

Year 6 Spring

SCIENCE

Light

- Recognise that light appears to travel in straight lines
- Use the idea that light travels in straight lines to explain hat objects are seen because they give out reflective light into the eye
- Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes
- Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

Electricity

- Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit
- Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches
- Use recognised symbols when representing a simple circuit in a diagram
- Make predictions based on scientific knowledge and understanding
- Look for patterns and relationships and collect relevant data
- Identify where there may be anomalies in data and suggest how to rectify this
- Record data and results of increasing complexity using scientific diagrams and labels, classification keys, scatter graphs, bar and pie charts
- Interpret and compare information and data in a variety of ways including from tables, line graphs and bar charts
- Plan different types of scientific enquiries to answer questions including recognising and controlling variables where necessary
- Take measurement using a range of scientific equipment with increasing accuracy and precision taking repeat readings when appropriate
- Communicate findings in tables, bar charts, line graphs and pie charts whilst making appropriate use of ICT
- Identify trends and patterns and results that do not appear to fit the pattern
- Provide explanations for differences in observations and measurements
- Make practical suggestions for improving methods in there

PSHCE

Understanding their place in the world

- Understand how humans, over time, have been impacted by climate change and the current range in our society
- Understand how to respect through examining rule of law and rights
- Understand entrepreneurial skills and how this relates to different economic situations
- Show an understanding of personal qualities and how you can show these in relation to careers
- Understand a wider range of acceptable terminology and behaviour and how to change this
- Use racial terminology correctly and understand how to combat racism and why it's important to do so
- Recognise different forms of sexism and how women's rights have changed over the years
- Understand how women got the vote and different rights
- Understand and discuss current affairs and challenges racism brings and the effect on people

ONLINE SAFETY AND DIGITAL CITIZENSHIP

Self image and identity

- I can identify and critically evaluate online content relating to gender, race, religion, disability, culture and other groups and explain why it's important to challenge and reject inappropriate representations online
- I can explain the importance of asking until I get the help needed

Online reputation

- I can search for information about an individual online and summaries of information found
- I can describe ways that information about anyone online can be used by others to make judgements about an individual and why these may be incorrect
- I can explain the way in which anyone can develop a positive online reputation
- I can explain strategies anyone can use to protect the 'digital personality' and online reputation including degrees of anonymity

IMOVIE

- Add and control audio and sound effect using the fade tool to gently ease in or out audio using the split function to split audio
- Layer audio and sound effect and use cross-fade
- Include elements of keynote presentation graphics such as scroll used parallax

Animation project

- App prototyping: create an app prototype using 'links' that is related to a subject/unit of study. For example design an app for a product that could shape the future.

Scroll based parallax presentation

- Build scroll based parallax animations to create exciting presentations throughout the use of 'magic move' you will already have acquired the skills to achieve this through using 'transition' effects between slides.

DT

- Create a model out of a range of materials, which incorporates an element of movement and electrical system
- Understand the stages of the design process

Design

- Use research they have done into famous designers and inventors to inform the design of their own innovative products
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design
- Create scaled drawings of designs
- Use of computer aided design to assist in designing a 3d product

Make

- Make careful and precise measurements so that joints, holes and openings are in exactly the right place
- Explore how to reinforce and strengthen a design so it is functional
- Explore how electrical systems can be integral in functional products
- Explore how series circuits can be developed into a product

GEOGRAPHY

Locational knowledge

- Name and locate counties in Scotland, Wales and Northern Ireland and recap cities for the UK and land-use patterns and understand how some of these aspects have changed over time
- Understand how vegetation belts, biomes, economic activity and trade links have impacted on where humans have settled and why
- Use fieldwork to observe, measure, record and present human and physical features in the local areas using a range of methods inc. sketch maps, plans, graphs and digital technologies
- Use world maps, atlases and globes and digital/computer mapping to locate where countries are around the world and describe their features

ART

- Create a sculpture using a range of materials in your final piece
- Begin to develop awareness of composition
- Use sketchbooks to plan work and develop ideas and techniques
- Refine use of learned sculpture techniques
- Recognise sculptural forms in the environment