

Bright Lights, Big City

5 Programmes of study, 6 skills and 5 knowledge statements

Year 1 **Driver subject** Geography Earth Identify & classify Modelling Physical things Properties and uses



- Y1 Distinguish between an object and the material from which it is made.
- Y1 Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.
- Y1 Describe the simple physical properties of a variety of everyday materials.
- Y1 Compare and group together a variety of everyday materials on the basis of their simple physical properties.
- Y2 Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics.

The Enchanted Woodland

10 Programmes of study, 11 skills and 11 knowledge statements

Hide

Year 1 **Driver subject** Science Habitats Human body Identify & classify Investigation Measurement Observation Parts and functions Pattern seeking Questioning
Report and conclude Survival



- Y1 Ask simple questions and recognise that they can be answered in different ways.
- Y1 Observe closely, using simple equipment.
- Y1 Perform simple tests.
- Y1 Identify and classify.
- Y1 Use their observations and ideas to suggest answers to questions.
- Y1 Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.
- Y1 Identify and describe the basic structure of a variety of common flowering plants, including trees.
- Y1 Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.
- Y1 Observe changes across the four seasons.
- Y1 Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics.

How big is a raindrop?

4 Programmes of study, 4 skills and 4 knowledge statements

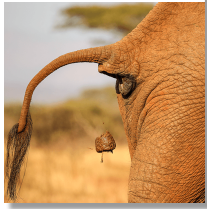
Year 1 **Driver subject** Science Earth Investigation Measurement Report and conclude



- Y1 Observe closely, using simple equipment.
- Y1 Perform simple tests.
- Y1 Use their observations and ideas to suggest answers to questions.
- Y1 Observe and describe weather associated with the seasons and how day length varies.

Whose poo?

Year 1 **4** Programmes of study, 4 skills and 4 knowledge statements
Driver subject Science Measurement Nutrition Observation Report and conclude



- Y1 Observe closely, using simple equipment.
- Y1 Identify and classify.
- Y1 Use their observations and ideas to suggest answers to questions.
- Y1 Identify and name a variety of common animals that are carnivores, herbivores and omnivores.

Do pine cones know it's raining?

4 Programmes of study, 4 skills and 4 knowledge statements

Year 1 **4** Programmes of study, 4 skills and 4 knowledge statements
Driver subject Science Changes Gather & record data Investigation Parts and functions



- Y1 Perform simple tests.
- Y1 Gather and record data to help in answering questions.
- Y1 Identify and describe the basic structure of a variety of common flowering plants, including trees.
- Y1 Observe and describe weather associated with the seasons and how day length varies.

Bright Lights, Big City

2 Programmes of study, 2 skills and 2 knowledge statements

Year 1 **2** Programmes of study, 2 skills and 2 knowledge statements
Driver subject Geography Changes Observation



- Y1 Identify and classify.
- Y2 Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

How do you make bread?

2 Programmes of study, 2 skills and 2 knowledge statements

Year 1 **2** Programmes of study, 2 skills and 2 knowledge statements
Driver subject Science Measurement Report and conclude



- Y1 Observe closely, using simple equipment.
- Y1 Use their observations and ideas to suggest answers to questions.



Dinosaur Planet

5 Programmes of study, 5 skills and 5 knowledge statements

Year 1 **Driver subject** History Identify & classify Living things Measurement Nutrition Parts and functions



- Y1 Observe closely, using simple equipment.
- Y1 Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.
- Y1 Identify and name a variety of common animals that are carnivores, herbivores and omnivores.
- Y1 Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).
- Y1 Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them.

How do plants grow in winter?

4 Programmes of study, 4 skills and 4 knowledge statements

Year 2 **Driver subject** Science Gather & record data Living things Observation Parts and functions



- Y2 Identify and classify.
- Y2 Gather and record data to help in answering questions.
- Y2 Observe and describe how seeds and bulbs grow into mature plants.
- Y2 Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

What is the life cycle of the ladybird?

4 Programmes of study, 4 skills and 4 knowledge statements

Year 2 **Driver subject** Science Identify & classify Nutrition Questioning Report and conclude



- Y2 Ask simple questions and recognise that they can be answered in different ways.
- Y2 Use their observations and ideas to suggest answers to questions.
- Y2 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.
- Y2 Notice that animals, including humans, have offspring which grow into adults.

How many arms does an octopus have?

4 Programmes of study, 4 skills and 4 knowledge statements

Year 2 **Driver subject** Science Measurement Physical things Questioning Survival

- Y2 Ask simple questions and recognise that they can be answered in different ways.
- Y2 Observe closely using simple equipment



- Y2 Observe closely, using simple equipment.
- Y2 Explore and compare the differences between things that are living, dead, and things that have never been alive.
- Y2 Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).

Can you find the treasure?

3 Programmes of study, 3 skills and 3 knowledge statements

Year 2 **Driver subject** Science Changes Investigation Report and conclude



- Y2 Perform simple tests.
- Y2 Use their observations and ideas to suggest answers to questions.
- Y2 Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Wriggle and Crawl

9 Programmes of study, 9 skills and 9 knowledge statements

Hide

Year 2 **Driver subject** Science Gather & record data Identify & classify Investigation Measurement Nutrition Questioning Report and conclude Survival



- Y2 Ask simple questions and recognise that they can be answered in different ways.
- Y2 Observe closely, using simple equipment.
- Y2 Perform simple tests.
- Y2 Use their observations and ideas to suggest answers to questions.
- Y2 Gather and record data to help in answering questions.
- Y2 Identify and name a variety of plants and animals in their habitats, including microhabitats.
- Y2 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.
- Y2 Notice that animals, including humans, have offspring which grow into adults.
- Y2 Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).

Coastline

1 Programme of study, 1 skills and 1 knowledge statement

Year 2 **Driver subject** Geography Forces



- Y2 Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to

NEW!



answer scientific questions about the world around them.

Street Detectives

3 Programmes of study, 3 skills and 3 knowledge statements

Year 2 **Driver subject** History Identify & classify Measurement Properties and uses



- Y2 Observe closely, using simple equipment.
- Y2 Identify and name a variety of plants and animals in their habitats, including microhabitats.
- Y2 Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.

Land Ahoy!

8 Programmes of study, 9 skills and 9 knowledge statements

Hide

Year 2 **Driver subject** Geography Forces Habitats Healthy lifestyle Investigation Nutrition Pattern seeking Properties and uses Staying safe Survival



- Y2 Perform simple tests.
- Y2 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.
- Y2 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.
- Y2 Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).
- Y2 Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.
- Y2 Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.
- Y2 Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics.
- Y2 Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them.

What is sand?

5 Programmes of study, 5 skills and 3 knowledge statements

Year 3 | Driver subject | Science | Investigation | Properties and uses | Report and conclude



- Y3 Set up simple practical enquiries, comparative and fair tests.
- Y3 Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Y3 Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- Y3 Use straightforward scientific evidence to answer questions or to support their findings.
- Y3 Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.

Do plants have legs?

5 Programmes of study, 5 skills and 4 knowledge statements

Year 3 | Driver subject | Science | Gather & record data | Investigation | Living things | Survival



- Y3 Set up simple practical enquiries, comparative and fair tests.
- Y3 Gather, record, classify and present data in a variety of ways to help in answering questions.
- Y3 Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.
- Y3 Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.
- Y3 Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

How mighty are magnets?

7 Programmes of study, 7 skills and 4 knowledge statements

Year 3 | Driver subject | Science | Forces | Gather & record data | Observation | Properties and uses



- Y3 Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
- Y3 Gather, record, classify and present data in a variety of ways to help in answering questions.
- Y3 Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.
- Y3 Identify differences, similarities or changes related to simple scientific ideas and processes.
- Y3 Notice that some forces need contact between two objects, but magnetic forces can act at a distance.
- Y3 Observe how magnets attract or repel each other and attract some materials and not others.
- Y3 Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.

Can you block magnetism?

5 Programmes of study, 5 skills and 3 knowledge statements

Year 3 | Driver subject | Science | Observation | Properties and uses | Questioning



- Y3 Ask relevant questions and using different types of scientific enquiries to answer them.
- Y3 Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of



equipment, including thermometers and data loggers.

Y3 Identify differences, similarities or changes related to simple scientific ideas and processes.

Y3 Observe how magnets attract or repel each other and attract some materials and not others.

Y3 Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.

What are sunglasses for?

6 Programmes of study, 7 skills and 4 knowledge statements

Year 3 Driver subject Science Measurement Observation Report and conclude Staying safe



Y3 Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.

Y3 Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.

Y3 Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.

Y3 Identify differences, similarities or changes related to simple scientific ideas and processes.

Y3 Use straightforward scientific evidence to answer questions or to support their findings.

Y3 Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.

Why do shadows change?

5 Programmes of study, 5 skills and 3 knowledge statements

Year 3 Driver subject Science Pattern seeking Phenomena Report and conclude



Y3 Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.

Y3 Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.

Y3 Use straightforward scientific evidence to answer questions or to support their findings.

Y3 Recognise that shadows are formed when the light from a light source is blocked by a solid object.

Y3 Find patterns in the way that the size of shadows change.

Rocks, Relics and Rumbles

3 Programmes of study, 3 skills and 3 knowledge statements

Year 3 Driver subject Geography Changes Earth Properties and uses



Y3 Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.

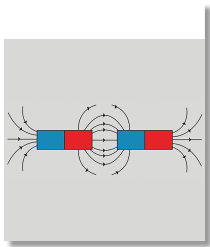
Y3 Describe in simple terms how fossils are formed when things that have lived are trapped within rock.

Y3 Recognise that soils are made from rocks and organic matter.

Why do magnets attract and repel?

5 Programmes of study, 5 skills and 2 knowledge statements

Year 3 Driver subject Science Physical things Report and conclude



- Y3 Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Y3 Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- Y3 Use straightforward scientific evidence to answer questions or to support their findings.
- Y3 Describe magnets as having two poles.
- Y3 Predict whether two magnets will attract or repel each other, depending on which poles are facing.

Why do cat's eyes glow at night?

6 Programmes of study, 6 skills and 4 knowledge statements

Year 3 Driver subject Science Identify & classify Phenomena Questioning Report and conclude



- Y3 Ask relevant questions and using different types of scientific enquiries to answer them.
- Y3 Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Y3 Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- Y3 Use straightforward scientific evidence to answer questions or to support their findings.
- Y3 Recognise that they need light in order to see things and that dark is the absence of light.
- Y3 Notice that light is reflected from surfaces.

How do fossils form?

5 Programmes of study, 5 skills and 3 knowledge statements

Year 3 Driver subject Science Changes Investigation Report and conclude



- Y3 Set up simple practical enquiries, comparative and fair tests.
- Y3 Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Y3 Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- Y3 Use straightforward scientific evidence to answer questions or to support their findings.
- Y3 Describe in simple terms how fossils are formed when things that have lived are trapped within rock.

Predator!

16 Programmes of study, 16 skills and 14 knowledge statements

Hide

Year 3 Driver subject Science Changes Earth Gather & record data Human body Living things Nutrition Observation Parts and functions Pattern seeking Phenomena Properties and uses Staying safe Survival



- Y3 Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of



equipment, including thermometers and data loggers.

- Y3 Gather, record, classify and present data in a variety of ways to help in answering questions.
- Y3 Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.
- Y3 Identify differences, similarities or changes related to simple scientific ideas and processes.
- Y3 Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.

Y3 Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.

Y3 Investigate the way in which water is transported within plants.

Y3 Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

Y3 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.

Y3 Identify that humans and some other animals have skeletons and muscles for support, protection and movement.

Y3 Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.

Y3 Describe in simple terms how fossils are formed when things that have lived are trapped within rock.

Y3 Recognise that soils are made from rocks and organic matter.

Y3 Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.

Y3 Recognise that shadows are formed when the light from a light source is blocked by a solid object.

Y3 Find patterns in the way that the size of shadows change.

Tremors

6 Programmes of study, 6 skills and 4 knowledge statements

Year 3 Driver subject Geography Gather & record data Investigation Observation Properties and uses



Y3 Set up simple practical enquiries, comparative and fair tests.

Y3 Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.

Y3 Gather, record, classify and present data in a variety of ways to help in answering questions.

Y3 Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.

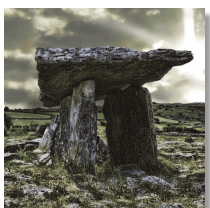
Y3 Identify differences, similarities or changes related to simple scientific ideas and processes.

Y3 Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.

Tribal Tales

6 Programmes of study, 6 skills and 5 knowledge statements

Year 3 Driver subject History Investigation Living things Observation Pattern seeking Survival



Y3 Set up simple practical enquiries, comparative and fair tests.

Y3 Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.

Y3 Identify differences, similarities or changes related to simple scientific ideas and processes.

Y3 Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.

Y3 Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

Y3 Find patterns in the way that the size of shadows change.

Road Trip USA!

5 Programmes of study, 5 skills and 4 knowledge statements

Year 4 **Driver subject** Geography Forces Modelling Physical things Properties and uses



- Y4 Identify common appliances that run on electricity.
- Y4 Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.
- Y4 Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery.
- Y4 Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.
- Y4 Recognise some common conductors and insulators, and associate metals with being good conductors.

Blue Abyss

12 Programmes of study, 12 skills and 8 knowledge statements

Hide

Year 4 **Driver subject** Science Gather & record data Identify & classify Living things Measurement Nutrition Questioning Report and conclude Survival



- Y4 Ask relevant questions and using different types of scientific enquiries to answer them.
- Y4 Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
- Y4 Gather, record, classify and present data in a variety of ways to help in answering questions.
- Y4 Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.
- Y4 Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Y4 Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- Y4 Use straightforward scientific evidence to answer questions or to support their findings.
- Y4 Recognise that living things can be grouped in a variety of ways.
- Y4 Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.
- Y4 Recognise that environments can change and that this can sometimes pose dangers to living things.
- Y4 Construct and interpret a variety of food chains, identifying producers, predators and prey.
- Y4 Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

Did the Romans use toilet roll?

5 Programmes of study, 5 skills and 2 knowledge statements

Year 4 **Driver subject** Science Observation Report and conclude



- Y4 Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
- Y4 Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Y4 Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- Y4 Identify differences, similarities or changes related to simple scientific ideas and processes.
- Y4 Use straightforward scientific evidence to answer questions or to support their findings.

Are all sea creatures the same?

5 Programmes of study, 5 skills and 3 knowledge statements

Year 4 Driver subject Science Gather & record data Identify & classify Questioning



- Y4 Ask relevant questions and using different types of scientific enquiries to answer them.
- Y4 Gather, record, classify and present data in a variety of ways to help in answering questions.
- Y4 Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.
- Y4 Recognise that living things can be grouped in a variety of ways.
- Y4 Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.

Can we block sound?

9 Programmes of study, 9 skills and 4 knowledge statements

Hide

Year 4 Driver subject Science Modelling Observation Phenomena Report and conclude



- Y4 Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
- Y4 Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Y4 Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- Y4 Identify differences, similarities or changes related to simple scientific ideas and processes.
- Y4 Use straightforward scientific evidence to answer questions or to support their findings.
- Y4 Identify how sounds are made, associating some of them with something vibrating.
- Y4 Recognise that vibrations from sounds travel through a medium to the ear.
- Y4 Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.
- Y4 Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.

How can we change a sound?

6 Programmes of study, 6 skills and 3 knowledge statements

Year 4 Driver subject Science Pattern seeking Phenomena Report and conclude



- Y4 Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Y4 Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- Y4 Use straightforward scientific evidence to answer questions or to support their findings.
- Y4 Identify how sounds are made, associating some of them with something vibrating.
- Y4 Recognise that vibrations from sounds travel through a medium to the ear.
- Y4 Find patterns between the pitch of a sound and features of the object that produced it.

How far can sound travel?

7 Programmes of study, 7 skills and 5 knowledge statements

Year 4 Driver subject Science Measurement Pattern seeking Phenomena Report and conclude





- Y4 Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
- Y4 Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Y4 Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- Y4 Use straightforward scientific evidence to answer questions or to support their findings.
- Y4 Find patterns between the pitch of a sound and features of the object that produced it.
- Y4 Find patterns between the volume of a sound and the strength of the vibrations that produced it.
- Y4 Recognise that sounds get fainter as the distance from the sound source increases.

Do all solids dissolve?

6 Programmes of study, 6 skills and 4 knowledge statements

Year 5 Driver subject Science Identify & classify Investigation Report and conclude



- Y5 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Y5 Use test results to make predictions to set up further comparative and fair tests.
- Y5 Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.
- Y5 Identify scientific evidence that has been used to support or refute ideas or arguments.
- Y5 Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.
- Y5 Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.

Sow, Grow and Farm

5 Programmes of study, 7 skills and 10 knowledge statements

Year 5 Driver subject Geography Habitats Identify & classify Investigation Nutrition Parts and functions Physical things Survival



- Y5 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Y5 Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.
- Y5 Describe the life process of reproduction in some plants and animals.
- Y5 Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics.
- Y5 Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

Why are zip-wires so fast?

3 Programmes of study, 3 skills and 3 knowledge statements

Year 5 Driver subject Science Gather & record data Observation Phenomena



- Y5 Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
- Y5 Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.



Y5 Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.

Do dock leaves cure a sting?

4 Programmes of study, 4 skills and 2 knowledge statements

Year 5 **Driver subject** Science Observation Report and conclude



- Y5 Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
- Y5 Use test results to make predictions to set up further comparative and fair tests.
- Y5 Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.
- Y5 Identify scientific evidence that has been used to support or refute ideas or arguments.

What is the life cycle of a mealworm?

6 Programmes of study, 6 skills and 4 knowledge statements

Year 5 **Driver subject** Science Identify & classify Physical things Questioning Report and conclude



- Y5 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Y5 Use test results to make predictions to set up further comparative and fair tests.
- Y5 Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.
- Y5 Identify scientific evidence that has been used to support or refute ideas or arguments.
- Y5 Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.
- Y5 Describe the life process of reproduction in some plants and animals.

Firedamp and Davy Lamps

5 Programmes of study, 5 skills and 3 knowledge statements

Year 5 **Driver subject** History Identify & classify Modelling Report and conclude



- Y5 Use test results to make predictions to set up further comparative and fair tests.
- Y5 Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.
- Y5 Identify scientific evidence that has been used to support or refute ideas or arguments.
- Y5 Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.
- Y5 Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

Allotment

8 Programmes of study, 9 skills and 7 knowledge statements

Hide



- Y5 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Y5 Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
- Y5 Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Y5 Use test results to make predictions to set up further comparative and fair tests.
- Y5 Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.
- Y5 Identify scientific evidence that has been used to support or refute ideas or arguments.
- Y5 Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.
- Y5 Describe the life process of reproduction in some plants and animals.

Stargazers

12 Programmes of study, 12 skills and 10 knowledge statements

Hide



- Y5 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Y5 Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
- Y5 Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Y5 Use test results to make predictions to set up further comparative and fair tests.
- Y5 Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.
- Y5 Identify scientific evidence that has been used to support or refute ideas or arguments.
- Y5 Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.
- Y5 Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.
- Y5 Describe the movement of the Moon relative to the Earth.
- Y5 Describe the Sun, Earth and Moon as approximately spherical bodies.
- Y5 Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.
- Y5 Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.

How does blood flow?

6 Programmes of study, 6 skills and 4 knowledge statements



- Y6 Use test results to make predictions to set up further comparative and fair tests.
- Y6 Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.
- Y6 Identify scientific evidence that has been used to support or refute ideas or arguments.
- Y6 Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.
- Y6 Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.



- Y6 recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.
- Y6 Describe the ways in which nutrients and water are transported within animals, including humans.

Can you send a coded message?

4 Programmes of study, 4 skills and 4 knowledge statements

- Year 6
- Driver subject
- Science
- Gather & record data
- Modelling
- Phenomena
- Questioning



- Y6 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Y6 Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Y6 Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.
- Y6 Use recognised symbols when representing a simple circuit in a diagram.

Can we slow cooling down?

6 Programmes of study, 6 skills and 4 knowledge statements

- Year 6
- Driver subject
- Science
- Gather & record data
- Measurement
- Report and conclude
- Survival

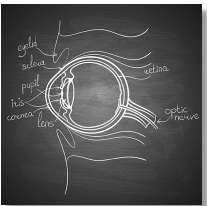


- Y6 Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
- Y6 Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Y6 Use test results to make predictions to set up further comparative and fair tests.
- Y6 Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.
- Y6 Identify scientific evidence that has been used to support or refute ideas or arguments.
- Y6 Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

How have eyes evolved?

7 Programmes of study, 7 skills and 4 knowledge statements

- Year 6
- Driver subject
- Science
- Earth
- Gather & record data
- Living things
- Report and conclude



- Y6 Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Y6 Use test results to make predictions to set up further comparative and fair tests.
- Y6 Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.
- Y6 Identify scientific evidence that has been used to support or refute ideas or arguments.
- Y6 Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.
- Y6 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.

Darwin's Delights

9 Programmes of study, 11 skills and 9 knowledge statements

Hide

Year 6 Driver subject Science Gather & record data Identify & classify Investigation Living things Parts and functions Questioning Report and conclude Survival

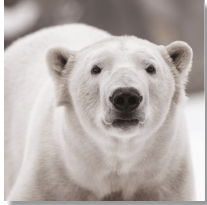


- Y6 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Y6 Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Y6 Use test results to make predictions to set up further comparative and fair tests.
- Y6 Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.
- Y6 Identify scientific evidence that has been used to support or refute ideas or arguments.
- Y6 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.
- Y6 Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.
- Y6 Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents
- Y6 Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

Frozen Kingdom

4 Programmes of study, 4 skills and 4 knowledge statements

Year 6 Driver subject Geography Gather & record data Habitats Investigation Survival



- Y6 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Y6 Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Y6 Give reasons for classifying plants and animals based on specific characteristics.
- Y6 Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

Revolution

1 Programme of study, 1 skills and 1 knowledge statement

Year 6 Driver subject History Forces



- Y6 Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.

Frozen Kingdoms

4 Programmes of study, 6 skills and 7 knowledge statements

Year 6 Driver subject Geography Gather & record data Habitats Investigation Survival

NEW!



- Y6 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Y6 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.
- Y6 Give reasons for classifying plants and animals based on specific characteristics.
- Y6 Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

Light Y6

12 Programmes of study, 15 skills and 12 knowledge statements

Hide

Year 6



- Y6 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Y6 Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
- Y6 Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Y6 Use test results to make predictions to set up further comparative and fair tests.
- Y6 Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.
- Y6 Identify scientific evidence that has been used to support or refute ideas or arguments.
- Y6 Recognise that light appears to travel in straight lines.
- Y6 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.
- Y6 Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.
- Y6 Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.
- Y6 Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics.
- Y6 Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.