

| Science        |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                         |
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|                | Autumn                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                       | Spring                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Summer                                                                                                                                                                                                                                                                                                                                                                                  |
| Year5          | Materials & Changing states                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                       | Earth, Sun & Moon/ Forces                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Life Cycles/ Describe Changes as Human Develop to old age                                                                                                                                                                                                                                                                                                                               |
|                | Term1                                                                                                                                                                                                                                           | Term2                                                                                                                                                                                                                                                                                                                                                                                                 | Term1                                                                                                                                                                                                                                                                                                                                                                                               | Term2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Term1/Term2-                                                                                                                                                                                                                                                                                                                                                                            |
|                | Materials (Mixtures and Separation)                                                                                                                                                                                                             | Materials – Changing State                                                                                                                                                                                                                                                                                                                                                                            | Earth, Sun & Moon                                                                                                                                                                                                                                                                                                                                                                                   | Forces                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Life Cycles /Describe Changes as Human Develop to old age. – ( Jigsaw- Changing me)                                                                                                                                                                                                                                                                                                     |
| Knowledge      | <ul style="list-style-type: none"> <li>-what are mixtures</li> <li>-what does dissolve means</li> <li>-know that some materials will dissolve in a liquid to form a solution</li> <li>-what processes can we use to separate mixture</li> </ul> | <ul style="list-style-type: none"> <li>–Compare everyday materials based on their properties, including hardness, solubility, transparency., conductivity( electrical and thermal) and response to magnets</li> <li>understand what changes states of matter</li> <li>- understand reversible and irreversible changes</li> <li>-differentiate between reversible and irreversible changes</li> </ul> | <ul style="list-style-type: none"> <li>-the size of the planets with respect to the sun</li> <li>-how the model of the solar system developed</li> <li>-how day and night is formed</li> <li>-how seasons are formed – differences between planet, natural satellite and star</li> <li>-the phases of moon</li> </ul>                                                                               | <ul style="list-style-type: none"> <li>-what a force is</li> <li>the units of force</li> <li>-the different types of forces</li> <li>-which force is the weakest and why</li> <li>-what a simple machine is</li> <li>-how to show the forces acting using arrows</li> <li>-what are balanced and unbalanced forces</li> <li>-how to use a force meter to measure weight</li> <li>-the advantages and disadvantages of frictional forces</li> <li>-real life examples where friction is useful or harmful</li> <li>- recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect</li> </ul> | <ul style="list-style-type: none"> <li>-the life cycles of a mammal, an amphibian, an insect and a bird</li> <li>-the different types of reproduction</li> <li>-why different plants have modified root, stem and leaf and flower</li> <li>-famous scientists and their contribution towards study of plants and animals</li> <li>-different ways that plants disperse seeds</li> </ul> |
| (skills)       | <ul style="list-style-type: none"> <li>-investigate how does a container of saltwater change over time?</li> <li>-plan a fair test to investigate which types of sugar dissolves the fastest.</li> </ul>                                        | <ul style="list-style-type: none"> <li>-sort materials based on their properties, including hardness, solubility, transparency., conductivity( electrical and thermal) and response to magnets</li> <li>-How does temperature affect how much of solute we can dissolve?</li> <li>- investigate reversible and irreversible changes</li> </ul>                                                        | <ul style="list-style-type: none"> <li>-observe the phases of moon and record the phases</li> <li>-construct simple shadow clocks and sundials, calibrated to show midday and the start and end of the school day</li> <li>- plot a graph in order to compare the time of day at different places on the Earth through internet links</li> <li>-create simple models of the solar system</li> </ul> | <ul style="list-style-type: none"> <li>-plan a fair test to find how surface area of a parachute affects the time it takes to fall?</li> <li>-plan a fair test to determine resistance in water by making and testing boats of different shapes</li> <li>-to investigate how changing variables on a paper helicopter affects the speed at which it falls through the air</li> </ul>                                                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>-grow plants from different parts of plant</li> <li>-compare and contrast how different animals reproduce and grow</li> <li>-observe changes in an animal over a period of time (for example, by hatching and rearing chicks or a butterfly or a frog)</li> </ul>                                                                                |
| Key Vocabulary | <ul style="list-style-type: none"> <li>Matter</li> <li>heterogeneous</li> <li>mixture</li> <li>dissolve</li> <li>solution</li> <li>solute</li> </ul>                                                                                            | <ul style="list-style-type: none"> <li>Reversible</li> <li>irreversible</li> <li>insulator</li> <li>immiscible</li> </ul>                                                                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>pinnacle</li> <li>rotation</li> <li>geocentric</li> <li>heliocentric</li> <li>axis</li> <li>revolution</li> <li>planet</li> </ul>                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>hefty</li> <li>unstable</li> <li>Newton</li> <li>gravity</li> <li>buoyancy</li> <li>friction</li> <li>air resistance</li> <li>unbalanced forces</li> <li>simple machine</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>propagation</li> <li>breeding</li> <li>reproduction</li> <li>asexual</li> <li>metamorphosis</li> <li>fertilization</li> <li>cell</li> </ul>                                                                                                                                                                                                      |

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| Links | <p>Computing<br/>Data and information- Flat-file<br/>databases</p> <p>Maths<br/>Statistics</p> |  | <p>Reading<br/>Non Fiction<br/>SPACE<br/>Literacy<br/>Newspaper Report Moon Landing<br/>Astronaut's Diary-optional<br/>Geography<br/>Identification of equator, N&amp;S<br/>hemispheres/ Tropics and time zones</p> | <p>Computing<br/>Data and information- Flat-file<br/>databases<br/>Design and Technology<br/>CAMs Moving Toys<br/>PE<br/>Invasion games - Hockey<br/>Tennis<br/>Change of speed<br/>Maths<br/>Statistics</p> | <p>PSHSE<br/>Healthy me<br/>(Summer)<br/>Puberty</p> |
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