

Springfield Primary Academy

Inspiring Futures: Making Memories
 Learning Creatively with:
 High Expectations. Integrity. Respect. Resilience. Determination.



Year 6 Science Curriculum Map

Autumn 1	Spring 1	Summer 1
<p>L.O. to investigate light and seeing</p> <ul style="list-style-type: none"> • Understand that light appears to travel in straight lines. • Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eyes. • Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them, and to predict the size of shadows when the position of the light source changes. • Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes. <p><i>build on the work on light in year 3, exploring the way that light behaves, including light sources, reflection and shadows. They should talk about what happens and make predictions</i></p> <p>L.O. to work scientifically</p> <ul style="list-style-type: none"> • Present findings in written form, displays and other presentations. • Use test results to make predictions to set up further comparative and fair tests. 	<p>L.O. to understand evolution</p> <ul style="list-style-type: none"> • Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. • Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. • Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. <p><i>introduced to the idea that characteristics are passed from parents to their offspring, for instance by considering different breeds of dogs, and what happens when, for example, labradors are crossed with poodles. They should also appreciate that variation in offspring over time can make animals more or less able to survive in particular environments, for example, by exploring</i></p>	<p>L.O. to work scientifically</p> <ul style="list-style-type: none"> • Plan enquiries, including recognising and controlling variables where necessary. • Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work. <p>L.O. to understand electrical circuits</p> <ul style="list-style-type: none"> • Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. • Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches. • Use recognised symbols when representing a simple circuit in a diagram. <p><i>Building on their work in year 4, pupils should construct simple series circuits, to help them to answer questions about what happens when they try different components, for example, switches, bulbs, buzzers and motors. They should learn how to represent a simple circuit in a diagram using recognised symbols. Note: Pupils are expected to learn only about series circuits, not parallel circuits. Pupils should be taught to take the necessary precautions for working safely with electricity</i></p>

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<ul style="list-style-type: none"> • Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments. 	<p><i>how giraffes' necks got longer, or the development of insulating fur on the arctic fox. Pupils might find out about the work of palaeontologists such as Mary Anning and about how Charles Darwin and Alfred Wallace developed their ideas on evolution.</i></p> <p>L.O. to work scientifically</p> <ul style="list-style-type: none"> • Present findings in written form, displays and other presentations. • Use test results to make predictions to set up further comparative and fair tests. • Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments. • Plan enquiries, including recognising and controlling variables where necessary. • Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work. 	<p>perseverance. Determination.</p>
<p>Autumn 2</p>		<p>Summer 2</p>
<p>L.O. to understand animals and humans</p> <ul style="list-style-type: none"> • Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. • Recognise the importance of diet, exercise, drugs and lifestyle on the way the human body functions. • Describe the ways in which nutrients and water are transported within animals, including humans. 		<p>L.O: to understand living things and their habitats.</p> <ul style="list-style-type: none"> • describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals • give reasons for classifying plants and animals based on specific characteristics <p>L.O. to work scientifically</p>

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<p><i>build on their learning from years 3 and 4 about the main body parts and internal organs (skeletal, muscular and digestive system) to explore and answer questions that help them to understand how the circulatory system enables the body to function. Pupils should learn how to keep their bodies healthy and how their bodies might be damaged – including how some drugs and other substances can be harmful to the human body</i></p> <ul style="list-style-type: none">• Plan enquiries, including recognising and controlling variables where necessary.• Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work.	<p>High Expectations. Integrity. Respect. Resilience.</p>	<ul style="list-style-type: none">• Present findings in written form, displays and other presentations.• Use test results to make predictions to set up further comparative and fair tests
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