

# West Moors Middle School - Curriculum Component Profile



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| Subject: Science   | Year: 5   |
| <p>Description of learning</p> <p>Enquiry based learning to establish that:</p> <ul style="list-style-type: none"> <li>• Scientists need key practical skills e.g. accurate measuring and recording.</li> <li>• Gravity is a force.</li> <li>• Friction, air and water resistance effect moving things.</li> <li>• Magnetism is a force.</li> <li>• The Earth is part of our solar system.</li> <li>• The moon is a satellite of the Earth.</li> <li>• Day and night, and the seasons, occur because of the movement of the Earth around the Sun.</li> <li>• Materials have properties such as absorbency, rigidity, solubility.</li> <li>• Materials can be changed by forces, heat, chemicals</li> <li>• Some changes are reversible and some are not.</li> <li>• Some mixtures of materials can be separated.</li> <li>• Animals, including humans, change as they age.</li> <li>• Humans reproduce.</li> <li>• Life cycles describe the process of change and reproduction that plants and animals have.</li> <li>• Plants and animals reproduce in similar but different ways.</li> </ul> |   |
| <p>Important questions:</p> <p>What is gravity?<br/>         What does gravity do?<br/>         How do birds and planes stay up in the sky?<br/>         Why don't boats sink?<br/>         Is melting a reversible change?</p>  | <p>Bigger picture and linking:</p> <p>The solar system is only one of many such systems.</p>  |
| <p>Overlearning required:</p> <p>Day and night are caused by the Earth turning as it orbits the Sun.<br/>         Dissolving is a reversible change.</p>   | <p>WoW factor:</p> <p>Experiments with model boats.</p>   |
| <p>How will our learning values be developed?</p> <p>Fairness - through establishing the idea of a fair test.</p> <p>Respect - whilst learning about changes to girls and boys during puberty.</p> <p>Understanding - how ideas about the solar system have changed over time.</p>   | <p>How will our community values be developed?</p> <p>Creativity - using models to improve understanding of the solar system and life cycle of a flowering plant.</p> <p>Reflectiveness - to evaluate the effectiveness of an investigation</p> |
| <p>How will pupils' numeracy be developed?</p> <p>Measuring and recording.<br/>         Drawing graphs.<br/>         Learning units of time.</p>   | <p>How will pupils' literacy be developed?</p> <p>Vocabulary extension.<br/>         Presentations about the Solar System e.g. a poster designed and made by each child.</p>  |