

Y5 Term 4

English	Narrative – Harry Miller’s Run Kennings poetry	Maths	Decimals and percentages
Science: Electricity			
NC objectives from curriculum progression Children will be taught to: Scientific Knowledge *associate 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 loudness of buzzers and the on/off position of switches *use recognised symbols when representing a simple circuit in a diagram. 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) <i>Building on their work in year 4, pupils should construct simple series circuits, to help them to answer questions about what happens when they try different components, for example, switches, bulbs, buzzers and motors. They should learn how to represent a simple circuit in a diagram using recognised symbols.</i> <i>Note: pupils are expected to learn only about series circuits, not parallel circuits. Pupils should be taught to take the necessary precautions for working safely with electricity.</i> 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
Explanations		Observing lifecycles in the local environment

Art/DT: DT – Electrical Games (Electrical Systems)

Children will:

Design

*explore electrical games, eg, 'Operation', investigating how they work

*interview peers about what makes a good board/electrical game (market research)

*generate innovative ideas through discussion and identify a purpose for their product – an electrical game which....

*apply scientific learning about electrical circuits and components

*draw up a specification for their design, indicating the features that will appeal to intended users and how particular parts work

*through discussion, explore, develop and communicate design proposals by modelling ideas, using ICT where appropriate

• make design decisions, taking account of constraints such as time, resources and cost

Make

*develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail

*select appropriate tools and techniques, explaining choices

*select materials, using scientific knowledge about the properties of materials to inform their choice

*use skills in using different tools and equipment safely and accurately

*measure and mark out accurately

*cut and join with accuracy to ensure a good-quality finish to the game

Evaluate

Start of the unit

* evaluate existing examples of electrical board games eg. Operation

- how well products have been designed

- how well products have been made

- why materials have been chosen

- what methods of construction have been used

- how well products work

- how well products achieve their purposes

- how well products meet user needs and wants

- who designed and made the products

- where products were designed and made

- when products were designed and made

- whether products can be recycled or reused

- how much products cost to make

- how innovative products are

-how sustainable the materials in products are

-what impact products have beyond their intended purpose

*identify criteria that can be used for their own designs

During the unit

*critically evaluate the quality of the design, preparation, cooking and fitness for purpose of their electrical game as they design and make

End of the unit

*evaluate their electrical game against the original design specification, carrying out appropriate tests (play with peers and gather feedback)

ICT: We are web designers: make a web page

Children will be taught:

Computer Science

*how HTML is used to create a web page and how it is transmitted as packets of digital data over the internet.

*how simple HTML tags (such as <h1> and <p>) are used for marking up a web page.

*how take a complex problem (how to make a webpage), identify component parts, use decomposition to break this problem down and then plan how they can solve the problem by working through the elements they have identified.

*to use sequence and repetition in the construction of the code for their webpage

*to use logical reasoning to detect errors in algorithms.

Digital Literacy

*the importance of encrypted (HTTPS) connections when browsing the web and of using strong passwords to protect their identity online.

*how to act responsibly when creating, editing or commenting on web pages or blog posts.

*about the likely or possible consequences of particular behaviours when using digital technology to create web pages or write blog posts.

*to work in collaboration with others to develop a shared web page and blog.

Information Technology

*to use multiple digital devices (chromebooks, ipads) to take photographs and films to be uploaded to their webpages. The devices will include web servers, allowing them to use cloud-based applications.

*to evaluate the quality of information located (text, audio, images and video), looking for bias or questioning assumptions that have been made.

BBC Bitesize – What makes a good webpage?

*to summarise information for use in their own web page

*to use a common search engine effectively, to search for particular information on the web.

E-safety - Managing Online Information (Project Evolve)

PSHE: Our Community: Community Groups

Children will be taught:

L10. to recognise the role of voluntary, community and pressure groups, especially in relation to health and wellbeing

French: Me in the World

Children will be taught:

*about the many countries in the Francophone world.

*bout different festivals (religious and non-religious) around the world.

*that we are different and yet all the same.

*that we can all help to protect our planet.

*how to use “à” (when talking about living IN a city) and “en/au/aux” (when talking about living IN a country).

PE

Indoor PE

Real PE/Dance (Multi-Ability Focus: Social)

Outdoor PE

Invasion Games – Rugby (Multi-Ability Focus: Creative)

Music

Music Express- Exploring lyrics and melody

Learning to play the violin: Abracadabra

The Volcano Song

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).