## Y5 Term 3

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| **English** | Newspaper reports (volcanoes/earthquakes)<br>Flashback story – based around a picture book | **Maths** | Fractions |

**Science: Light**

**NC objectives from curriculum progressions**

Children will be taught to:

**Scientific Knowledge**

*recognise that light appears to travel in straight lines
*use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect 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

**Scientific skills**

*with support, answer questions with evidence from different types of scientific enquiry, e.g. comparing life cycles of plants using change over time, surveys and secondary sources.
*with prompting, identify and manage variables, e.g. when exploring the brightness of bulbs.
*following discussion of alternatives, select appropriate equipment, e.g. a thermometer.
*take measurements that are precise as well as accurate, e.g. the amount of sugar which can be dissolved in different temperatures of water.
*know how to process repeat readings, e.g. when investigating the behaviour of components in a circuit.
*start to use labelled diagrams to show more complex outcomes, e.g. demonstrating how we see objects.
*with prompting, use various ways to record complex evidence, e.g. the behaviour of particles in different states of matter and when changing between states.
*use a line graph to record basic data, e.g. length and mass of a baby as it grow.
*with support, display and present key findings from enquiries orally and in writing, e.g. suggesting reasons for similarities and differences between various animals.
*with support, indicate why some results may not be entirely trustworthy, e.g. in relating brightness of bulb to voltage supplied.
*with prompting, write a conclusion using evidence and identifying causal links, e.g. what makes a bulb shine more brightly.
* suggest further relevant comparative or fair tests, e.g. when testing materials for various properties to determine their suitability for an application.
*show how evidence supports a conclusion, e.g. researching gestation periods of various mammals and relating them to adult mass.

***Notes and guidance (non-statutory)***

*Pupils should build on the work on light in year 3, exploring the way that light behaves, including light sources, reflection and shadows. They should talk about what happens and make predictions.*

***Pupils might work scientifically by:***

*-systematically identifying the effect of changing one component at a time in a circuit*
*-designing and making a set of traffic lights, a burglar alarm or some other useful circuit.*
*-deciding where to place rear-view mirrors on cars*
*-designing and making a periscope and using the idea that light appears to travel in straight lines to explain how it works*
*-investigating the relationship between light sources, objects and shadows by using shadow puppets*
*-looking a range of phenomena including rainbows, colours on soap bubbles, objects looking bent in water and coloured filters (they do not need to explain why these phenomena occur).*

## Geography: Italy

**NC objectives from curriculum progression**

Children will be taught to:

**Geographical Knowledge**

*locate Italy and the countries of Europe on a map, concentrating on Italy's physical features

*identify the position and significance of the Equator; and the Southern and Northern Hemispheres; the Arctic and Antarctic circles; and lines of longitude and latitude, including the Tropics of Cancer and Capricorn

**Geographical Understanding**

*describe and understand key aspects of physical geography, particularly the effects of plate tectonics: mountains, volcanoes and earthquakes

*describe and understand the interaction between physical and human processes, in terms of the effects of volcanoes and earthquakes both historically and more recently

*understand geographical similarities and differences by comparing tectonic activity in the UK and Italy

**Geographical Enquiry**

*use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied

*use the eight points of the compass, four-figure grid references, symbols and keys to build their knowledge of the local area

*use a range of methods including sketch maps, plans and graphs, and digital technologies

| English activities/links | Maths activities/links | Outdoor learning/ Visits/Visitors |
|---|---|---|
| 3 possible summative activities any of which could also be linked to a Talk for Writing unit.<br>-A diary entry about the eruption of Mount Vesuvius<br>-An information leaflet with 3 sections: Italy (physical and human geography), Earthquakes, Volcanoes<br>-A newspaper report on an earthquake or volcanic eruption (including a description of how they are caused etc – geographical knowledge) | Climate graphs | Newspaper editor – virtual visitor |

## Art/DT: Art – Volcano Paintings

Children will:

**Appreciate and Gain Knowledge**

*view pictures showing how different artists have presented volcanoes; compare and contrast

*focus on Kate Fortin's painting of a volcano and how she has created perspective

**Research and Design**

*research use of perspective in landscape paintings

*use sketchbooks to develop skills with creating perspective when sketching a landscape

*develop ideas for their own volcano painting

**Experiment and Create**

*experiment with different paint types (watercolour, poster, acrylic)and brush types and sizes

*experiment with use of colour and colour-mixing to create 'lava' effects

*select materials, colours and tools to produce effective final art work

**Evaluate**

*begin to make notes on their progress and how they think they may modify or improve ideas or processes/techniques

*reflect on how effectively perspective has been created and effects created through choice of materials, colour and techniques

## ICT: We are designers: design and make a computer-controlled product

Children will be taught:

**Computer Science**

*how a rule-based algorithm works and what it does so that they can explain it in their own words. (Revision to introduce unit.)
*how to design, write, test and debug a program using a block language based on their own ideas using Lego WeDo.
*to use simple computer control with products they make in design and technology, using Lego WeDo kits.
*to plan a solution to a problem using decomposition.
*to use sequence, selection and repetition in programs. Repetition might include exit conditions (e.g. repeat...until...). Selection would normally be of an if...then or if...then...else type.
*to combine repetition with selection.
*to use logical reasoning to detect and explain errors in algorithms.
**E-safety** - Online Bullying (Project Evolve)

## PSHE: Keeping Safe: First Aid

Children will be taught:
H11. to recognise how their increasing independence brings increased responsibility to keep themselves and others safe
H15. school rules about health and safety, basic emergency aid procedures, where and how to get help
H17. which, why and how, commonly available substances and drugs (including alcohol, tobacco and 'energy drinks') can damage their immediate and future health and safety; that some are restricted and some are illegal to own, use and give to others
H21. strategies for keeping physically and emotionally safe including road safety (including cycle safety- the Bikeability programme), and safety in the environment (including rail, water and fire safety)

## French: The Weather

Children will be taught how to:
*repeat and recognise the vocabulary for weather in French.
*ask what the weather is like today.
*say what the weather is like today.
*create a French weather map.
*describe the weather in different regions of France using a weather map with symbols.

## PE

Indoor PE
Real PE/Dance (Multi-Ability Focus:Personal )
Outdoor PE
Invasion Games – Hockey (Multi-Ability Focus: Cognitive)

## Music

Music Express: Exploring lyrics and melody
Learning to play the violin: Abracadabra
The Volcano song
https://www.youtube.com/watch?v=bwTkTzdkVS4

## RE: What would Jesus do? (Can we live by the values of Jesus in the 21st century?)

This unit will enable children to:
*outline Jesus' teaching on how his followers should live (A2).
*explain the impact Jesus' example and teachings might have on Christians today (B1).
*offer interpretations of two of Jesus' parables and say what they might teach Christians about how to live (B3).
*discuss their own ideas about the importance of values to live by, comparing them to Christian ideas (C3).
*express their own understanding of what Jesus would do in relation to a moral dilemma from the world today (C3).