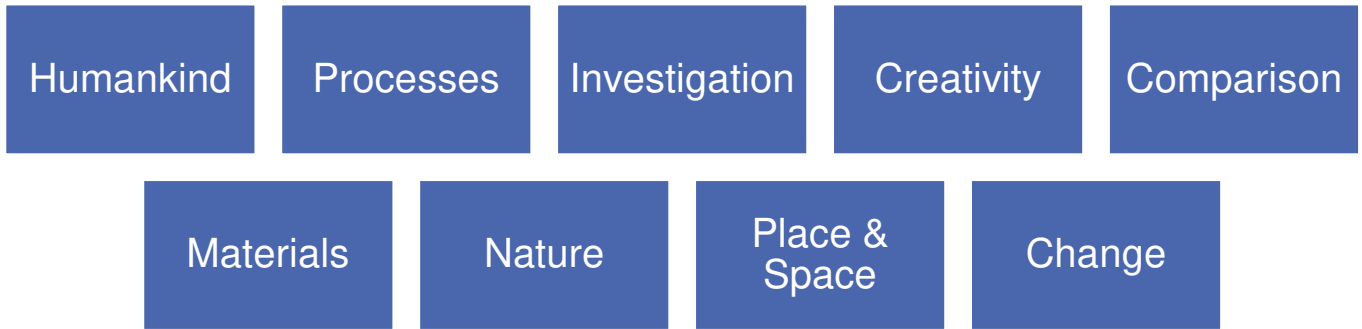


Curriculum Concepts

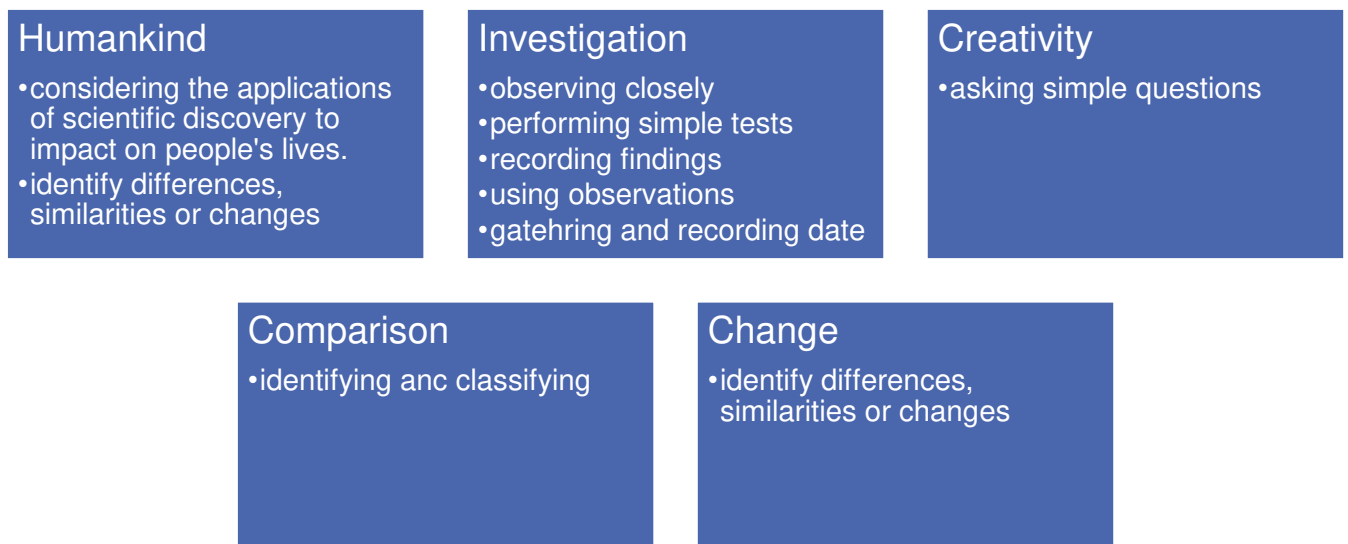
We have identified ten key curricular concepts that are developed across our curriculum. In History, we explicitly develop knowledge, understanding and skills in five of these concepts:











Subject Disciplinary Skills – An overview

Thinking Scientifically

The skills outlined in each of the Curriculum Concepts need to be developed in order for a pupil to be able to think in a scientific manner. These skills make learning in Science distinctive from learning in other subjects.



 Asking simple questions and recognising they can be answered in different ways	 Observing closely using simple equipment	 Performing simple tests	 Identifying and classifying
<p>How does this new knowledge link to what I already know? Based on what I know already, what is my hypothesis? Why do I think that? If I am doing a practical investigation, what variables do I need to think about?</p>	<p>What do I need to observe? What equipment do I need to make my observations? What am I expecting to see?</p>	<p>What type of investigation would it be best to follow? Why? What equipment am I using? Why is this the best equipment? How do I use this equipment precisely and safely? If I am problem solving or researching, where will I look for information that will help me?</p>	<p>How can I sort and classify the things I have been looking at and comparing? Why have I grouped or classified my observations and measurements in the way that I have? Are there any formal methods for sorting and classifying that I should use to help me?</p>

 <p>Recording findings using simple scientific language, drawings, labelled diagrams, bar charts and tables</p>	 <p>Using their observations and ideas to answer questions</p>	 <p>Gathering and recording data to help in answering questions</p>	 <p>Identify differences, similarities or changes related to simple scientific ideas and processes</p>
<p>How will I check that any results are accurate? How will I record my information and data?</p>	<p>What patterns have I spotted in my data and information? What conclusions can I draw from my investigation?</p>	<p>How does my data and information relate to my hypothesis? What conclusions can I draw from my investigation?</p>	<p>How does what I have observed match theories and ideas I have been learning about?</p>

Working Scientifically - IPROF



Substantive Knowledge – An overview

We organise learning into the three key scientific areas across Key Stage 2. Each of the sciences is further divided into the areas of learning highlighted in the table below. This aligns with the Programme of Study areas outlined in the National Curriculum for Science.

Biology				
Animals including humans	Plants	Living things and their habitats	Evolution and inheritance	
Properties of materials – introducing Chemistry				
Rocks and soils	States of matter		Properties and changes of materials	
Physics				
Light	Sound	Forces including magnets	Electricity	Earth and Space

The following table shows how each of the areas is distributed across the key stage.

	Biological Sciences		Properties of materials	Physical Sciences		
Year 3	Animals including humans	Plants	Rocks & soils	Light	Forces and magnets	
Year 4		Living things and their habitats	States of matter	Sound		Electricity
Year 5			Properties and changes of materials		Forces	Earth and Space
Year 6			Evolution and inheritance		Light	Electricity

Substantive Knowledge

Our [SUBJECT] Curriculum develops **substantive knowledge** using the disciplinary skills. Substantive knowledge is the body of knowledge that form the basis of understanding in the [SUBJECT]. Substantive knowledge develops progressively throughout our curriculum, and is organised into [NUMBER] of distinct **substantive concepts**: **[OUTLINE NEEDED]** (in line with the National Curriculum Programmes of Study).

This section outlines how our curriculum is organised in each of our Key Stages. It includes some specific details about the development of the disciplinary skills, and an outline of how the substantive knowledge is organised within the substantive concepts.

Disciplinary Knowledge

OUTLINE OF DISCIPLINARY SKILLS FROM PAGE 1, WITH QUESTIONS RELEVANT TO THE KEY STAGE

Substantive Knowledge

OUTLINE OF THE ORGANISATION OF SUBSTANTIVE KNOWLEDGE AND CONCEPTS

OUTLINE OF THE WAY THAT KNOWLEDGE / CONCEPTS ARE PLANNED ACROSS THE KEY STAGE