Neroche Community Primary School Year 4 Topic and Science Programmes 2020-2021

Topics

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic Title	**Music Mania**	**Tremendous Trading**	**Through the Ages**	**Recycled Art**	**Queen Victoria**	**Location, Location, Location**
Curriculum Area	**DT**	**Geography**	**History**	**Art**	**History**	**Geography**
Objectives	**Design** ♣ use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups ♣ generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design **Make** ♣ select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately ♣ select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities **Evaluate** ♣ investigate and analyse a range of existing products ♣ evaluate their ideas and products against their own design criteria and consider the views of others to improve their work **Technical knowledge** ♣ apply their understanding of how to strengthen, stiffen and reinforce more complex structures	♣ 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	♣ changes in Britain from the Stone Age to the Iron Age Examples (non-statutory) This could include: Late Neolithic hunter-gatherers and early farmers, for example, Skara Brae Bronze Age religion, technology and travel, for example, Stonehenge Iron Age hill forts: tribal kingdoms, farming, art and culture ♣ Britain's settlement by Anglo-Saxons and Scots Examples (non-statutory) This could include: Anglo-Saxon invasions, settlements and kingdoms: place names and village life Anglo-Saxon art and culture	Pupils should be taught: ♣ to create sketch books to record their observations and use them to review and revisit ideas ♣ to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay] ♣ about great artists, architects and designers in history.	A study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066 Examples (non-statutory) *the changing power of monarchs using case studies such as John, Anne and Victoria*	♣ locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities

Science

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Scientific Enquiry Skills	**States of matter**	**Animals including humans**	**Living things and their habitats**	**Electricity**	**Sound**
♣ asking relevant questions and using different types of scientific enquiries to answer them ♣ setting up simple practical enquiries, comparative and fair tests ♣ making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers ♣ gathering, recording, classifying and presenting data in a variety of ways to help in answering questions ♣ recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables ♣ reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions ♣ using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions ♣ identifying differences, similarities or changes related to simple scientific ideas and processes ♣ using straightforward scientific evidence to answer questions or to support their findings.	Pupils should be taught to: ♣ compare and group materials together, according to whether they are solids, liquids or gases ♣ observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) ♣ identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	Pupils should be taught to: ♣ describe the simple functions of the basic parts of the digestive system in humans ♣ identify the different types of teeth in humans and their simple functions ♣ construct and interpret a variety of food chains, identifying producers, predators and prey.	Pupils should be taught to: ♣ recognise that living things can be grouped in a variety of ways ♣ explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment ♣ recognise that environments can change and that this can sometimes pose dangers to living things.	Pupils should be taught to: ♣ identify common appliances that run on electricity ♣ construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers ♣ identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery ♣ recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit ♣ recognise some common conductors and insulators, and associate metals with being good conductors.	Pupils should be taught to: ♣ identify how sounds are made, associating some of them with something vibrating ♣ recognise that vibrations from sounds travel through a medium to the ear ♣ find patterns between the pitch of a sound and features of the object that produced it ♣ find patterns between the volume of a sound and the strength of the vibrations that produced it ♣ recognise that sounds get fainter as the distance from the sound source increases.