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Content/ Knowledge	<u>Living Things and Habitats</u> Describe the differences in life cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some plants and animals.	<u>Animals Including Humans</u> Describe the changes as humans develop from birth to old age.	<u>Space</u> Describe the movement of the Earth and other planets, relative to the sun in the solar system. Describe the movement of the moon relative to the Earth. Describe the Sun, Earth and Moon as approximate spherical bodies. Use Earth rotation to explain day and night due to the apparent movement of the sun across the sky.	<u>Properties of materials</u> Compare and group together everyday materials based on their properties, including hardness, solubility, transparency, conductivity and response to magnets. Know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution. Use knowledge of solid, liquid and gas to decide how mixtures might be separated including through filtering, sieving and evaporation. Give reasons based on evidence from comparative tests for the particular uses of everyday materials including metals, wood and plastic. Demonstrate that dissolving, mixing and changes of state are reversible changes. Explain that some changes result in the formation of new materials and this kind of change is not usually reversible including changes associated with burning and the action of acid on bicarbonate of soda.	<u>Forces</u> I can explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. I can identify the effects of air resistance, water resistance and friction, that act between moving surfaces I can recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect
Scientific Enquiry	<p> <u>Comparative and fair testing</u> Which seed shape takes the longest time to fall?</p> <p> <u>Observation over time</u> How do brine shrimp change over their lifetime?</p> <p>How does a bean change as it germinates?</p> <p>How does our compost heap change over time?</p> <p> <u>Pattern seeking</u></p> <p>Is there a relationship between a mammal's size and its gestation period?</p> <p> <u>Identifying, grouping and classifying</u></p> <p>Compare this collection of animals based on similarities and differences in their lifecycle.</p> <p> <u>Research using secondary sources</u> Why What are the differences between the life cycle of an insect and a mammal?</p>	<p> <u>Comparative and fair testing</u> How does age affect a human's reaction time?</p> <p> <u>Observation over time</u></p> <p> <u>Pattern seeking</u> Are the oldest children in our school the tallest?</p> <p> <u>Identifying, grouping and classifying</u> Can you identify all the stages in the human life cycle?</p> <p> <u>Research using secondary sources</u> Why do people get grey/white hair when they get older?</p>	<p> <u>Comparative and fair testing</u> How does the length of daylight hours change in each season?</p> <p> <u>Observation over time</u></p> <p> <u>Pattern seeking</u> Is there a pattern between the size of a planet and the time it takes to travel around the Sun?</p> <p> <u>Identifying, grouping and classifying</u> How could you organise all the objects in the solar system into groups?</p> <p>Can you observe and identify all the phases in the cycle of the Moon?</p> <p> <u>Research using secondary sources</u> How have our ideas about the solar system changed over time?</p> <p>What unusual objects did Jocelyn Bell Burnell discover?</p>	<p> <u>Comparative and fair testing</u> Which type of sugar dissolves the fastest?</p> <p>How does the temperature of tea affect how long it takes for a sugar cube to dissolve?</p> <p> <u>Observation over time</u> How does a container of salt water change over time?</p> <p>How does a sugar cube change as it is put in a glass of water?</p> <p> <u>Pattern seeking</u> Do all stretchy materials stretch in the same way?</p> <p> <u>Identifying, grouping and classifying</u> Can you group these materials based on whether they are transparent or not?</p> <p> <u>Research using secondary sources</u></p>	<p> <u>Comparative and fair testing</u> Which shoe is the most slippy?</p> <p>Which shape parachute takes the longest to fall?</p> <p>How does the angle of launch affect how far a paper rocket will go?</p> <p>How does the surface area of a container affect the time it takes to sink?</p> <p>How does the surface area of a parachute affect the time it takes to fall to the ground?</p> <p> <u>Observation over time</u> How long does a pendulum swing for before it stops?</p> <p> <u>Pattern seeking</u> Do all objects fall through water in the same way?</p> <p> <u>Identifying, grouping and classifying</u> Can you label and name all the forces acting on the objects in each of these situations?</p> <p> <u>Research using secondary sources</u></p>

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