Year 4
Age Related Expectations: Science and Foundation Subjects

This document details the end of Year Expectations for Science and Foundation Subjects.

Termly topic planning is developed as follows

Reading & Writing	**Core skills**
Maths	**Skills for life and learning, these subjects are taught as discrete subjects, but linked where appropriately as part of a broader theme**
Science	

Science	**Topic Drivers**
History	**A topic will usually be 'driven' by a depth study focusing on one subject. However, other links between skills will be made where appropriate.**
Geography	

Computing	**Enrichment Subjects**
Art	**Subjects complement topics where appropriate and provide wider opportunities for children**

Design Technology		
Music		
French		
RE		

PE	**Health and Wellbeing**
E-Safety	**Provide opportunities for personal and collective wellbeing and development**
PSHE	
Spiritual development and collective worship	

Science	Asks relevant questions. • Uses different scientific enquiries to answer questions, makes some planning decisions. • Makes simple predictions based on everyday experience. Do and record • Sets up simple: practical enquiries, comparisons, fair tests or pattern seeking enquiries to try and answer a question. • Makes systematic and careful observations. • Takes accurate measurements using standard units to the nearest whole or half unit. Reads scales to nearest division labelled and unlabelled. • Uses a range of measuring equipment including thermometers and data loggers. • Gathers data in a variety of ways to help answer the question.

	• Records data in a variety of ways to help answer the question, e.g. 2 column tables. • Classifies data in a variety of ways to help answer the question. • Presents data in a variety of ways to help answer the question. • Records findings using simple scientific language, drawings, labelled diagrams, keys, bar graphs and tables. Bar graphs with 1:1, 1:2, 1:5, 1:10 scale. Begins to plot line graphs. • Uses secondary sources to add to data (books, photographs, video). Review • Reports findings from enquiries, including: oral and written explanations; displays or presentations of results and conclusions. • Draws simple conclusions. • Makes predictions for new values. • Suggests improvements to test. • Raises further questions to explore. • Identifies differences, similarities or changes related to science ideas or processes. • Uses scientific evidence to answer questions or support their findings. • • Reads and spells scientific vocabulary correctly with confidence
History	• plot recent history on a timeline using centuries • recognise that the lives of wealthy people were very different from those of poor people • appreciate how items found belonging to the past are helping us to build up an accurate picture of how people lived in the past • explain how events from the past have helped shape our lives • research two versions of an event and say how they differ • research an aspect or theme in a given period from the past and use photographs and illustrations to • present their findings • describe how their local area was different in the past and offer explanations for these changes
Geography	• use an atlas, map or globe to name and locate countries and major cities, with particular regard to the European Union, and show awareness of some human and physical features of these locations • Including major towns in Shropshire, • name and locate UK cities using an atlas, map or globe, with awareness of features such as hills, rivers,

	coastlines • identify human and physical characteristics from a map or aerial photograph • know some global regions / features egg where the Equator, the Northern and Southern Hemispheres, • the Tropics of Cancer and Capricorn, and the Arctic and Antarctic are • compare a region in the UK with a region in Europe (e.g. the Shropshire Hills to a Mediterranean coast) • describe and understand aspects of human geography (e.g. land use, types of settlement) and physical • geography (e.g. rivers and mountains, volcanoes and earthquakes) • use some basic OS map symbols and use the eight points of a compass • use fieldwork to answer questions about the local area (e.g. observe, measure, record) • name the areas of origin of the main ethnic groups in the UK and in Shropshire
Computing	• design a sequence of instructions, including angles and turns • write simple programs that accomplish specific goals • write and de-bug the same program • work with various forms of input and output • describe how he/she might use variables within their program • look at an algorithm and make an accurate prediction, explaining why he/she believes something will happen and create content (e.g. manipulate and improve digital images) • select and use software to accomplish given goals • collect and present data • recognise what is personal information and keep it private • know what to do if they are concerned when they use the internet • and other technology • recognise acceptable and unacceptable behaviour when using • the internet and other technology • use technology appropriately, effectively and efficiently
Art	• explore ideas and collect visual and other information to help them develop their work (e.g. by sketching) • investigate and use a variety of materials and processes (e.g. drawing, painting, 3D work, collage, printing, e-art, textiles) to communicate ideas and make images / artefacts

	- combine and organise visual and tactile elements (e.g. when using colour, shade, pattern, line, texture, form, shape, composition, scale, proportion and tone) to suit their intentions - record their ideas, marks, experiments and examples in a sketch book, adapting and improving what they do - design and make images / artefacts for different purposes - describe what they think or feel about their own and others' work (including that of artists and designers), and adapt and improve their own - comment on similarities and differences between pieces of art, including art from different periods and cultures
Design Technology	- research design criteria to inform the design of functional, appealing products that are aimed at a particular audience - generate, develop and communicate their ideas through discussion and annotated sketches - select from and use a wider range of tools and equipment to perform practical tasks (e.g. cutting, shaping, joining, finishing) - choose and use a wider range of materials and components (including construction materials, textiles and ingredients) according to their properties - investigate and analyse similar existing products - evaluate their ideas and products against design criteria and consider the views of others to improve their work - understand and use electrical systems in their products (e.g. series circuits, incorporating switches, bulbs, buzzers and motors) - show they have knowledge, skills and understanding at an age appropriate level: diet; food origins; food choice; food labelling; food safety - When handling food be able to cut, weigh, measure, bake and use of skills at an age-appropriate level
Music	- sing in tune with expression - perform simple parts that use a limited range of notes - improvise repeated patterns and combine layers of sound with awareness of the effect - recognise how different musical elements are combined and used expressively - describe what they think or feel about music, with some reference to specific musical features e.g. pitch, tempo, structure

	• begin to identify with the style of work of at least one great composer
Modern Foreign Languages	• speak and listen in a foreign language (i.e. listen with some understanding; engage in a simple interaction; follow instructions; use recognisable pronunciation) • read some words, phrases and simple writing • begin to write with accuracy some phrases from memory • appreciate and make links with patterns and sounds in songs and rhymes • develop their vocabulary and show some skills in understanding new words
PE	• create a short dance piece that communicates a simple idea • perform clearly and fluently • work in a controlled way • perform and repeat short sequences that include changes of speed and level, with clear shapes • and quality of movement • use hitting, kicking, throwing and catching in a game, with control, whilst moving • vary tactics such as use of space, pass and move and adapt skills within a game • have an influence on games by working collaboratively to keep or gain possession • work as part of a team to create simple activities/games • suggest improvement to theirs and others performance • recognise that different tasks make their body work in different ways