



Intent & Long-Term Plan

# Science

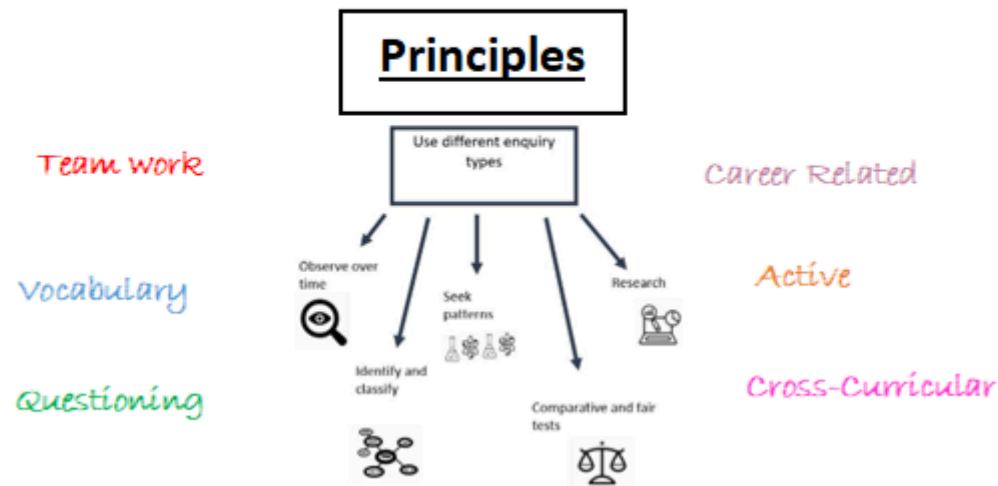


Co-op Academy  
Woodslee



## Vision

**At Co-op Academy Woodslee, we want children to be confident, inquisitive and articulate scientists who are prepared for life in STEM and beyond. Children are given the opportunity to not only learn deeply about the world around them, but to also understand *why* it is important that they do this.**



Co-op Academy Woodslee provides an ambitious science curriculum, which covers the full scope of the National Curriculum.

Our science curriculum is designed with the emphasis on pupils building their scientific knowledge sequentially, whilst also developing the skills of scientific enquiry. Our curriculum provides schools with a progression model so that teachers elicit and build on prior knowledge and connect this to what comes next. Key knowledge is revisited within and across units so that pupils can build a secure understanding of increasingly complex scientific concepts. These key concepts are revisited as pupils move through the academy. This, along with opportunities to work practically, contributes to the curriculum design for pupils with SEND.

Our science curriculum provides opportunities for pupils to consolidate and apply their knowledge from other curriculum areas, including mathematics, ICT/Computing, music and English. A heavy emphasis is placed on pupils' acquisition of language and vocabulary, including scientific words and more advanced high frequency words with multiple meanings. The science curriculum also provides the foundational knowledge needed in other wider curriculum subjects, such as geography and design technology. Our curriculum builds pupils' cultural capital through exposing them to great scientists, past and present, and important discoveries. We promote careers in science, taking every opportunity to discuss and describe less well-known jobs. Our curriculum includes a focus on current, diverse (counter-stereotypical) scientists. This is in keeping with our Co-op Values.

Each unit in our curriculum provides opportunities for pupils to work practically, giving them first-hand experiences of investigating and exploring safely. These experiences are designed to foster pupils' critical thinking as well as their reasoning and explanation skills. Key scientific knowledge is revisited, to support pupils in remembering more and assessments are in place to check they can apply their knowledge.

In line with our inclusive values, we support our pupils with SEND to acquire the core knowledge they need to unlock future learning. To this end, we use knowledge organisers to identify the vital knowledge pupils need to remember. Pupils, including disadvantaged pupils, also benefit from the emphasis on science careers, aimed at broadening pupils' horizons and keeping their aspirations on track. As a trust, we promote a range of enrichment opportunities, including the celebration of British Science week and provision of STEM clubs.

## Science Long Term Plan for 2024-2025:

### Year 1

Autumn	The Human body	Seasonal change	Materials	Seasonal change	
Spring	Planting A	Animals	Caring for the planet	Seasonal change	Planting B
Summer	Plants	Planting C	Growing and cooking	Seasonal change	

### Year 2

Autumn	Animals' need for survival	Humans	Materials	Plastic	
Spring	Plants (light and dark)	Living things and their habitats		Plants (light and dark)	
Summer	Plants (bulbs and seeds)	Growing up	Bulbs and seeds	Growing up	Wildlife

### Year 3

Autumn	Skeletons	Movement	Nutrition and diet	Food waste	Rocks
Spring	Fossils	Soils	Light		
Summer	Plants A	Forces	Magnets	Plants B	Biodiversity

### Year 4

Autumn	Group and classify living things	Data collection A	States of matter		
Spring	Sound	Data collection B	Electricity	Energy	
Summer	Data collection C	Habitats	Deforestation	The digestive system	Food chains

Year 5

Autumn	Forces	Space	Global warming	
Spring	Properties of materials	Animals including humans	Life cycles	
Summer	Reproduction A	Reversible and irreversible changes	Plastic pollution	Reproduction B

Year 6

Autumn	Living things and their habitats	Electricity	Renewable energy	
Spring	Light	Light pollution	The circulatory system	Diet, drugs and lifestyle
Summer	Variation	Adaptations	Fossils	Themed projects (year 7 ready)