

Science – Year 5 and 6 Long term plans – Cycle 1

	Autumn 1	Autumn 2	Spring	Summer 1	Summer 2
Year 5 & 6 (3)	<p><u>Electricity</u></p> <ul style="list-style-type: none"> * Know what electricity is and how it works. * Know the components in a series circuit. * Know the effects and consequences of changing circuit components and batteries. 	<p><u>Animals, Including Humans</u></p> <ul style="list-style-type: none"> * Know what blood is made of and why we need it. * Know why our bodies need nutrients and how they are transported. * Know what the circulatory system is. * Know what the heart is like inside and how it works. * Know who influenced what we know about our circulatory system. * Know what we can do to keep healthy. 	<p><u>Light</u></p> <ul style="list-style-type: none"> * Know how light travels. * Know what colour light is made of. * Know how light helps us to see objects. * Know what surfaces make the best reflectors. * Know why we see objects as particular colours. * Know what happens to the appearance of objects when placed in water. 	<p><u>Evolution and Inheritance</u></p> <ul style="list-style-type: none"> * Know how living things have changed over time and how we know this. * Know how life on Earth has changed over time. * Know what DNA is and what it does. * Know that not all offspring are identical to their parents. * Know who Darwin and Wallace are and the evidence they share to argue the case for evolution. * Know what is meant by the survival of the fittest and how animals have adapted and evolved to suit their environment. 	<p><u>Living things and their habitats.</u></p> <ul style="list-style-type: none"> * Know who Carl Linnaeus was and what he did. * Know what the parts of the digestive system are. * Know how to classify invertebrates we know. * Know how to classify invertebrates we don't know. * Know what animals I can classify. * Know what plants and animals exist in our local environment.

Science – Year 5 and 6 Long term plans – Cycle 2

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 5 & 6	<p><u>Properties and changes of materials</u></p> <ul style="list-style-type: none"> * Know the different properties of materials and how we use them. * Know what a solution is. * Know what a mixture is. * Know how we can separate materials from a mixture. * Know how we can separate materials 	<p><u>Animals, Including Humans</u></p> <ul style="list-style-type: none"> * Know what the human timeline is. * Know how we change into adults. * Know how human and animal gestation and lifespan compare. 	<p><u>Forces (L1 – 3)</u></p> <ul style="list-style-type: none"> * Know when friction is helpful and when it is not. * Know what the effect of air resistance is. * Know what the effect of water resistance is. 	<p><u>Earth and Space</u></p> <ul style="list-style-type: none"> * Know what the planets are in our solar system. * Know how our view of the Moon changes in a lunar moon. * Know why the rotation of the Earth results in night and day. * Know why the Earth's tilt (axis) is responsible for the seasons 	<p><u>Living Things and Their Habitats</u></p> <ul style="list-style-type: none"> * Know the difference between a mammal and an amphibian's life cycle. * Know the difference between an insect and a bird's life cycle. * Know what is similar and different between the life cycles of a mammal, an insect, an amphibian and a bird. * Know who Maria Merion was and what she did. * Know how living things reproduce. 	<p><u>Forces continued (L4 – 6)</u></p> <ul style="list-style-type: none"> * Know who Galileo Galilei was. * Know how levers help us. * Know how pulleys and gears help us