



Switched on Science Year 6

Autumn 1 - Unit 1 - Classifying critters

Week	Unit	National Curriculum strand	Activity Title	Subject knowledge Learning outcomes	Working scientifically learning outcomes
1	1.1 Animalia	Living things and their habitat	Animal, vegetable or mineral?	How living things are classified into broad groups.	Use classification keys
		Living things and their habitat	The key to it all	Give reasons for classifying animals based on specific characteristics.	Use classification keys
2	1.2 Is it a plant?	Living things and their habitat	Marvellous microbes	Classify into broad groups according to common observable characteristics and based on similarities and differences – including micro-organisms.	Plan different types of scientific enquiries to answer questions.
3	1.2 Is it a plant?	Living things and their habitat	Fabulous fungi	Classify into broad groups according to common observable characteristics and based on similarities and differences – including fungi	Plan different types of scientific enquiries to answer questions.
4	1.3 Give me five	Living things and their habitat	Vegetation	Classify into broad groups according to common observable characteristics and based on similarities and differences – Five kingdoms	Use classification keys
5	1.3 Give me five	Living things and their habitat	Carl Linnaeus	Classification – Carl Linnaeus	Plan different types of enquiry – researching using secondary resources. To know about the life and work of a scientists – Carl Linnaeus.

Autumn 2 – Unit 2 - Staying alive

Week	Unit	National Curriculum strand	Activity Title	Subject knowledge Learning outcomes	Working scientifically learning outcomes
1	2.1 Going round in circles	Animals including humans	Is your heart in it?	Identify and name the main parts of the human circulatory system, and describe the main functions of the heart, blood vessels and blood.	Record using scientific diagrams.
2	2.1 Going round in circles	Animals including humans	Lub dub	Identify and name the main parts of the human circulatory system, and describe the main functions of the heart, blood vessels and blood.	Report findings from enquiries e.g. display and other presentations.
3	2.2 Faster, faster!	Animals including humans	Out of puff	Recognise the impact of exercise on the way their bodies function.	Take measurements, using a range of scientific equipment. Record data and results. Report findings, including conclusions, causal relationships and explanations.
4	2.2 Faster, faster!	Animals including humans	Race against time	Recognise the impact of exercise on the way their bodies function.	Plan a scientific enquiry to answer question. Identify scientific evidence that has been used to support or refute ideas or arguments.
5	2.3 Health, wealth and happiness	Animals including humans	What is a drug?	Recognise the impact of drugs on the way their bodies function.	Draw conclusions, causal relationships and explanations.
6	2.3 Health, wealth and happiness	Animals including humans	The importance of diet	Recognise the impact of diet on the way their bodies function.	Present findings including conclusions, causal relationship and explanations. Use to support or refute arguments. To know about the life and work of a scientists – John Boyd Orr.
7	2.3 Health, wealth and happiness	Animals including humans	Milking it	Recognise the impact of diet on the way their bodies function.	Record data and results as a graph or report conclusions. To know about the life and work of a scientists – John Boyd Orr.

Spring 1 - Unit 3 - We're evolving

Week	Unit	National Curriculum strand	Activity Title	Subject knowledge Learning outcomes	Working scientifically learning outcomes
1	3.1 The same but different	Evolution and inheritance	You look like your dad!	Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.	Record data and results using tables.
2	3.1 The same but different	Evolution and inheritance	Adaptation	Identify how animals and plants are adapted to suit their environment in different ways.	Record data using diagrams
3	3.2 Evolve or die!	Evolution and inheritance	How have they changed?	Identify how animals are adapted to suit their environment in different ways and that adaptation may lead to evolution.	Record results, report and present findings, including conclusions, causal relationships and explanations.
4	3.2 Evolve or die!	Evolution and inheritance	Natural selection	Identify how animals are adapted to suit their environment in different ways and that adaptation may lead to evolution.	Record results, report and present findings, including conclusions, causal relationships and explanations. Identify scientific evidence that has been used to support ideas.
5	3.3 Bury the evidence	Evolution and inheritance	All change	Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.	Identify scientific evidence that has been used to support ideas.
6	3.3 Bury the evidence	Evolution and inheritance	Life on Earth timeline	Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.	Identify scientific evidence that has been used to support ideas.
7	3.3 Bury the evidence	Evolution and inheritance	Mary Anning	Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.	Identify scientific evidence that has been used to support ideas. To know about the life and work of a scientists – Mary Anning.

Spring 2 - Unit 4 - Let it shine

Week	Unit	National Curriculum strand	Activity Title	Subject knowledge Learning outcomes	Working scientifically learning outcomes
1	4.1 Going straight	Light	Straight as an arrow	Recognise that light appears to travel in straight lines. Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.	Report findings from enquiries, including conclusions and causal relationships.
2	4.1 Going straight	Light	The perfect silhouette	Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.	Plan a scientific enquiry to answer a question, including recognising and controlling variables where necessary (fair test), present findings including conclusions.
3	4.2 Reflecting on seeing	Light	Mirror image	Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye.	Present findings including conclusions.
4	4.2 Reflecting on seeing	Light	Seeing is believing	Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye.	Record using scientific diagrams, present findings including conclusions.
5	4.3 Never a dull moment	Light	Light misbehaviour	Recognise that light appears to travel in straight lines.	Report and present findings from enquiries including conclusions, causal relationships.
6	4.3 Never a dull moment	Light	Rainbows	Recognise that light appears to travel in straight lines.	Report and present findings from enquiries including conclusions, causal relationships

Summer 1 – Unit 5 - Electrifying!

Week	Unit	National Curriculum strand	Activity Title	Subject knowledge Learning outcomes	Working scientifically learning outcomes
1	5.1 Think like an electrician	Electricity	Simple circuits	Use recognised symbols when representing a simple circuit in a diagram.	Record using diagrams.
2	5.1 Think like an electrician	Electricity	It's faulty	Associate the brightness of a lamp or volume of a buzzer. Compare the reasons for variations in how components function.	Record using scientific diagrams and present findings including conclusions.
3	5.2 All change	Electricity	Blow!	Compare the reasons for variations in how components function.	Record using scientific diagrams and present findings including conclusions.
4	5.2 All change	Electricity	How bright?	Compare the reasons for variations in how components function.	Record using scientific diagrams, graphs, present findings including conclusions.
5	5.3 Build your own	Electricity	Games galore	Associate the brightness of a lamp and volume of a buzzer with the number of voltage of cells used in the circuit. Use recognised symbols when representing a simple circuit in a diagram.	Record using scientific diagrams.
6	5.3 Build your own	Electricity	It's all new	Research information on renewable energy.	Identify scientific evidence that has been used to support or refute ideas or arguments about renewable energy.

Summer 2 – Unit 6 - We are dinosaur hunters

**** This topic is an additional creative topic and goes beyond National Curriculum requirements.**

Week	Unit	National Curriculum strand	Activity Title	Subject knowledge Learning outcomes	Working scientifically learning outcomes
1	6.1 Dinosaur dawnings	Evolution and inheritance	Design a dino	Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.	Plan different types of scientific enquiries to answer questions, report and present findings from enquiries.
2	6.1 Dinosaur dawnings	Evolution and inheritance	Colourful dinosaurs	Compare everyday materials on the basis of their properties, thermal conductivity.	Plan a scientific enquiry controlling variables where necessary, taking repeat readings when appropriate, using test results to make predictions, present findings, including explanations.
3	6.2 All change	Evolution and inheritance	Dino tracks	Identify how animals are adapted to suit their environment in different ways and that adaptation may lead to evolution.	Record data and results, report findings, including conclusions, causal relationships and explanations of and degree of trust in results.
4	6.2 All change	Evolution and inheritance	Dino doo doo	Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.	Identify evidence to support or refute ideas.
5	6.3 Dinosaur goings	Evolution and inheritance	Dying dinos	Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.	Identify scientific evidence that has been used to support or refute ideas or arguments.
6	6.3 Dinosaur goings	Evolution and inheritance	Going, going, gone...?	Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.	Identify scientific evidence that has been used to support or refute ideas or arguments.