

Year 1

Lesson Code	Lesson Title	Enquiry Approaches	Enquiry Skills
Plants			
N22-11-01	1. Understand that seeds grow into plants	Observation over time	Making predictions
N22-11-02	2. Identify the basic parts of a plant and tree	Identifying, Grouping & Classifying	Observing and Measuring
N22-11-03	3. Understand that different plants can grow in the same environment	Identifying, Grouping & Classifying	Recording data
N22-11-04	4. Know the difference between deciduous and evergreen trees	Research	Observing and Measuring
N22-11-05	5. Know that fruit trees and vegetables are varieties of plants	Identifying, Grouping & Classifying	Making predictions
N22-11-06	6. Record the growth of a plant	Observation over time	Interpreting and communicating results
Animals including humans - all about me			
N22-12-01	1. Discover the basic parts of the human body	Identifying, Grouping & Classifying	Recording data
N22-12-02	2. Learn about your eyes and sight	Pattern Seeking	Observing and Measuring
N22-12-03	3. Learn about your ears and hearing	Identifying, Grouping & Classifying	Recording data
N22-12-04	4. Explore the tongue and taste	Research	Setting up tests
N22-12-05	5. Explore your sense of touch	Identifying, Grouping & Classifying	Observing and Measuring
N22-12-06	6. Discover how your nose smells	Pattern Seeking	Recording data
Animals including humans - all about animals			
N22-13-01	1. Discover animal families	Identifying, Grouping & Classifying	Recording data
N22-13-02	2. Learn about the differences between mammals and birds	Identifying, Grouping & Classifying	Recording data
N22-13-03	3. Learn about the differences between amphibians, reptiles and fish	Identifying, Grouping & Classifying	Observing and Measuring
N22-13-04	4. Discover the type of food living things eat	Identifying, Grouping & Classifying	Recording data
N22-13-05	5. Explore where animals live	Identifying, Grouping & Classifying	Recording data
N22-13-06	6. Explore the difference between wild animals and pets	Research	Recording data
Everyday materials - exploring everyday materials			
N22-14-01	1. Identify and name a variety of everyday materials	Identifying, Grouping & Classifying	Observing and Measuring
N22-14-02	2. Distinguish between an object and the material it is made from	Identifying, Grouping & Classifying	Recording data
N22-14-03	3. Describe the properties of everyday materials	Identifying, Grouping & Classifying	Observing and Measuring
N22-14-04	4. Identify objects that are natural and those that are manmade	Identifying, Grouping & Classifying	Recording data
N22-14-05	5. Predict and identify if an object will float or sink	Comparative / Fair Testing	Making predictions
N22-14-06	6. Explore which materials are best for different objects	Comparative / Fair Testing	Setting up tests
Everyday materials - building			
N22-15-01	1. Build a structure strong enough to withstand wind	Comparative / Fair Testing	Setting up tests
N22-15-02	2. Build a waterproof structure	Comparative / Fair Testing	Setting up tests
N22-15-03	3. Understand the properties of glass and its uses	Problem Solving	Observing and Measuring
N22-15-04	4. Understand that materials are used to create a variety of furniture	Problem Solving	Observing and Measuring

N22-15-05	5. Explore a variety of fabrics and understand their different properties	Identifying, Grouping & Classifying	Recording data
N22-15-06	6. Explain the uses of materials and why they are suitable	Identifying, Grouping & Classifying	Evaluating
Seasonal changes			
N22-16-01	1. Understand there are four seasons	Observation over time	Observing and Measuring
N22-16-02	2. Understand the changes that take place in Autumn	Pattern Seeking	Recording data
N22-16-03	3. Understand the changes that take place in Winter	Pattern Seeking	Observing and Measuring
N22-16-04	4. Understand the changes that take place in Spring	Identifying, Grouping & Classifying	Recording data
N22-16-05	5. Understand the changes that take place in Summer	Identifying, Grouping & Classifying	Recording data
N22-16-06	6. Investigate how you can measure rainfall	Pattern Seeking	Interpreting and communicating results

Year 2

Lesson Code	Lesson Title	Enquiry Approaches	Enquiry Skills
Uses of everyday materials			
N22-21-01	1. Identify different materials and their uses	Identifying, Grouping & Classifying	Observing and Measuring
N22-21-02	2. Understand how to select the right materials to build a bridge	Comparative / Fair Testing	Setting up tests
N22-21-03	3. Explore and test the stretchiness of materials	Comparative / Fair Testing	Setting up tests
N22-21-04	4. Understand that materials can change their shape by twisting, bending, squashing or stretching	Comparative / Fair Testing	Recording data
N22-21-05	5. Find out about Charles Macintosh and explore how materials are suitable for different purposes	Comparative / Fair Testing	Interpreting and communicating results
N22-21-06	6. Discover which materials change shape when making a road with John McAdam	Comparative / Fair Testing	Evaluating
Living things and their habitats			
N22-22-01	1. Explore and compare the differences between things that are living, dead, and things that have never been alive	Identifying, Grouping & Classifying	Recording data
N22-22-02	2. Identify and name a variety of plants and animals in a microhabitat	Research	Observing and Measuring
N22-22-03	3. Design a suitable microhabitat where living things could survive	Research	Observing and Measuring
N22-22-04	4. Find out what animals eat to survive in their habitats	Research	Recording data
N22-22-05	5. Understand food chains	Research	Recording data
N22-22-06	6. Understand the journey food makes from the farm to the supermarket	Identifying, Grouping & Classifying	Recording data
Living things and their habitats - habitats around the world			
N22-23-01	1. Learn about habitats	Identifying, Grouping & Classifying	Recording data
N22-23-02	2. Appreciate that environments are constantly changing	Research	Interpreting and communicating results
N22-23-03	3. Explore the rainforest and its problems	Research	Interpreting and communicating results
N22-23-04	4. Describe life in the ocean	Identifying, Grouping & Classifying	Recording data
N22-23-05	5. Discover the Arctic and Antarctic habitat	Identifying, Grouping & Classifying	Recording data

N22-23-06	6. Create a model of a habitat	Research	Interpreting and communicating results
Animals including humans - health and survival			
N22-24-01	1. Describe the needs of animals for survival	Research	Observing and Measuring
N22-24-02	2. Describe the needs of humans for survival	Identifying, Grouping & Classifying	Recording data
N22-24-03	3. Explore the importance of eating the right food	Identifying, Grouping & Classifying	Recording data
N22-24-04	4. Describe what a healthy, balanced diet looks like	Problem Solving	Interpreting and communicating results
N22-24-05	5. Investigate the impact of exercise on our bodies	Comparative / Fair Testing	Setting up tests
N22-24-06	6. Investigate the importance of hygiene	Comparative / Fair Testing	Setting up tests
Animals including humans - life cycles			
N22-25-01	1. Ordering the stages of a human life cycle	Identifying, Grouping & Classifying	Recording data
N22-25-02	2. Describe the stages of life from adulthood to old age	Research	Recording data
N22-25-03	3. Learn how to match offspring to their parent	Identifying, Grouping & Classifying	Recording data
N22-25-04	4. Explore the life cycle of a chicken	Pattern Seeking	Observing and Measuring
N22-25-05	5. Describe the life cycle of a butterfly	Research	Recording data
N22-25-06	6. Explore the life cycle of a frog	Research	Recording data
Plants			
N22-26-01	1. Know the difference between seeds and bulbs	Research	Observing and Measuring
N22-26-02	2. Design an experiment to find out what plants need to grow	Comparative / Fair Testing	Asking questions
N22-26-03	3. Describe what plants need to grow and stay healthy	Research	Recording data
N22-26-04	4. Describe the life cycle of a plant	Research	Recording data
N22-26-05	5. Observe and record the growth of plants over time	Pattern Seeking	Interpreting and communicating results
N22-26-06	6. Understand that plants adapt to suit their environment	Identifying, Grouping & Classifying	Recording data

Year 3

Lesson Code	Lesson Title	Enquiry Approaches	Enquiry Skills
Scientific Enquiry			
N22-31-01	1. How can a solar oven be made more effective: posing questions and writing predictions	Comparative / Fair Testing	Asking questions
N22-31-02	2. How can a solar oven be made more effective: recording and presenting results	Observation over time	Recording data
N22-31-03	3. Cleaning coins: writing a method and carrying out a practical test	Comparative / Fair Testing	Making predictions
N22-31-04	4. Cleaning coins: writing a conclusion	Observation over time	Interpreting and communicating results
N22-31-05	5. Making a cake: fair testing, controls and variables	Comparative / Fair Testing	Setting up tests
N22-31-06	6. Making a cake: scientific enquiry	Comparative / Fair Testing	Interpreting and communicating results
Plants			
N22-32-01	1. Compare the effect of different factors on plant growth	Comparative / Fair Testing	Asking questions
N22-32-02	2. Identify and describe the functions of different parts of a flowering plant and how they are used in photosynthesis	Research	Interpreting and communicating results
N22-32-03	3. Investigate the way in which water is transported within plants	Observation over time	Observing and Measuring
N22-32-04	4. Explore the part that flowers play in the life cycle of flowering plants	Research	Recording data
N22-32-05	5. Understand the pollination process and the ways in which seeds are dispersed	Research	Interpreting and communicating results
N22-32-06	6. Compare the effect of different factors on plant growth	Pattern Seeking	Interpreting and communicating results
Animals including humans			
N22-33-01	1. Explore the 5 key food groups	Identifying, Grouping & Classifying	Recording data
N22-33-02	2. Learn about the nutrition in the food we eat	Research	Interpreting and communicating results
N22-33-03	3. Learn about the different types of skeletons	Research	Interpreting and communicating results
N22-33-04	4. Learn about the human skeleton	Identifying, Grouping & Classifying	Observing and Measuring

N22-33-05	5. Learn about animals and their skeletons	Problem Solving	Interpreting and communicating results
N22-33-06	6. Explore the role of muscles	Research	Interpreting and communicating results
Rocks			
N22-34-01	1. Explore the formation and properties of igneous rocks	Research	Interpreting and communicating results
N22-34-02	2. Explore the formation and properties of sedimentary rocks and metamorphic rocks	Comparative / Fair Testing	Observing and Measuring
N22-34-03	3. Weathering and the suitability of rocks for different purposes	Problem Solving	Evaluating
N22-34-04	4. Explore how water contributes to the weathering of rocks	Comparative / Fair Testing	Setting up tests
N22-34-05	5. Understand how fossils are formed	Research	Observing and Measuring
N22-34-06	6. Explore different types of soil	Comparative / Fair Testing	Observing and Measuring
Light			
N22-35-01	1. Identify the difference between light sources and non light sources	Identifying, Grouping & Classifying	Recording data
N22-35-02	2. Explore the light that comes from the sun and how to stay safe	Comparative / Fair Testing	Making predictions
N22-35-03	3. Explore materials which are reflective	Comparative / Fair Testing	Recording data
N22-35-04	4. Discover how shadows are formed	Pattern Seeking	Observing and Measuring
N22-35-05	5. Investigate how shadows change throughout the day	Observation over time	Recording data
N22-35-06	6. Investigate how you can change the size of a shadow	Pattern Seeking	Observing and Measuring
Forces and magnets			
N22-36-01	1. Explore contact and non-contact forces	Comparative / Fair Testing	Observing and Measuring
N22-36-02	2. Compare how things move on different surfaces	Comparative / Fair Testing	Setting up tests
N22-36-03	3. Explore different types of magnets	Comparative / Fair Testing	Making predictions
N22-36-04	4. Explore the properties of magnets and everyday objects that are magnetic	Identifying, Grouping & Classifying	Recording data
N22-36-05	5. Understand that magnetic forces can act at a distance	Comparative / Fair Testing	Setting up tests
N22-36-06	6. Explore the everyday uses of magnets	Problem Solving	Observing and Measuring

Year 4

Lesson Code	Lesson Title	Enquiry Approaches	Enquiry Skills
Living things and their habitats			
N22-41-01	1. Explore different habitats	Identifying, grouping and classifying	Interpreting and communicating results
N22-41-02	2. Research a habitat	Research	Interpreting and communicating results
N22-41-03	3. Explore how animals can be classified	Identifying, grouping and classifying	Recording data
N22-41-04	4. Create a classification key	Identifying, grouping and classifying	Interpreting and communicating results
N22-41-05	5. Adaptations and classification within species	Problem-solving	Interpreting and communicating results
N22-41-06	6. Explore and classify pond plants	Research	Observing and measuring
Living things and their habitats - conservation			
N22-42-01	1. Describe ecosystems and how they are affected by changes in the seasons	Research	Interpreting and communicating results
N22-42-02	2. Understand human impact on the environment through deforestation	Problem-solving	Interpreting and communicating results
N22-42-03	3. Explore air pollution	Observation over time	Observing and measuring
N22-42-04	4. Understand water pollution	Observation over time	Interpreting and communicating results
N22-42-05	5. Explore methods that can be used to conserve water	Observation over time	Recording data
N22-42-06	6. Understand that humans can have a positive impact on nature	Problem-solving	Interpreting and communicating results
Animals including humans			
N22-43-01	1. Identify the organs in the digestive system	Identifying, grouping and classifying	Interpreting and communicating results
N22-43-02	2. Describe the functions of the main organs in the digestive system	Identifying, grouping and classifying	Recording data
N22-43-03	3. Identify the types of human teeth and their functions	Identifying, grouping and classifying	Recording data
N22-43-04	4. Investigate the effects of different liquids on the teeth	Comparative / fair testing	Observing and measuring
N22-43-05	5. Understand food chains	Pattern-seeking	Interpreting and communicating results
N22-43-06	6. Explore food webs	Research	Recording data
States of matter			
N22-44-01	Compare and group the 3 states of matter	Identifying, grouping and classifying	Interpreting and communicating results

N22-44-02	Explore how particles behave in solids, liquids and gases	Pattern-seeking	Interpreting and communicating results
N22-44-03	Investigate melting points	Observation over time	Setting up tests
N22-44-04	Explore freezing and boiling points	Research	Recording data
N22-44-05	Explore evaporation and condensation	Comparative / fair testing	Making predictions
N22-44-06	Understand the water cycle	Problem-solving	Recording data
Sound			
N22-45-01	1. Identify how sounds are made	Identifying, grouping and classifying	Interpreting and communicating results
N22-45-02	2. Explore how vibrations from sounds travel through a medium to the ear	Pattern-seeking	Observing and measuring
N22-45-03	3. Exploring sound insulation	Problem-solving	Setting up tests
N22-45-04	4. Exploring volume	Pattern-seeking	Recording data
N22-45-05	5. Explore pitch	Pattern-seeking	Evaluating
N22-45-06	6. Exploring sounds from near and from far	Comparative / fair testing	Setting up tests
Electricity			
N22-46-01	1. Explore electrical appliances and electrical safety	Problem-solving	Interpreting and communicating results
N22-46-02	2. Learn about electrical components in a series circuit	Problem-solving	Setting up tests
N22-46-03	3. Investigate electrical circuits	Pattern-seeking	Making predictions
N22-46-04	4. Explore conductors and insulators	Comparative / fair testing	Setting up tests
N22-46-05	5. Learn about electrical switches	Problem-solving	Setting up tests
N22-46-06	6. Investigate how electrical components can change within a circuit	Comparative / fair testing	Asking questions

Year 5

Lesson Code	Lesson Title	Enquiry Approaches	Enquiry Skills
Living things and their habitats			
N22-51-01	Understand the life processes of a plant.	Pattern-seeking	Making predictions
N22-51-02	Understand the life cycles of mammals.	Identifying, grouping and classifying	Interpreting and communicating results
N22-51-03	Compare the life cycles of insects and amphibians.	Observation over time	Recording data
N22-51-04	Understand the life cycle of birds and reptiles.	Identifying, grouping and classifying	Observing and measuring
N22-51-05	Know about the life and work of Jane Goodall and David Attenborough.	Research	Interpreting and communicating results
N22-51-06	Research and present the life cycle of a creature.	Problem-solving	Interpreting and communicating results
Animals including humans			
N22-52-01	Identify the key stages of a mammal's life cycle	Observation over time	Recording data
N22-52-02	Explore the gestation periods of mammals	Research	Interpreting and communicating results
N22-52-03	Learn about foetal development	Pattern-seeking	Recording data
N22-52-04	Investigate the hand span of different ages of children	Comparative / fair testing	Observing and measuring
N22-52-05	Learn about the changes experienced during puberty	Identifying, grouping and classifying	Interpreting and communicating results
N22-52-06	Describe the changes humans may experience during adulthood and old age	Problem-solving	Interpreting and communicating results
Properties of Materials			
N22-53-01	Exploring properties of materials	Comparative / fair testing	Making predictions
N22-53-02	Explore thermal conductors and thermal insulators	Problem-solving	Observing and measuring
N22-53-03	Explore the hardness of materials	Pattern-seeking	Observing and measuring
N22-53-04	Discover materials that become soluble in water	Comparative / fair testing	Setting up tests
N22-53-05	Investigate the solubility of materials	Comparative / fair testing	Evaluating

N22-53-06	Explore how mixtures could be separated by filtering, sieving, evaporating or magnets	Problem-solving	Evaluating
Changes of materials			
N22-54-01	Use evaporation to recover the solute from a solution	Observation over time	Setting up tests
N22-54-02	Recognise and describe reversible changes	Problem-solving	Interpreting and communicating results
N22-54-03	Observe chemical reactions and describe how we know new materials are made	Observation over time	Interpreting and communicating results
N22-54-04	Investigate rusting reactions	Comparative / fair testing	Setting up tests
N22-54-05	Investigate burning reactions	Problem-solving	Interpreting and communicating results
N22-54-06	Investigate chemical reactions - acids and bicarbonate of soda	Comparative / fair testing	Recording data
Earth and space			
N22-55-01	Explore the solar system and its planets.	Identifying, grouping and classifying	Interpreting and communicating results
N22-55-02	Understand the Heliocentric model of the solar system.	Research	Interpreting and communicating results
N22-55-03	Explain the Earth's movement in Space.	Pattern-seeking	Observing and measuring
N22-55-04	Explain the Earth's rotation and night and day.	Observation over time	Making predictions
N22-55-05	Explain the movement of the Moon.	Pattern-seeking	Recording data
N22-55-06	Design a planet using knowledge gained.	Problem-solving	Interpreting and communicating results
Forces			
N22-56-01	Explore gravity and the life and work of Isaac Newton	Comparative / fair testing	Making predictions
N22-56-02	Examine the connection between air resistance and parachutes	Problem-solving	Setting up tests
N22-56-03	Explore factors which affect an object's ability to resist water	Comparative / fair testing	Interpreting and communicating results
N22-56-04	Investigate the effects of friction on different surfaces	Comparative / fair testing	Setting up tests
N22-56-05	Investigate mechanisms - levers and pulleys	Problem-solving	Evaluating

N22-56-06	Investigate mechanisms - gears	Problem-solving	Observing and measuring
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Year 6

Lesson Code	Lesson Title	Enquiry Approaches	Enquiry Skills
Living things and their habitats			
N22-61-01	Classify living things	Identifying, grouping and classifying	Recording data
N22-61-02	Understand the kingdoms of life.	Research	Interpreting and communicating results
N22-61-03	Classify living things using the Linnaean system.	Research	Interpreting and communicating results
N22-61-04	Identify the characteristics of different type of microorganisms.	Comparative / fair testing	Setting up tests
N22-61-05	Investigate asexual reproduction through spore dispersal.	Observation over time	Observing and measuring
N22-61-06	Classify and describe a living organism.	Problem-solving	Interpreting and communicating results
Animals including humans			
N22-62-01	Understand the function of the heart and its role in the circulatory system	Identifying, grouping and classifying	Recording data
N22-62-02	Identify and compare blood vessels	Comparative / fair testing	Observing and measuring
N22-62-03	Explore blood	Identifying, grouping and classifying	Recording data
N22-62-04	Learn how the body transports water and nutrients	Comparative / fair testing	Setting up tests
N22-62-05	Investigate what affects your heart rate	Comparative / fair testing	Evaluating
N22-62-06	Learn about the impact of drugs and alcohol on the body	Identifying, grouping and classifying	Interpreting and communicating results
Light			
N22-63-01	Explore how light travels	Identifying, grouping and classifying	Recording data
N22-63-02	Explore reflection	Comparative / fair testing	Setting up tests
N22-63-03	Explore reflection and explain how it can be used to help us see	Problem-solving	Evaluating
N22-63-04	Investigate how shadows can change	Comparative / fair testing	Observing and measuring
N22-63-05	Investigate how we can show why shadows have the same shape as the object that casts them	Problem-solving	Interpreting and communicating results

