

SCIENCE – YEAR 6	
AUTUMN TERM	
<p>Pupils will have the opportunity to develop the following skills; Continue building on the Year 5 Working Scientifically skills and include:</p> <ul style="list-style-type: none"> • Ask questions and develop lines of enquiry based on observations. • Make predictions using scientific knowledge and understanding. • Plan and design investigations and experiments to make observations and test predictions. • Identify independent, dependent and control variables and other factors to be taken into account when collecting evidence and data. • Select appropriate techniques, apparatus, and materials during fieldwork and laboratory work, working safely. • Make and record observations and measurements using a range of methods for different investigations. • Evaluate the reliability of methods and suggest possible improvements. • Present observations and data using appropriate methods, including tables and graphs. • 	<p>Pupils will have the opportunity to develop their knowledge about:</p> <p>Living things and their habitats (Classification)</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>Animals including Humans (Organ Systems)</p> <ul style="list-style-type: none"> • Describe the ways in which nutrients and water are transported within animals, including humans. • Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood • Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function • Working scientifically project on effect of exercise on pulse/ breathing rate.
SPRING TERM	
<p>Pupils will have the opportunity to develop the following skills; Continue building on the Year 5 Working Scientifically skills for KS2 and include:</p> <ul style="list-style-type: none"> • Ask questions and develop lines of enquiry based on observations. • Make predictions using scientific knowledge and understanding. • Plan and design investigations and experiments to make observations and test predictions. • Identify independent, dependent and control variables and other factors to be taken into account when collecting evidence and data. • Use classification keys. • Select appropriate techniques, apparatus, and materials during fieldwork and laboratory work, working safely. • Make and record observations and measurements using a range of methods for different investigations. 	<p>Pupils will have the opportunity to develop their knowledge about:</p> <p>Light</p> <ul style="list-style-type: none"> • Recognise 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 eye • 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 • Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. <p>Electricity</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

<ul style="list-style-type: none"> • Evaluate the reliability of methods and suggest possible improvements. • Present observations and data using appropriate methods, including tables and graphs. 	<ul style="list-style-type: none"> • 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 (only for series circuits) • Use recognised symbols when representing a simple circuit in a diagram.
SUMMER TERM	
<p>Working scientifically – pupils will have the opportunity to develop the following skills:</p> <p>Continue building on the Year 5 Working Scientifically skills and include:</p> <ul style="list-style-type: none"> • Ask questions and develop lines of enquiry based on observations. • Make predictions using scientific knowledge and understanding. • Plan and design investigations and experiments to make observations and test predictions. • Identify independent, dependent and control variables and other factors to be taken into account when collecting evidence and data. • Select appropriate techniques, apparatus, and materials during fieldwork and laboratory work, working safely. • Make and record observations and measurements using a range of methods for different investigations. • Evaluate the reliability of methods and suggest possible improvements. • Present observations and data using appropriate methods, including tables and graphs. • 	<p>Pupils will have the opportunity to develop their knowledge of:</p> <p>Evolution and Inheritance (Fossil Record)</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 <p>Evolution and Inheritance (Adaptation and Evolution)</p> <ul style="list-style-type: none"> • 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>KS3 Chemistry</p> <p>Undertake an investigation on chemistry in preparation for KS3 e.g., candles, beakers and burn time.</p>