Why are rainforests important to us?

Map of the world's biomes

biome

An area of the world with a similar climate and landscape, where similar plants and animals live.

- Tundra
- Boreal forest
- Temperate deciduous forest
- Savannah
- Tropical rainforest
- Desert



Tropic of Cancer

A line of latitude north of the Equator which marks the northernmost edge of the Earth's hottest regions.

Equator

An invisible horizontal line that splits the world into two hemispheres.

Tropic of Capricorn

A line of latitude south of the Equator which marks the southernmost edge of the Earth's hottest regions.

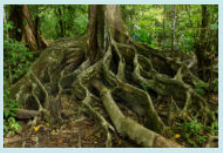
Tropical rainforest



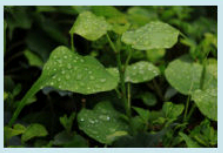
How have plants adapted in the Amazon rainforest?



Thin, smooth bark ensures rain can run off trees easily.



Buttress roots keep tall trees stable in the wet soil and strong winds.



Drip tips mean rain can run off leaves without damaging them.



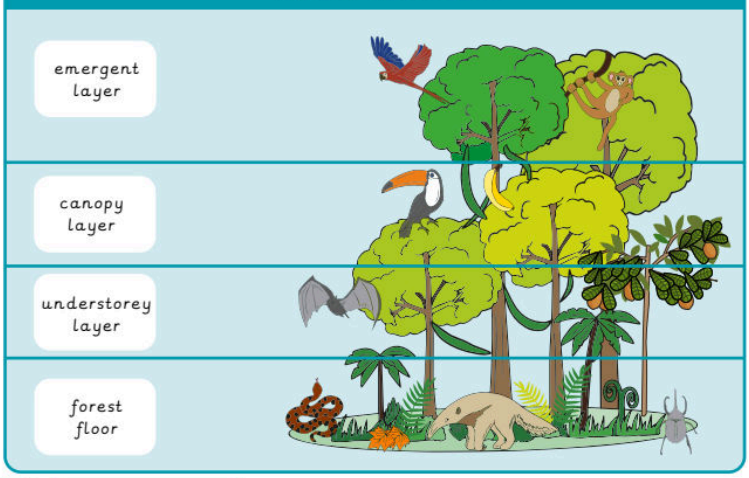
Lianas (vines) wind their way up other plants to reach sunlight.

Geography - Why are rainforests important to us?

Map of the Amazon rainforest



Layers of the rainforest



global warming



When our Earth's temperature rises because of greenhouse gases.

mining



The process of digging up valuable minerals from the Earth's crust.

logging



The cutting down of trees for their wood.

deforestation



The cutting down of trees in a large area.

emergent layer	The top layer of the rainforest with the tallest trees that get lots of sunlight, rain and wind.
canopy layer	The layer of overlapping branches and leaves below the top of the rainforest that gets sunlight, rain and wind.
understorey layer	The warm and damp layer above the forest floor that gets little light.
forest floor	The ground layer of the rainforest where it is dark, wet and hot.

Music

Music - Singing in parts

melodic loop	A short pattern of sounds that repeats continuously with different pitches.
practise	Repeating something to become better.
rhythmic loop	A short pattern of sounds that repeats continuously without different pitches.
round	The same melody sung or played by two groups, each beginning at a different time.



Use your ears

Listen closely to the music and each other.



Sing with a strong voice

Sing loudly and clearly but do not shout.



Feel the beat

Focus on feeling the beat of the music.



Use your eyes

Make eye contact with others to help you stay in time.

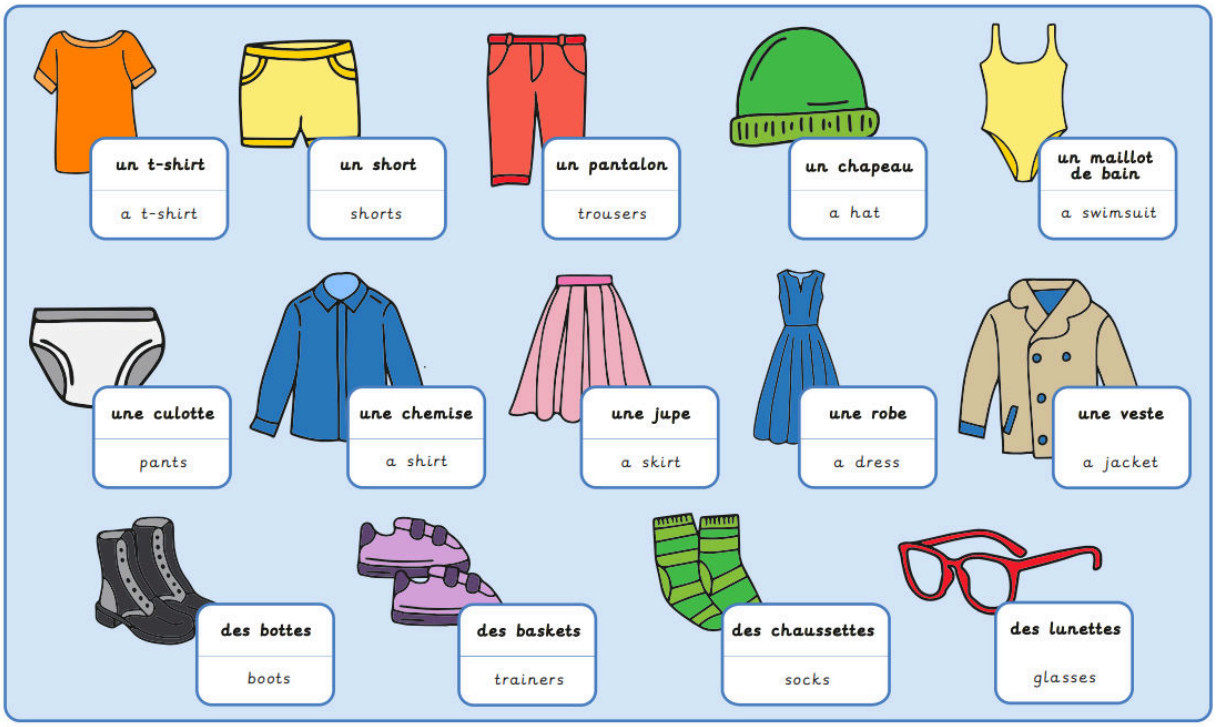


Singing with others

- Keep the beat.
- Stay in tune.
- Listen.
- Work as a team.

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French - Clothes: Getting dressed
Vocabulary and pictures



French - Clothes: Getting dressed
Sentence structure and phrases

French nouns are either

masculine or feminine

Difference between **un** and **une**. Both mean 'a' or 'an'.

masculine	feminine
un	**une**

Un is used for masculine nouns and **une** is used for feminine nouns.

Colour adjectives come after the noun and must agree with the gender and number that they are describing. This is usually achieved by:

No change for masculine singular nouns

un pantalon rouge

a pair of red trousers



Adding an **e** for feminine singular nouns

une robe bleu**e**

a blue dress



Adding an **s** for masculine plural nouns

des t-shirts verts

(some) green t-shirts



Adding es for feminine plural nouns

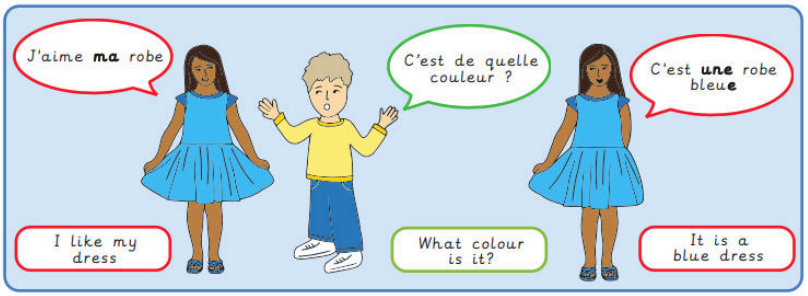
des chaussett**es** vertes

(some) green socks



Different ways to say my:	
mon	my (masculine singular)
ma	my (feminine singular)
mes	my (plural)

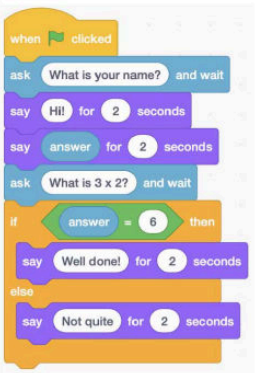
Other phrases	
il porte / elle porte	+ clothing - he is wearing / she is wearing
j'aime	I like
je n'aime pas	I don't like



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Computing

Computing - Programming: Further coding with Scratch



This program starts when the green flag is clicked. It asks for the player's name and says, "Hi!" followed by their answer. It then asks, "What is 3 × 2?"

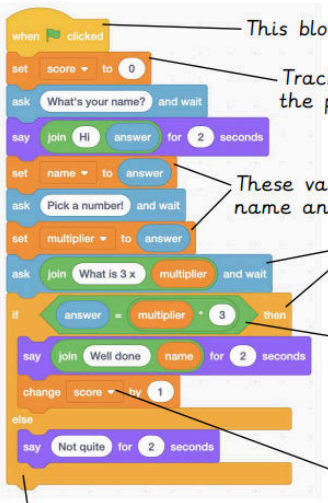
It checks the answer using an **if statement**. The **condition** 'if answer = 6' decides which message to show.

The 'answer' block stores what the player types, such as their name or maths answer.

Multiplication game blocks

- **Storing information**: use variables like **score**, **name** and **multiplier** to track what the player does.
- **Making choices:** use **if** and **if, then, else** to control what happens based on the user's **answer**.
- **Using sensors**: use blocks like answer, key pressed and touching sprite to react to input.

Multiplication game code



This block starts the program.

Tracks how many questions the player answers correctly.

These variables store the player's name and chosen number.

These blocks collect input from the player.

Checks if the answer is correct and shows a different message depending on the result.

This adds 1 point if the answer is correct using the score variable.

The 'if, then, else' block checks if the answer is correct and shows a different message depending on the result.

RE

Religion and worldviews - Are all religions equal?

Bahá'í*	A religious worldview founded in the Middle East in the 1800s by Bahá'u'lláh.
equality	All people having the same rights, treatment and opportunity.
harmony*	A state of peace and agreement between people.
Langar	The Sikh community meal at the gurdwara, welcome to everyone and the name for the kitchen where it is prepared.
merciful*	Forgiving and kind.
origin*	The start of something.
unity	Working together and being in agreement.



World Religion Day was started by Bahá'í followers as a way to celebrate all religions and promote religious equality and harmony.

A key belief of the Bahá'í worldview is in one God, who is the same for other religions. Unity and harmony are important concepts for many Bahá'í followers. The founder of the Bahá'íworldview, Bahá'u'lláh, wrote many teachings about how the world could be united and humans could live in peace.



There are many connections between religious worldviews. These include historical and geographical links between religious founders and leaders and where they found their inspiration.



Guru Nanak, the founder of the Sikh religion, taught the importance of equality and harmony. He said there is only one God and that God views all people as equal.

Many Sikh beliefs and practices focus on equality such as the Langar and reading the Guru Granth Sahib.



Religious worldviews try to understand and explain ideas and beliefs about the existence of a god or higher being.

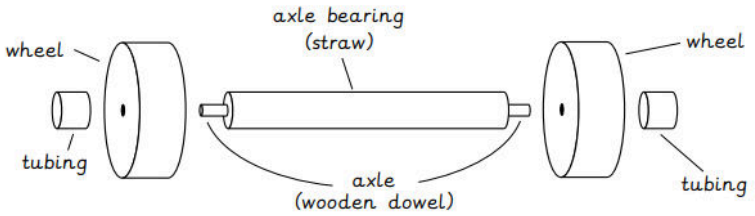
DT

D&T - Mechanical cars

The parts of a **machine** that move together are called a **mechanism**. When a machine has more than one mechanism, it is a **mechanical system**.

Wheel mechanism: the axle spins freely inside the bearing, while the wheels are secured to the axle so they spin with it, allowing the car to roll.

Exploded diagrams are used to show how different parts of an object fit together.



A prototype is a simple model built to test a design before making the final product.



Prototype one mechanism: an **inclined plane** (ramp) is used to make the car roll.



Prototype two mechanism: a rubber band is used to **slingshot** the car forwards.



Prototype three mechanism: a rubber band is wound around the back axle and unwinds to make the car move.