

Year 4 Progression map - The History of science		
National curriculum objectives:	Scope:	Coherence:
<ul style="list-style-type: none"> • Explore the requirements of plants for life and growth (Y3) • Notice that light is reflected from surfaces (Y3) • Notice that some forces need contact between 2 objects, whilst others act at a distance, (Y3) • Recognise that environments can change and that this can sometimes pose dangers to living things (Y4) • Compare and group materials together (Y4) <p>Misconceptions:</p> <ul style="list-style-type: none"> • That humans were alive at the same time as dinosaurs • That humans evolved from Apes • That humans invented fire • That all Egyptians were mummified • That the Roman empire was situated in Rome, only • There were no scientific advancements during the idle Ages • That Science was developed in the Western world, only • That Timbuktu is not a real place 	<p>HEP science lesson titles</p> <ol style="list-style-type: none"> 1. Did Science exist in prehistoric times? 2. How did ancient Egyptians use science? 3. What was ancient Greek science? 4. How did ancient Romans use science? 5. What was science in the Middle Ages? 6. What is modern science? <p>Working scientifically skills used: Making systematic and careful observations, reporting on findings from enquiries, including oral and written explanations, using results to draw simple conclusions, identify differences, similarities or changes related to simple scientific ideas or processes, using simple straightforward evidence to answer questions or support their findings</p> <p>Key scientists and inventors: Socrates, Plato, Aristotle, Brahmagupta, Mohammed ibn Musa al Khwarizmi, Abu Rayhan al-Biruni, Ibn Sina, Banu Musa, Ibn al Haytham, Nicolaus Copernicus, Galileo Galilei, Sir Isaac Newton.</p>	<p>English: Phonetics, etymology, morphology, sentence starters and stems, cloze activity.</p> <p>Key vocabulary: Machines, prehistoric, technology, bronze, civilisations, mummification, papyrus, horizon, pharaohs, philosophy, aqueducts, hygiene, malaria, mosquitoes, algebra, Baghdad, Kaaba, Persia, Timbuktu, gravity, Renaissance.</p> <p>Maths: Brahmagupta, algebra, recording results in a table, moving a distance between a load and pivot using a ruler, balancing, ranking, measuring quantities, deciphering symbols, averages and repeats,</p> <p>Art: Kaleidoscopes, model-making, hieroglyphics.</p>

Builds on:	Future learning:	Further reading:
<p>KS1: Basics of science e.g. Naming plants and animals, etc. Naming and identifying parts of the body, everyday materials and seasonal changes</p> <p>KS2: Learning to name and describe basic processes, such as how seeds and bulbs grow into mature plants, uses and suitability of a range of materials</p>	<p>Properties and changes of materials (Y5) Earth and space (Y5) Forces (Y5) Evolution and inheritance (Y6) Light (Y6)</p>	<p>100 Scientists who made history, by Andrea Mills Kid Scientists Childhood Science Superstars, by Stabler and Cross</p>