



## Yearly Overview- Year 3- Science

	Focus	Areas to cover	Resources
<b>Autumn One</b>	Cycles in Nature	<p><b>Seasonal Cycles</b> The four seasons and Earth’s orbit around the Sun [Review from Year 1]</p> <p><b>Life Cycles</b> The life cycle: birth, growth, reproduction, death Reproduction in plants and animals</p>	<p>Judy Hindley &amp; C. J. Rawson, <i>How your Body Works</i>, (Usborne Publishing) 1995.</p> <p>Chris Oxlade, <i>The Science Behind Growth</i>, (Raintree) 2013.</p> <p>Jinny Johnson, <i>How Does it Grow: Butterfly</i>, (Franklin Watts) 2009.</p>
<b>Autumn Two</b>		<p><b>The Water Cycle</b> Most of the Earth’s surface is covered by water Evaporation and condensation Water vapour in the air, humidity Clouds: cirrus, cumulus, stratus Precipitation, groundwater</p>	<p>Catherine Chambers, <i>Drought (Wild Weather Series)</i>, (Heinemann) 2008.</p> <p>Beatrice Hollyer, <i>Our World of Water</i> (Frances Lincoln) 2009.</p> <p>Christiane Dorion &amp; Beverley Young, <i>How the Weather Works</i>, (Templar) 2011.</p>
<b>Spring One</b>	Insects	<p>Insects can be helpful and harmful to people:</p> <p><b>Helpful:</b> pollination; products like honey, beeswax, and silk; eat harmful insects</p> <p><b>Harmful:</b> destroy crops, trees, wooden buildings, clothes; carry disease; bite or sting</p> <p><b>Distinguishing characteristics:</b> Exoskeleton, chitin, six legs and three body parts: head, thorax and abdomen, most but not all insects have wings.</p> <p><b>Life cycles:</b> metamorphosis</p> <p><b>Social Insects:</b> Most insects live solitary lives, but some are social (for example: ants, honeybees, termites, wasps)</p>	<p>R. Beaumont-Parkinson, <i>The First Flower: How Pollination Works and Why Insects are So Important</i>, (AuthorHouse) 2009.</p> <p>Stephanie Turnbull, <i>Caterpillars and Butterflies</i>, (Usborne) 2006.</p> <p>Wildfowl and Wetlands Trust <a href="http://www.wwt.org.uk">www.wwt.org.uk</a> – Webcams of animals and birds.</p> <p>Emma Helborough, <i>1001 Bugs to Spot</i> (Usborne 1001 Things to Spot Series), (Usborne) 2009.</p>
<b>Spring Two</b>	The Human Body: Cells, Systems and	<p><b>Cells</b> All living things are made up of cells, too small to be seen without a microscope.</p>	<p>Leslie Jean LeMaster, <i>Cells and Tissues</i>, (Children’s Press) 1985.</p>

	Health	<p><b>The Digestive and Excretory Systems:</b> Salivary glands, taste buds Teeth: incisors, bicuspids, molars Oesophagus, stomach, liver, small intestine, large intestine Kidneys, urine, bladder, urethra, anus, appendix</p> <p><b>Taking Care of your Body: A Healthy Diet</b> The 'food pyramid' Vitamins and minerals</p>	<p>Claire Llewellyn, <i>Health and Growth (Start-up Science)</i>, (Evens Brothers) 2004.</p> <p>Paul Showers, <i>What Happens to a Hamburger</i>, (HarperCollins) 2001.</p>
Summer One	Simple Machines	<ul style="list-style-type: none"> <li>• Lever</li> <li>• Pulley</li> <li>• Wheel and axle</li> <li>• Gears: wheels with teeth and notches</li> <li>• How gears work and familiar uses (for example, in bicycles)</li> <li>• Inclined plane</li> <li>• Wedge</li> <li>• Screw</li> </ul>	<p>Anne Horvatic, <i>Simple Machines</i>, (Dutton) 1989.</p> <p>Chris Oxlade, <i>Very Useful Machines: Pulleys</i>, (Heinemann) 2004.</p> <p>Mandy Suhr, <i>Simple Technology: Wheels and Cogs</i> (Wayland) 2009.</p>
Summer Two	Magnetism	<p>Magnetism demonstrates that there are forces we cannot see that act upon objects.</p> <p>Most magnets contain iron Lodestones: naturally occurring magnets Magnetic poles: north-seeking and south-seeking poles Magnetic field (strongest at the poles) Law of magnetic attraction: unlike poles attract, like poles repel. The Earth behaves as if it were a huge magnet: north and south magnetic poles (near, but not the same as, geographic North Pole and South Pole). Orienteering: use of a magnetised needle in a compass, which will always point to the north</p>	<p>Helen J. Challand, <i>Experiments with Magnets</i> (Children's Press) 1986.</p> <p>Terry Jennings, <i>Now You Know Your Science: Magnet Magic</i>, (Franklin Watts) 2006.</p> <p>Stephen Krensky, <i>All About Magnets</i> (Scholastic) 1993.</p>