
FUTURE SPARKS:
AUTOMATONS
& ASPIRATIONS
SPRING 2

READING

We will continue to cover the discrete reading skills through our class book, Peter Brown 'The Wild Robot'.

- I can apply my knowledge of root words, prefixes and suffixes to understand the meaning of new words.
- I can ask questions to improve my understanding.
- I can draw inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence.
- I can predict what might happen from details stated and implied.
- I can summarise the main ideas drawn from more than one paragraph, identifying key details that support the main ideas.
- I can discuss and evaluate how authors use language, including figurative language, considering the impact on the reader.
- I can distinguish between statements of fact and opinion.
- I can retrieve, record and present information from non-fiction.

WRITING

The text types we are learning about this half term are speech writing and blogs.

- I can recall the key features of a blog.
- I can write effective sentences for a blog.
- I can use exaggeration in my writing.
- I can use cause and effect language in my writing.
- I can shift in formality with my writing.
- I can use superlatives.
- I can include figurative language in my writing.
- I can recall the features of a persuasive speech.
- I can include technical information in my writing.
- I can include emotions and feelings in my writing.
- I can directly address the audience including a personal address.

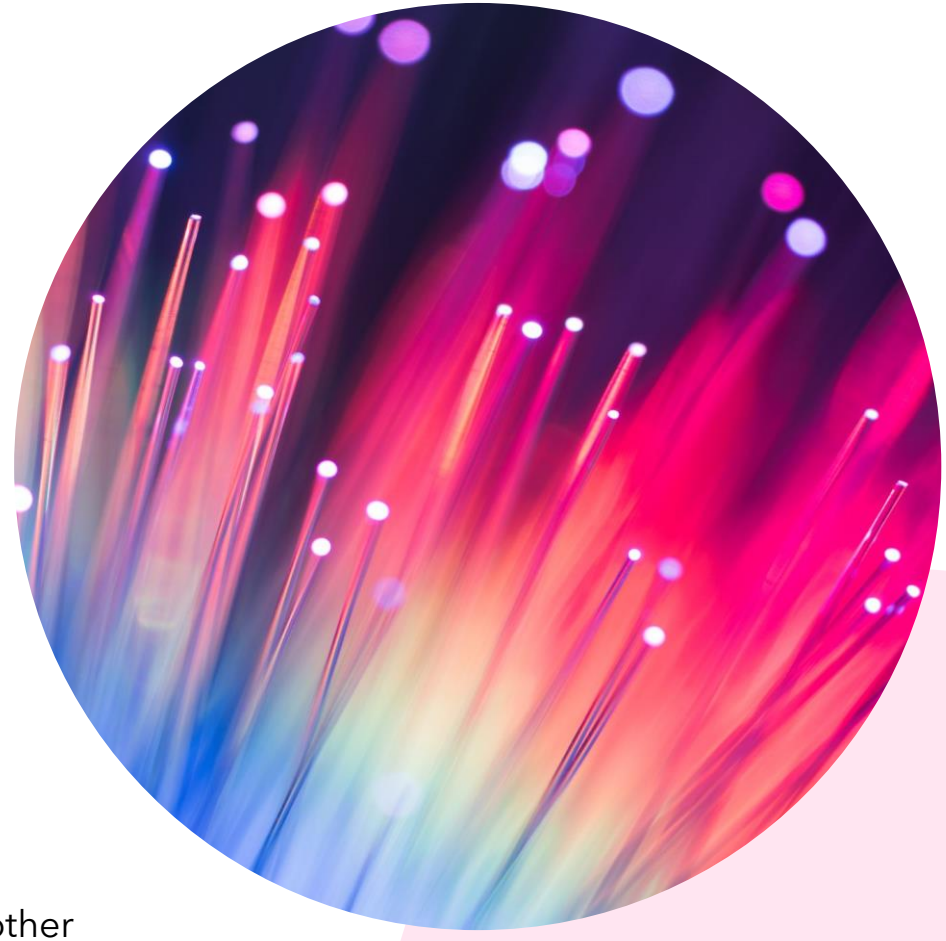
MATHS

We will be learning about position, area & perimeter and shape.

- I can understand, convert and calculate metric measures.
- I can read and plot coordinates in all four quadrants.
- I can translate and reflect.
- I can find area and perimeter of different types of triangles.
- I can find the area and perimeter of parallelograms.
- I can find area and perimeter of cubes and cuboids.
- I can measure and classify angles.
- I can calculate angles.
- I can calculate angles within a triangle.
- I can find missing angles in a triangle.
- I can find missing angles and calculate angles in a quadrilateral.
- I can draw shapes accurately.
- I can draw nets of 2D shapes.

SCIENCE

We will be learning about electricity.



- I can understand the impact of adding cells to a circuit.
- I can plan an experiment to record the impact of adding cells to a circuit.
- I can take measurements and record my findings using scientific language.
- I can use my test results to make a prediction.
- I can use diagrams to create circuits and explain the result.

KIRFS
Key Instant Recall Facts and skills

- A circuit is a complete path that electricity flows around.
- Circuits need a source of electricity, such as a battery but have other components such as wires, a bulb, a motor or a buzzer.
- Switches control the flow of electricity around a circuit.
- Circuit symbols are used to create circuit diagrams.
- A current is a flow of electrons, measured in amps and voltage is the force that makes the electrical current move through the wires.
- A series circuit only has one route for the current to take.

GEOGRAPHY

We will be learning to compare key aspects of human geography including types of settlement and land use, economic activity, including trade links and the distribution of natural resources including energy, food, minerals and water.

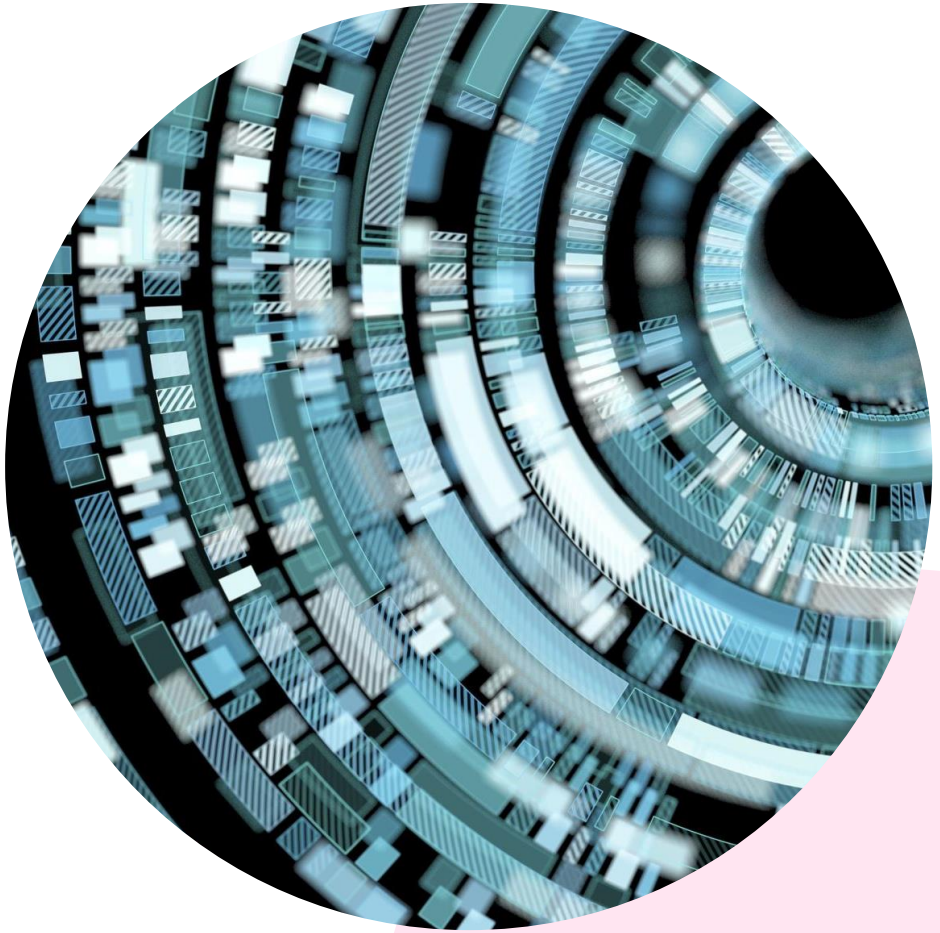
- I can ask questions to help compare places including their features.
- I can recognise that people have differing quality of life living in different locations and environments.
- I can describe how people have been affected by changes in the environment.
- I can explain about key natural resources.

- I can explain why towns are built in the geographical places they are.
- I can describe how some places are similar, and others are different in relation to their **physical features**.
- **Natural resources** are materials produced by the environment that humans can make use of.
- Natural resources include coal, natural gas, oil, plants, wood and quartz.
- Some natural resources are **renewable**, some are not. **Renewable** means that something will not be used up or run out.
- Some natural resources are not **renewable**. Once they have been used, they cannot be replaced.

KIRFS
Key Instant Recall Facts and skills

COMPUTING

We will be learning about programming and how to combine previous skills of sequence, repetition, selection and variables. We will use all of these constructs in a different, but still familiar environment, while also utilising a physical device – the micro:bit.



- The micro:bit
- Go with the flow
- Sensing inputs
- Finding your way
- Designing a step-counter
- Making a step-counter

PSHE

We will be learning about 'Aiming High' and how to focus on achievements, aspirations and opportunities

- I can identify skills and attributes that are useful in many roles.
- I can identify my preferred learning style.
- I can identify potential barriers to success.
- I can identify opportunities that might be available to me in the future.
- I can identify and challenge stereotypes.
- I can explain different routes into further education and work.
- I can discuss goals I could set to work towards my ambitions.
- I understand the different roles within a team.
- I can discuss challenges many people face and how some people overcome these.

KIRFS
Key Instant Recall Facts and skills

- Dial 999 or 112 for help.
- The first line of my address and town is …
- My date of birth is...
- Childline telephone is 0800 1111.
- SMART acronym for internet safety means SAFE, MEETING, ACCEPTING, RELIABLE, TELL.
- A responsible, global citizen is someone who is aware of and understands the wider world – and knows their place in it.
- Change is the process when someone or something becomes different.

R E

We will be learning about what Christians believe Jesus did to ‘save’ people?

- I can explain how incarnation and salvation fit within the Bible
- I can explain what Christians mean when they say that Jesus’ death was a sacrifice
- I can make connections between the Christian idea of sacrifice and the celebration of Holy Communion
- I can weigh up the value and impact of sacrifice in my own life and the world today
- I can explain my thoughts about the idea of sacrifice, recognising different points of view

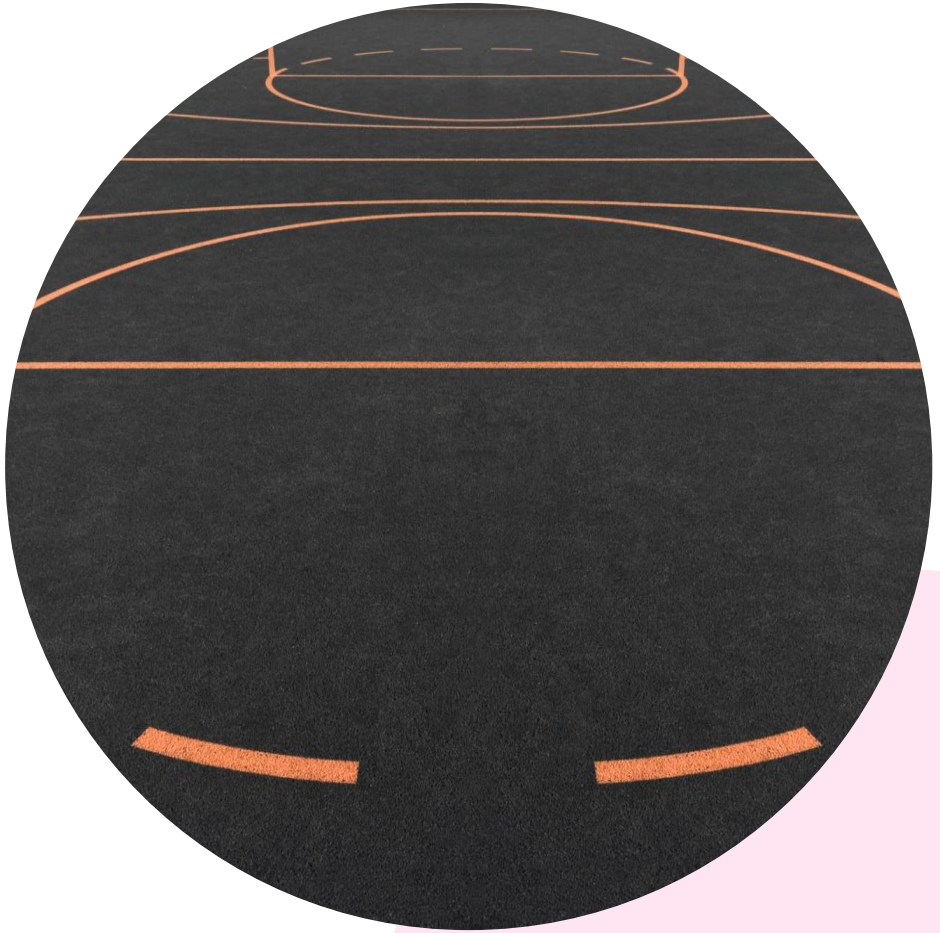
FRENCH

We will be learning how to navigate around the town using directions and prepositions to indicate the exact position of a place in relation to another.

- I can name all 10 places around the town in French with the correct article/determiner.
- I can follow and give 5 directional instructions in French and understand and use phrases of relative distance (nearby/far away).
- I understand that when using some prepositions in French, grammatical changes are needed depending on the gender of the noun that follows.
- I can take part in a complete, authentic dialogue, asking and giving directions in French.

P E

We will be learning about gymnastics and orienteering.



Gymnastics:

- I can perform complex travel progressions, including floor travels.
- I can show different combinations and pathways when travelling.
- I can create longer routines.
- I can perform high quality jumps, rolls and group balances.
- I can creatively change the dynamics of a routine with a partner.
- I can confidently perform in front of others and constructively feedback on others' performances.

Orienteering:

- I can show confidence in group activities.
- I can plan effectively.
- I can understand a complex map.
- I can scale a map effectively.
- I can choose successful approaches to tasks.
- I can complete an adapted control event.

D T

We will be creating an automaton from the future.

- I can discuss the features of an automaton.
- I can identify the correct cam for a chosen movement.
- I can use a range of techniques to create a working automaton.
- I can follow my design to meet the brief.
- I can evaluate my finished product.

M U S I C

We will be learning about texture: 3-part round/polyphonic texture, monophonic, homophonic using the songs ‘Dona Nobis Pacem’ and ‘Jubilate Deo’.

- I can compose an 8-bar piece on percussion, in 3-time and using chords F and C major.
- I can sing a round accurately and in a legato style.
- I can sing a chorus in two-part harmony with dancing on the beat.
- I can identify changes in texture between parts moving together (homophonic texture) and parts moving independently (polyphonic texture).

Our class book this half term will be Peter Brown 'The Wild Robot'

Udeskole sessions we have planned include assessing the school grounds to see how 'environmentally' friendly and 'inclusive' it is for people with disabilities.

We are planning a school trip to Discovering42 science museum.

Our links to Kernow in this topic's learning include learning about local scientists from Cornwall and studying Truro's economic and natural geography.

Our Kea assessment task will be to produce an automaton for the future.

Diversity, equality and representation within this topic include learning about diverse scientists and activists.

Our baking activity this term will be to construct a new recipe based on the future.

Science investigation which the children will be taking part in investigating how real-life circuits can be adapted e.g alarms used for a specific purpose.

Music appreciation link is music from the motion picture 'The Wild Robot' by Kris Bowers.

Links to climate change include our speech writing related to Greta Thunberg speech.