**Year 4**

**Autumn 1**

| Animals Including Humans | | | | | |
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| **Lesson Sequence** | | | | | |
| Identify that animals, including humans cannot make their own food and need to get nutrition from what they eat. | Identify that animals, including humans, need the right types and amount of nutrition. Look at food groups and how to eat a balanced diet. | Identify that humans and some other animals have skeletons to support/protect their body.<br>Introduce vertebrates and invertebrate | Identify that humans and some other animals have skeletons to support/protect their body. Look at human skeletons - identify bones and their purposes. | Look at joints and how these work to allow movement. | Identify that humans and some other animals have muscles and look at how they help with movement. |
| **Substantive Knowledge** | | | | | |
| Animals (including humans) can't make their own food, they get food by growing, hunting or gathering it.<br>**Nutrition** means getting the food needed to grow and be healthy. | The human body needs a **balanced diet** to work properly. You need the right amount of food from the different food groups.<br>**Fruit and vegetables**<br>- Contain fibre which helps us to digest food<br><br>**Carbohydrates –** give us energy e.g. bread, potatoes, pasta<br><br>**Proteins** – help our bodies to repair e.g. fish, meat, nuts, seeds, eggs and cheese<br><br>**Fats** – help store energy for our bodies e.g. butter, cheese, fried foods | Mammals, birds, fish, reptiles, amphibians are **vertebrates** this means they have a skeleton inside their body.<br><br>**Invertebrates** means they don't have a skeleton inside their bodies. Some examples of these are spiders, snails, jellyfish, crabs, worms. | The skeleton is made of bones. This protects and supports the body.<br>**Skull** – protects the brain<br>**Rib cage** – protects major organs (e.g. heart, lungs)<br>**Humerus, radius, ulna** – bones in your arms<br>**Femur, tibia, fibula** – bones in your legs | Joints are where two or more bones join together. The skeleton can bend at these joints e.g. **knees, elbows.**<br>Know the terms: ball and socket joint, hinge joint and gliding joint. | **Muscles** are attached to the skeleton to help us **move**. They **contract** and **relax** as they move with the bones.<br><br>Know that **contraction** means to get smaller and **expansion** means to get bigger. |

| Disciplinary Knowledge | | | | | |
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| **Methods:**<br>**<u>Research</u>**<br>Research is an investigation or study to find out facts in order to reach a conclusion.<br><br>**Data analysis:**<br>Know that you can present information from research as pictures with labels to make it easier to understand.<br><br>Know that information texts use scientific language.<br><br>**Evidence to develop explanations:**<br>Know that scientific evidence has been used to classify how animals, including humans, get their food. | **Methods:**<br>**<u>identify and classify</u>**<br>To identify and classify, you make observations and collect data to find similarities and differences. This help to organise things into groups and make connections.<br><br>**Apparatus & techniques:**<br>A ruler is a tool used to draw straight lines.<br><br>Axis are used to label areas of the bar chart to enable the reader to understand what is being shown.<br><br>**Data analysis:**<br>Know that tally charts are the best way to collate numbers quickly and effectively.<br><br>Know that bar charts show results clearly so that conclusions can be made.<br><br>Know that you need to use scientific language when identifying and classifying.<br><br>**Evidence to develop explanations:** | **Methods:**<br>**<u>Research</u>**<br>Research is an investigation or study to find out facts.<br><br>**Data analysis:**<br>Know that you can present information from research in a table to make it clearer and easier to understand.<br><br>**Evidence to develop explanations:**<br>Know that information texts use scientific language.<br><br>Know that scientific evidence has been used to classify vertebrates and invertebrates, including exoskeletons and hydroskeletons. | **Methods:**<br>**<u>Research</u>**<br>Research is an investigation or study to find out facts in order to reach a conclusion.<br><br>**Apparatus & techniques:**<br>A ruler is a tool used to measure length.<br><br>Centimetre is a unit of measurement.<br><br>Meter is a unit of measurement<br><br>**Data analysis:**<br>Know that you can present information from research in a table to make it clearer and easier to understand. | **Methods:**<br>**<u>Comparative testing</u>**<br>Comparative testing is a way of making direct comparisons between different things.<br><br>**<u>Pattern seeking</u>**<br>Pattern seeking is when you carry out a simple test or observe closely to look for patterns in your results.<br><br>**Data Analysis:**<br>Know that you can present information from research in a table to make it clearer and easier to understand.<br><br>Know that you can present information from pattern seeking in a table to make it clearer and easier to understand.<br><br>**Evidence to develop explanations:**<br>To draw a scientific conclusion you need to look at your results and identify patterns. | **Methods:**<br>**<u>Research</u>**<br>Research is an investigation or study to find out facts in order to reach a conclusion<br><br>**Evidence to develop explanations:**<br>To draw a scientific conclusion you need to look at your results. |

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| | To draw a scientific conclusion you need to look at your results and identify patterns. | | | | |

**Year 4**

**Autumn 2**

| Light | | | | | |
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| **Lesson Sequence** | | | | | |
| Understand that light comes from a light source (e.g. the sun).<br>Recognise that they need light in order to see things and that dark is the absence of light. | Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. | Introduce the terms opaque, translucent and transparent.<br>Investigate how different materials allow different amounts of light to pass through them. | Recognise that shadows are formed when the light from a light source is blocked by an opaque object. | Find patterns in the way that the size of shadows change. | Investigate how light is reflected from surfaces. |
| **Substantive Knowledge** | | | | | |
| Dark is the absence of light.<br><br>You need to use a light source to see objects. These include **the sun, a torch and a light bulb.** | Understand that the sun can be dangerous to our eyes and there are ways to protect your eyes such as **wearing sunglasses and shades for your eyes.** | **Opaque** is when you cannot see through something, **transparent** is when you can see through something and **translucent** is only when the light can be seen through something. | Opaque objects such as **cups, tables and books** create a shadow when they block the light source.<br><br>. | Notice that the size of shadows increase the closer the light source depending on the distance of the light source to the object | Children understand that light can be reflected from surfaces such as **the moon, a mirror and water.** |
| **Disciplinary Knowledge** | | | | | |
| **Methods:**<br>**Identifying and classifying**<br>Classifying is when you sort items into groups based on similarities and differences.<br><br>Items can be sorted into things that are light sources and non-light sources.<br><br>**Data analysis:**<br>Know that a table is the best way to present the | **Methods:**<br>**Observation over time**<br>Observing over time is when you watch or measure something over a period of time to see how it changes.<br><br>You can observe the effects of a UV source (the sun) on a UV bead (skin) over time to help understand the importance of protection from the sun. | **Methods:**<br>**Identifying and classifying** Classifying is when you sort items into groups based on similarities and differences.<br><br>You can make careful observations to help you classify objects.<br><br>Materials can be sorted into those that are: transparent, translucent and opaque. | **Methods:**<br>**Fair test**<br>A fair test is when one variable is changed and the others remain constant.<br><br>A variable is a factor that can change.<br><br>A fair test can be used to investigate how the length of a shadow changes depending on the distance the object is from the light source. | **Methods:**<br>**Pattern seeking**<br>Pattern seeking is when you observe variables that cannot be controlled to notice patterns.<br><br>You can carry out a pattern seeking investigation to see which materials reflect light.<br><br>You can use your observations from a pattern seeking enquiry to classify materials into reflective and non-reflective.<br><br>**Apparatus & techniques:**<br>A torch is a light source. | |

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| results when you identify and classify. | **Apparatus & techniques:**<br>UV beads change colour when exposed to a UV light source.<br><br>A UV torch provides a UV ray which effects the UV beads.<br><br>You can use time-lapse on an iPad to observe changes over time<br><br>**Data analysis:**<br>When you collect data it needs to be presented in a way that is clear and easy to understand.<br><br>A table is a simple way to present data collected through an observation over time.<br><br>A scientific diagram is a picture that is usually labelled.<br><br>**Evidence to develop explanations:**<br>Know that results from a scientific enquiry can be used to answer a scientific question.<br><br>To answer a scientific question, you should include evidence from your scientific enquiry | Using existing knowledge, you can make a prediction about what the outcome of your scientific enquiry will be.<br><br>**Data analysis**:<br>Know that a table is the best way to present the results when you identify and classify.<br><br>A scientific diagram is a picture that is usually labelled. | When carrying out a fair test it is important that you have a scientific question e.g. As the distance from the light source increases, will the height<br><br>Using existing knowledge, you can make a prediction about what the outcome of your scientific enquiry will be<br><br>**Apparatus & techniques:**<br>You can measure longer lengths using metre sticks.<br><br>Centimetres and millimetres are units of measure we use for length.<br><br>1cm = 10mm.<br><br>**Data analysis:**<br>When you collect data it needs to be presented in a way that is clear and easy to understand.<br><br>A table is a simple way to present data collected in a fair test.<br><br>A scientific diagram is a picture that is usually labelled.<br><br>**Evidence to develop explanations:** | **Data analysis:**<br>When you collect data it needs to be presented in a way that is clear and easy to understand.<br><br>A table is a simple way to present data collected in a pattern seeking investigation.<br><br>**Evidence to develop explanations:**<br>Know that results from a scientific enquiry can be used to answer a scientific question.<br><br>To answer a scientific question, you should include evidence from your scientific enquiry<br><br>Conclude that some materials reflect light from a light source and some materials do not. |

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| | | | Know that results from a scientific enquiry can be used to answer a scientific question.<br><br>To answer a scientific question, you should include evidence from your scientific enquiry<br><br>Conclude that as the distance from the light source increases, the shadow size decreases. | |

**Year 4**

**Spring 1**

| Electricity | | | | | |
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| **Lesson Sequence** | | | | | |
| Identify common appliances that run on electricity. Look at the difference between mains and battery powered appliances. Look at how to keep safe around electricity. | Construct a simple series electrical circuit, identifying and naming its basic parts, | 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. | Recognise some common conductors and insulators, and associate metals with being good conductors. Look at everyday uses of conductors and insulators and consider why these materials are used. E.g. plastic around a plug. | Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. | Investigate different types of switches depend on the purpose e.g. light switch, safety switch for lawn mower. |
| **Substantive Knowledge** | | | | | |
| Many household devices and appliances run on electricity: e.g. washing machine, television, toaster, and kettle. Some devices run on batteries others need mains power to work. | A **simple series electrical circuit** allows a flow of current through each component. The parts of a circuit can be named, including cells, wires, bulbs, switches and buzzers. | 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. | Recognise some common conductors and insulators, and associate metals with being good conductors. Look at everyday uses of conductors and insulators and consider why these materials are used. E.g plastic around a plug | Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. | Investigate different types of switches depend on the purpose e.g. light switch, safety switch for lawn mower |
| **Disciplinary Knowledge** | | | | | |
| **Methods:**<br>**Identifying and classifying**<br>To identify and classify, you make observations and measurements to find similarities and differences. This help to organise things into groups and make connections. | **Methods:**<br>**Identify**<br>Identifying means that you find out what something is.<br><br>You can identify the parts of an electrical circuit.<br><br>**Apparatus & techniques:** | **Methods:**<br>**Pattern seeking**<br>Pattern seeking is when you observe variables that cannot be controlled to notice patterns.<br><br>Variables are anything that can change or be changed. | **Methods:**<br>**Identifying and classifying**<br>To identify and classify, you make observations and measurements to find similarities and differences. This help to organise things into groups and make connections. | **Methods:**<br>**Pattern seeking**<br>Pattern seeking is when you observe variables that cannot be controlled to notice patterns.<br><br>Variables are anything that can change or be changed. | **Methods:**<br>**Pattern seeking**<br>Children to apply knowledge of switches, conductors and insulators to make switches that are fit for different purposes.<br><br>**Apparatus & techniques:**<br>Wires, batteries, bulbs, buzzers and motors are |

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| You can classify electrical appliances in ones that are mains powered and ones that are battery powered.<br><br>**Data analysis:**<br>A Venn diagram is a clear way to present findings from an identifying and classifying enquiry.<br><br>A Venn diagram uses circles to show the relationship between things. Items placed in the cross over between the circles show that they fit into both categories. | Wires, batteries, bulbs, buzzers and motors are electrical components that make up a circuit. | You can carry out a pattern seeking enquiry to investigate what is needed to ensure the bulb will light in an electrical circuit.<br><br>You can make predictions about what patterns you might find before carrying out a pattern seeking enquiry<br><br>**Apparatus & techniques:**<br>Wires, batteries, bulbs, buzzers and motors are electrical components that make up a circuit.<br><br>**Data analysis:**<br>When you collect data it needs to be presented in a way that is clear and easy to understand.<br><br>Know that results from a pattern seeking enquiry can be presented clearly in a table.<br><br>A diagram is a picture that is usually labelled.<br><br>You can draw a diagram to show the parts of an electrical circuit.<br><br>**Evidence to develop explanations:** | **Apparatus & techniques:**<br>Wires, batteries, bulbs, buzzers and motors are electrical components that make up a circuit.<br><br>You can use crocodile clips to put materials within a circuit to test if they are conductors or insulators.<br><br>**Data analysis:**<br>Know that a table is the best way to present the results when you identify and classify.<br><br>**Evidence to develop explanations:**<br>Know that results from a scientific enquiry can be used to answer a scientific question.<br><br>To answer a scientific question, you should include evidence from your scientific enquiry.<br><br>Know that conclusions drawn from scientific enquires can be used to make recommendations such as how to keep safe around electrical equipment in the home. | You can carry out a pattern seeking enquiry to find out that a switch breaks a circuit and therefore the bulb will light/not light when the switch is open/closed.<br><br>**Apparatus & techniques:**<br>Wires, batteries, bulbs, buzzers and motors are electrical components that make up a circuit.<br><br>**Data analysis:**<br>You can use crocodile clips to put a switch in a circuit.<br><br>When you collect data it needs to be presented in a way that is clear and easy to understand.<br><br>**Evidence to develop explanations:**<br>Know that results from a pattern seeking enquiry can be presented clearly in a table.<br><br>Know that results from a scientific enquiry can be used to answer a scientific question.<br><br>Know that results from a scientific enquiry can be used to make recommendations or suggest improvements. | electrical components that make up a circuit.<br><br>**Data analysis:**<br>You can use crocodile clips to put a switch in a circuit.<br><br>When you collect data it needs to be presented in a way that is clear and easy to understand.<br><br>**Evidence to develop explanations:**<br>Know that results from a pattern seeking enquiry can be presented clearly in a table.<br><br>Know that results from a scientific enquiry can be used to answer a scientific question.<br><br>Know that results from a scientific enquiry can be used to make recommendations or suggest improvements |

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| | | Know that results from a scientific enquiry can be used to answer a scientific question.<br><br>To answer a scientific question, you should include evidence from your scientific enquiry.<br><br>Conclude that you need a complete electrical circuit for the bulb to light. If there is a break in the circuit, the bulb will not light. | | | |

**Year 4**

**Spring 2**

| Forces and Magnets | | | | | | |
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| **Lesson Sequence** | | | | | | |
| Understand a force as a push or pull. | Introduce term friction.<br>Compare how things move on different surfaces depending on the amount of friction created. | Investigate pushes and pulls and how they make an object move. | Observe how magnets attract or repel each other.<br>Describe magnets as having two poles. | Children learn that magnets have a north and south pole. They are then to investigate how magnets can attract and repel. | Observe how magnets attract or repel some materials and not others. | 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 |
| **Substantive Knowledge** | | | | | | |
| Some forces need contact with objects and this is **push** and **pull.** | An object will move differently on different surfaces due to **friction (the resistance that one surface or object receives when moving over another).** An object will move more smoothly on the table or corridor floor compared to the carpet or grass. | Some forces need contact with objects and this is **push** and **pull.** | Some forces do not need contact with objects and can act at a distance. This is a **magnetic force.** | Some forces do not need contact with objects and can act at a distance. This is a **magnetic force.**<br><br>A magnet has two poles. These are the **North Pole** and **South Pole.**<br><br>The same poles **repel** each other but opposite poles **attract. This is known as a magnetic force.** | Magnets attract or repel each other. Magnets are attracted to **iron, nickel** and **metals that contain iron e.g. steel**.<br><br>Magnets repel the following materials: **copper, silver** and **gold** | To know that a paper clip, a staple, the iPad locker are all magnetic.<br><br>To know that tinfoil, door handles and copper coins are not magnetic. |
| **Disciplinary Knowledge** | | | | | | |
| **Methods:**<br>**Identifying and classifying** | **Methods:**<br>**Fair test**<br>A fair test is when one variable is changed | **Methods:**<br>**Comparative testing** | **Methods:**<br>**Pattern seeking**<br>Pattern seeking is when you observe | **Methods:**<br>**Fair test**<br>A fair test is when one variable is changed | **Methods:**<br>**Identifying and classifying**<br>Classifying is when | **Methods:**<br>**Fair testing**<br>A fair test is when one variable is |

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| Know that classifying is when you sort items into different groups based on their similarities and differences.<br><br>Know that to identify and classify you need to observe closely.<br><br>Know that you can sort activities/actions into push and pull forces.<br><br>**Data analysis:**<br>A Venn diagram uses circles to show the relationship between things. Where the circles cross over shows that the items sorted fit into both categories. | and the others remain constant.<br><br>A variable is a factor that can be changed.<br><br>**Apparatus & techniques:**<br>We can measure mass using electronic scales.<br><br>Grams and kilograms are units used for measuring mass.<br><br>1kg = 1000g<br><br>We measure force using a Newton metre.<br><br>Newtons is the unit of measure used for force.<br><br>You can measure longer lengths using metre sticks.<br><br>Centimetres and millimetres are units of measure we use for length.<br><br>1cm = 10mm.<br><br>Metres is a unit of measure we use for length.<br><br>1m = 100cm | A comparative test is when you test and compare different cases and situations.<br><br>A comparative test can be used to investigate the distance travelled when using a push forces applied by different parts of the body (foot stamping on bottles/blowing straws).<br><br>**Data analysis:**<br>A table is a clear way to present data collected when carrying out a comparative test.<br><br>**Evidence to develop explanations:**<br>To draw verbal conclusion | variables that cannot be controlled to notice patterns.<br><br>Pattern seeking can be used to investigate whether you need contact with an object to make it move.<br><br>**Evidence to develop explanations:**<br>Observations from pattern seeking observations can be used to draw conclusions.<br><br>Conclude that some forces do not need contact with objects and can act at a distance | and the others remain constant.<br><br>A variable is a factor that can change.<br><br>You can carry out a fair test to investigate how close a magnetic object needs to be to a magnet in order for it to attract.<br><br>**Apparatus & techniques:**<br>A magnet is an object that has a magnetic field. A magnet attracts and repels other items.<br><br>Centimetres and millimetres are units of measure we use for length.<br><br>1cm = 10mm.<br><br>**Data analysis:**<br>When you collect data it needs to be presented in a way that is clear and easy to understand.<br><br>A table is a simple way to present data.<br><br>**Evidence to develop explanations:**<br>Know that results from a scientific enquiry | you sort items into groups based on similarities and differences.<br><br>You can classify materials as magnetic or non-magnetic.<br><br>**Apparatus & techniques:**<br>A magnet is an object that has a magnetic field. A magnet attracts and repels other items.<br><br>**Evidence to develop explanations:**<br>Know that a table is the best way to present the results when you identify and classify. | changed and the others remain constant.<br><br>A variable is a factor that can change.<br><br>Centimetres and millimetres are units of measure we use for length.<br><br>1cm = 10mm.<br><br>Know that a Venn diagram and bar chart are different ways to present data.<br><br>A Venn diagram uses circles to show the relationship between things.<br><br>A bar chart is a chart that has rectangles of different sizes to represent values. |

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| | **Data analysis:**<br>A table is a clear way to present data collected when carrying out a fair test.<br><br>**Evidence to develop explanations:**<br>Results from fair test can be used to answer a scientific question.<br><br>Conclude that an object will need a lesser force to move it when there is less friction on the surface it is moving across. | | | can be used to answer a scientific question.<br><br>To answer a scientific question, you should include evidence from your scientific enquiry | | |

**Year 4**

**Summer**

| Plants | | | | | |
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| **Lesson Sequence** | | | | | |
| Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers | 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 - carry out investigation to observe these requirements showing what happens if they are not all fulfilled. | 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 - review results from investigation. | Investigate the way in which water is transported within plants. | Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. | Explore methods of seed dispersal. |
| **Substantive Knowledge** | | | | | |
| **Parts of a plants**<br>The main parts of a plant are: flowers, leaves, stem and roots.<br><br>**Flowers** – have colour and smell to attract insects<br><br>**Leaves** – change carbon dioxide and water into food for the plant and oxygen.<br>**Stem** – this holds the plant up and carries water to the rest of the plant.<br>**Roots** – hold the plant in the ground and soak up water and minerals from the soil. | **Parts of a flower**<br>A flower's job is to create seeds so that new plants can be grown.<br><br>**Anther** –part that makes pollen.<br>**Filament** –holds up the anther.<br>**Ovule** – a small egg<br>**Stigma** – takes in the pollen<br>**Style** –Pollen travels down the style to the ovary.<br>**Ovary** – contains the eggs<br>**Petal** – brightly coloured and sweetly scented to attract insects. | **What plants need to grow**<br>Air, light, water, nutrients from the soil, room to grow. | **Life cycle of flowering plants**<br><br>**Germination** – the seed starts to grow.<br>**Growing** – the plant grows bigger and forms a flower.<br>**Pollination** – pollen from the anther lands on the stigma and travels down the style.<br>**Fertilisation** – the pollen joins with an ovule and a seeds starts to form.<br>**Seed dispersal** – the fully formed seeds are moved away from the parent plant. | **Water transportation**<br>Roots absorb water from the soil.<br><br>The stem transports water to the leaves. | **Seed dispersal**<br><br>Seeds can be dispersed by:<br>**Wind** – seeds are blown by the wind.<br>**Animals** – seeds are eaten by animals and then excreted. Seeds also hook onto an animal's fur and are then transported.<br>**Explosion** – dry seed pods split open and shoot out the seeds.<br>**Water** – seeds fall into the water and move with the current |

| Disciplinary Knowledge | | | | | |
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| **Methods:**<br>**Identifying**<br>Identifying means that you find out what something is.<br><br>You can identify the main parts of a flowering plant. To do this you need to observe them closely.<br><br>**Research using secondary sources**<br>Research is an investigation or study to find out facts in order to reach a conclusion.<br><br>Secondary sources are works such as textbooks, encyclopedia and scientific books.<br><br>Secondary sources can help you to identify parts of a flowering plant.<br><br>**Data analysis:**<br>A scientific diagram is a picture that is usually labelled. | **Methods:**<br>**Identifying**<br>Identifying means that you find out what something is.<br><br>You can identify the main parts of a flowering plant. To do this you can dissect them and then observe each part closely.<br><br>**Apparatus & techniques:**<br>Tweezers can be used to dissect an object. They help you to pick up very small parts. | **Methods:**<br>**Fair testing**<br>A fair test is when one variable is changed and the others remain constant.<br><br>A variable is a factor that can change.<br><br>You can set up a fair test to investigate how plants grow when one of the variables is removed.<br><br>**Observation over time**<br>Observing over time is when you watch or measure something over a period of time to see how it changes.<br><br>You can observe how a plant grows over time, recording your observations at set time intervals.<br><br>**Apparatus & techniques:**<br>You can take photographs on an iPad to record changes over time<br><br>**Data analysis:**<br>When you collect data it needs to be presented in | **Methods:**<br>**Observation over time**<br>Observing over time is when you watch or measure something over a period of time to see how it changes.<br><br>You can observe the changes to a sunflower seed after it has been planted.<br><br>**Research using secondary sources**<br>Research is an investigation or study to find out facts in order to reach a conclusion.<br><br>Secondary sources are works such as textbooks, encyclopedia and scientific books.<br><br>Secondary sources of information can be used to find out about germination, growing, pollination, fertilization and seed dispersal in a flowering plant.<br><br>**Apparatus & techniques:**<br>You can access secondary sources of information on an ipad. | **Methods:**<br>**Observation over time**<br>Observing over time is when you watch or measure something over a period of time to see how it changes.<br><br>**Evidence to develop explanations:**<br>You can carry out an observation over time to see how water is transported from the soil, to the stem, to the leaves of a plant.<br><br>Know that findings from enquires can be reported in different ways e.g. orally, written, results presentation or as a conclusion.<br><br>Know that a scientific write up can include: a question, prediction, method, results and conclusion. | **Data analysis**:<br>Model making is a clear way to represent scientific ideas. |

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| | | a way that is clear and easy to understand.<br><br>You can record observations in a table.<br><br>Photographs can be used as a method of recording changes over time. These need to be in time order to show the changes.<br><br>**Evidence to develop explanations:**<br>Know that results from a scientific enquiry can be used to answer a scientific question.<br><br>To answer a scientific question, you should include evidence from your scientific enquiry.<br><br>Conclude that in order to grow and be healthy, plants need: air, light, water, nutrients from soil and room to grow. | **Evidence to develop explanations:**<br>Know that findings from enquires can be reported in different ways e.g. orally, written, results presentation or as a conclusion.<br><br>A powerpoint is a clear way to present information collected when using secondary sources. | | |