

KEY STAGE 1

Our activities consolidate topics and skills principally found in Science and Geography.

KEY STAGE 3

Our activities consolidate topics and skills principally found in Science, Geography and Spanish.

KEY STAGE 2

Our activities consolidate topics and skills principally found in Science, Geography, PSHE, English, Design and Technology as well as Mathematics.

GCSE

Our activities consolidate topics and skills principally found in Combined Science, Biology, Chemistry and Spanish.

KEY STAGE 1 SCIENCE

Our activities overlap with the following broad topics required by the National School Curriculum: Animals including Humans Living Things and their Habitats Working Scientifically **Everyday Materials**

- Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
- Identify and name a variety of common animals that are carnivores, herbivores and omnivores
 Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
 Identify and name a variety of plants and animals in their habitats, including microhabitats
 Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and
- name different sources of food
- Ask simple questions and recognising that they can be answered in different ways
- Observe closely, using simple equipment Perform simple tests

- Use their observations and ideas to suggest answers to questions
 Gather and record data to help in answering questions
 Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
- Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching
 Describe the simple physical properties of a variety of everyday materials
 Compare and group together a variety of everyday materials on the basis of their simple physical properties

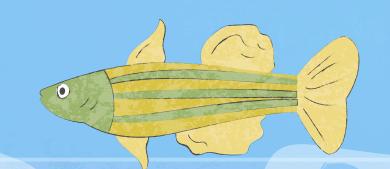
KEY STAGE 1 GEOGRPAHY

Our activities overlap with the Human and Physical Geography topics required by the National School Curriculum:

• Use basic geographical vocabulary to refer to key physical features,

including beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather

• Use basic geographical vocabulary to refer to key human features, including city, town, village, factory, farm, house, office, port, harbour and shop



KEY STAGE 2 SCIENCE

Our activities overlap with the following Science National Curriculum points:

• Identify that animals, including humans, need the right types and amount of nutrition, and that they

cannot make their own food; they get nutrition from what they eat

• Construct and interpret a variety of food chains, identifying producers, predators and prey

• Recognise that environments can change and that this can sometimes pose dangers to living things

• Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic

Plan different types of scientific enquiries to answer questions, including recognising and controlling

variables where necessary

• Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate

• Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs

Use test results to make predictions to set up further comparative and fair tests
Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations

Construct and interpret a variety of food chains, identifying producers, predators and prey
 Living things & their habitats; Evolution and inheritance



KEY STAGE 2 SCIENCE - YEAR 4, YEAR 6

Our activities overlap with the following Science National Curriculum especially for Year 4 and Year 6:

Year 4:

- Environmental change and how this can affect organisms.
 Evolution and inheritance
- Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.
- 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 the local and wider environment.

Year 6:

- Recognise that living things have changed over time.
 Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.
 Understand that adaptation may lead to evolution.
 Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.
 Give reasons for classifying plants and animals based on specific characteristics.

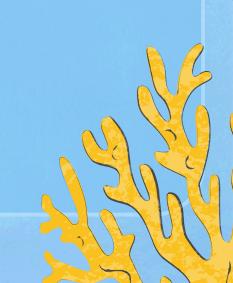
KEY STAGE 2 GEOGRAPHY

Our activities overlap with the following Science National Curriculum points:

- How environments can change over time; focus on both terrestrial and marine systems and places.
 Locate globally significant marine places
 Globally significant marine and terrestrial places
 Physical geography: climate zones, biomes and vegetation belts
 Human geography: land use and the distribution of natural resources
 Use basic geographical vocabulary to refer to key physical and human features, eg beach, cliff, coast, sea, ocean, river, port, harbour.

Students work geographically by using maps and atlases to locate and describe features studied.
Students work scientifically by using research for enquiry.
Develop contextual knowledge of the location of globally significant marine places including their defining physical and human

Describe and understand key aspects of the water cycle.
Understand geographical similarities and differences through the study of physical geography of a region of the United Kingdom, a region in a European country, and a region within North America.
Describe and understand key aspects of climate zones.



KEY STAGE 2 GEOGRAPHY-YEAR 4, YEAR 6

Our activities overlap with the following Science National Curriculum especially for Year 4 and Year 6:

Year 4:

• Recognise that environments can change.

Year 6:

 Identify how animals and plants are adapted to suit their environment in different ways.



KEY STAGE 2 PSHE

Our activities overlap with the following PSHE National Curriculum points:

- Sustainable development and use of natural resources
 Taking action on environmental issues



KEY STAGE 2 ENGLISH

Our activities overlap with the following English National Curriculum points:

• Plan writing by identifying the audience for and purpose of the writing, selecting the appropriate form, and using other similar writing as model

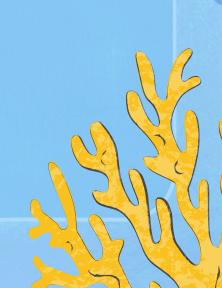
Spoken English

• Students give well-structured descriptions, explanations and narratives.

• Students speak audibly and fluently with an increasing command of Standard English.

Students participate in presentations.
Students gain, maintain and monitor the interest of the listeners.

• Students practise public speaking and self-reflection.



KEY STAGE 2 DESIGN AND TECHNOLOGY

Our activities overlap with the following Design and Technology National Curriculum points:

• Select from and use a wider range of tools and equipment to perform practical tasks accurately.

Select a wider range of materials based on their properties.
Evaluate ideas and products against students' own design criteria.
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 ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and

computer-aided design

• 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

• Investigate and analyse a range of existing products

Evaluate ideas and products against design criteria and cons



KEY STAGE 2 MATHEMATICS

Our activities overlap with the following Mathematics National Curriculum points:

• Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs







Our activities overlap with the following science topics:

- The carbon cycle
- The production of carbon dioxide by human activity and the impact on climate
 Relationships in an ecosystem: interdependence of organisms in an ecosystem.
 Apply knowledge of the carbon cycle to climate change mitigation
 The composition of the atmosphere
 Evidence for past climate change
 Genetics and evolution: the importance of maintaining biodiversity.

- Biodiversity and its importance
 Threats to biodiversity
- Investigate the diversity and nature of coastal ecosystems
 Conservation and management strategies
- Adaptation

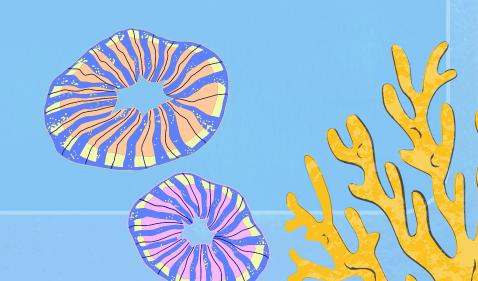
- Using evidence to support conclusions
 Communication and advocacy
 Using evidence to support conclusions
- Analysing data and graphs
- Investigation skills
- Relationships in an ecosystem, environmental changes, and effects on living things

KEY STAGE 3 GEOGRAPHY

Our activities overlap with the following human and physical geography, locational knowledge, geographical skills and fieldwork topics:

Human geography relating to the use of natural resources
Understand how human and physical processes interact to influence, and change the climate
Understand how human and physical processes interact to influence, and change landscapes, environments
Understand through the use of detailed place-based exemplars at a variety of scales, the key processes in human geography relating to: the use of natural resources
Understand through the use of detailed place-based exemplars at a variety of scales, the key processes in human geography relating to: international development, urbanisation, economic activity and the use of natural resources
Locational Knowledge of Europe, Africa and Asia (including China and India)
Should develop greater competence in using geographical skill in analysing and interpreting different data sources
Interpret a range of sources of geographical information, including maps, diagrams, globes
Communicate geographical information in a variety of ways, including through maps, numerical and quantitative skills and writing

skills and writing



GCSE COMBINED SCIENCE

Our activities overlap with the topics in the following exam boards:

AQA Combined Science: Synergy

• 4.4.1 The Earth's atmosphere

AQA Combined Science: Trilogy

• 4.7.2 Organisation of an ecosystem

Edexcel Combined Science

Topic 9 Ecosystems and material cycles



GCSE BIOLOGY

Our activities overlap with the topics in the following exam boards:

AQA GCSE Biology 4.7.2 Organisation of an ecosystem

OCR Gateway Science Biology A B4.1 Ecosystems

OCR Twenty First Century Science Biology B B3.3. How are organisms in an ecosystem interdependent?



GCSE CHEMISTRY

Our activities overlap with the topics in the following exam boards:

AQA GCSE Chemistry
4.9 Chemistry of the atmosphere

OCR Gateway Science Chemistry A C6.3 Interpreting and interacting with earth systems

OCR Twenty First Century Science Chemistry B C1.1 How has the Earth's atmosphere changed and why?



