



YEAR 5

CURRICULUM LEAFLET

EXPLORE—SPRING 2

GLOBAL GOALS: 1 & 13

READING

Children will begin to read *The Explorer* by Katherine Rundell in Destination Reader. We will be combining strategies using evidence from the text to support our understanding. The children will also develop their fluency skills to increase their speed and accuracy of what they read.



WRITING

Using *The Tempest* by William Shakespeare, children will explore the themes, ideas and characters in the play, as well as writing opportunities, such as character descriptions and comparisons, scene/setting descriptions and diary entries. They also explore the conventions of writing playscripts. Using *Can We Save the Tiger* by Martin Jenkins and Vicky White and the poem *The Tyger* by William Blake the children will create posters, persuasive speeches, poems (as well as having the opportunity to learn a poem by heart), explanation texts and discussion texts.



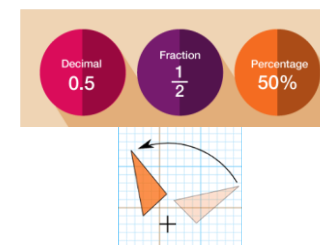
MATHS

Review Prior Learning:

- Adding and subtracting mixed and improper fractions
- Convert mixed numbers to improper fractions and vice versa.

New Learning:

- Fractions and percentages
- Transformations



RE/ PSHE

RE:

We will be exploring the question 'Does Eternity exist?'

PSHE: Citizenship

We will begin to understand what happens when the law is broken, the links between rights and responsibilities, protecting the planet, contributing to the community, recognize the pressure groups and how

Parliament works.



PE/ SPANISH

Physical Education:

In Year 5, will have two weekly PE lessons.
Teachers: Swimming
First Kicks: Gymnastics/Cricket

Spanish:

In Year 5, we will explore sports and opinions. Learners pronounce cognate and other sports accurately from text, applying their phonics knowledge from previous years. They practise using a dictionary to look up unknown words. They describe sports, using simple sentences with 'tiene', 'es' and 'hay' for their peers to guess. They learn how to say which sports they like/dislike doing, using 'me gusta' + infinitive verb.

COMPUTING

Computing: Data Handling—Mars Rover 1

In this unit, pupils will learn about the automated motor vehicle, Mars Rover, exploring how and why the Mars Rover transfers data, understanding how messages can be sent using binary code and experiencing how to; programme a Mars Rover, calculate binary addition and represent binary as text.



ART/ DT

Art: Drawing - I need space

In this unit, pupils will understand and explain what retrofuturism is.

DT: Textiles - Stuffed Toys

In this unit, the pupils will design a stuffed toy, considering the main component shapes of their toy, using blanket stitch to assemble their stuffed toy, repairing when needed.





YEAR 5

GEOGRAPHY

SPRING 2

BIOMES

PRIOR KNOWLEDGE

Previously in Year 3:

- **Geography: Mountains, Volcanoes and Earthquakes**—What is the earth made of?
- **Geography: Water, Weather and Climate**—How Earth's climate changed in the past and is changing now

Previously in Year 4:

- **Geography: Rivers**—Where are the world's rivers?
- **Geography: Natural Resources in Northern Chile**—Which countries have the most natu-

NEW KNOWLEDGE

During this unit, I will learn:

- What are the Earth's biomes?
- What affects an ecosystem?
- What is the tundra?
- What is the taiga?
- What is the savanna?
- How are biomes being damaged?



KEY IDEAS AND VOCABULARY

Biome	A large area of land with a particular climate, type of plants and animals.
Ecosystem	A community of living and non-living things that work together.
Climate	The general weather conditions and patterns in an area.
Deciduous	A tree that sheds its leaves in the autumn.
Dormant	When a plant or animal is in a deep, long sleep.
Equator	The imaginary line that runs around the middle of the earth
Fauna	The animals that normally live in a particular biome.
Flora	The plants that normally grow in a particular biome.
Latitude	Imaginary lines goes around the earth horizontally.
Temperature	Mild weather, further away from the equator.
Tropics	Any place on earth near the equator.
Deforestation	Cutting down trees.

FUTURE KNOWLEDGE

Later in Year 6:

- **Geography: Local Fieldwork**—How do geographers collect data?
- **Geography: Globalisation**—Where will globalisation lead us?

Later in KS3 (Secondary School):

- **Geography: Locational knowledge**—extend their locational knowledge and deepen their spatial awareness of the world's countries using maps of the world, focusing on their environmental regions, including polar and hot deserts.

GEOGRAPHICAL SKILLS AND FIELDWORK

During this unit:

Geographical skills and fieldwork

- I will use maps, atlases, globes and digital/computer mapping to locate countries and identify where researchers above carry out fieldwork.
- I will use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build my knowledge of the United Kingdom and the wider world
- I will use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.





YEAR 5

SCIENCE

SPRING 2

ELECTRICAL CIRCUITS

PRIOR KNOWLEDGE

Previously in Year 3:

- **Science: Raw and synthetic materials** — Sort materials into synthetic and raw materials.

Previously in Year 4:

- **DT: Electrical systems: Torches**—Pupils explore the difference between 'electrical' and 'electronic' and create a torch.

Previously in Year 5:

- **Science: Magnetism** —*State what an electromagnetic is.*

FUTURE KNOWLEDGE

Later in Year 6:

- **Energy**—What is energy transformation? How can we calculate kinetic energy?

Later in KS3 (Secondary School):

- **Electricity and electromagnetism:**
Current electricity—electric current, measured in circuits, series and parallel circuits. Potential difference, measured in volts, battery and bulb ratings. Differences in resistance between conducting and insulating components (quantitative).
Static electricity— separation of positive or negative charges when objects are rubbed together.

NEW KNOWLEDGE

During this unit, I will learn:

- What is static electricity?
- What are the parts of an electrical circuit?
- What are circuit diagrams?
- What are electrical insulators and conductors?
- What happens in a circuit when we change the components?
- How can we create a circuit to build a buzzer game?

Cell		What is commonly known as a 'battery' is a cell. Provides the power to make electricity flow.
Battery		When two or more cells are used together
Bulb		Produces light when electricity flows through it
Buzzer		Produces sound when electricity flows through it
Switch (open)		Creates a gap in the circuit to stop the flow of electricity
Switch (closed)		Closes the gap in the circuit to allow electricity to flow

SCIENTIFIC ENQUIRY

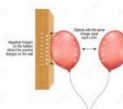
During this unit:

I will answer scientific questions by using: Comparative and fair tests - I will design and carry out fair tests exploring changes in circuits to measure e.g. the brightness of bulbs, the speed of motors, the volume of buzzers.

KEY IDEAS AND VOCABULARY

Adding more cells to a complete circuit will make a bulb brighter, a motor spin faster or a buzzer make a louder sound. If you use a battery with a higher voltage, the same thing happens. Adding more bulbs to a circuit will make each bulb less bright. Using more motors or buzzers, each motor will spin more slowly and each buzzer will be quieter. Turning a switch off (open) breaks a circuit so the circuit is not complete and electricity cannot flow. Any bulbs, motors or buzzers will then turn off as well. You can use recognised circuit symbols to draw simple circuit diagrams.

Static



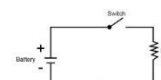
Static electricity is a familiar electric phenomenon in which charged particles are transferred from one body to another.

volts/ voltage



voltage is the pressure from an electrical circuit's power source that pushes charged electrons (current) through a conducting loop.

Circuit



A combination of individual electronic components connected together by conductive wires through which electricity can flow.

Electrical insulators



An electrical insulator is a material in which electric current does not flow freely.

Electrical conductors



An electrical conductor is a material in which electric current does flow freely.