



TWO RIVERS  
HIGH SCHOOL

Two Rivers High School

Explorers – Year 9 & 10

Knowledge and Skills

	Autumn 2022-23		Spring 2022-23		Summer 2022-23	
	Light - Shadows	Nutritio n, diet and exercis e	Teeth and digesti on	Forces and magn ets	States of Matter	How does your garden grow?
<b>Key content:</b>						
To notice that light is reflected from surfaces.						
To recognise that he/she needs light in order to see things and that dark is the absence of light						
To recognise that light from the sun can be dangerous and list that there are ways to protect eyes						
To recognise that shadows are formed when the light from a light source is blocked by a solid object.						
To find patterns in the way that the size of shadows change.						
To identify that animals, including humans, need the right types and amount of nutrition,						



## TWO RIVERS

### HIGH SCHOOL

and that they cannot make their own food; they get nutrition from what they eat.						
To identify what different food groups do to support the body						
To identify the consequences of not eating correctly.						
To describe the simple functions of the basic parts of the digestive system in humans.						
To identify the different types of teeth in humans and their simple functions.						
To compare how things move on different surfaces.						
To notice that some forces need contact between two objects but magnetic forces can act at a distance.						
To compare and group together a variety of everyday materials on the basis of whether or not they are attracted to a magnet, and identify some magnetic materials.						
To observe how magnets attract or repel each other and attract some materials and not others.						
To describe magnets as having two poles.						
To predict whether two magnets will attract or repel each other, depending on which poles are facing.						
To compare and group materials together, according to whether they are solids, liquids or gases.						



## TWO RIVERS

### HIGH SCHOOL

To observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius						
To identify the part played by evaporation and condensation in the water cycle, and associate the rate of evaporation with temperature.						
To identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers						
To explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow), and how they vary from plant to plant.						
To investigate the way in which water is transported within plants.						
To explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal						
<b>Working scientifically key skills:</b>						
To identify the importance of lab safety						
To list how to remain safe in the lab						
To ask relevant questions and use different types of scientific enquiries to answer them						
To set up simple practical enquiries, comparatives and fair tests.						



TWO RIVERS

HIGH SCHOOL

To identify differences, similarities or changes related to simple scientific ideas and processes.						
To use straightforward scientific evidence to answer questions or support their findings.						
To use results to draw simple conclusions.						
To gather, record, classify and present data.						
To record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables						
To report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.						
To report on findings from enquiries.						
To set up simple practical enquiries, comparatives and fair tests.						
To make systematic observations.						



**TWO RIVERS**  
HIGH SCHOOL

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	Electricity	Skeleton and movement	Rocks and Fossils	Habitats	Sound
<b>Key content:</b>					
To identify common appliances that run on electricity					
To construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers					
To identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery.					
To recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.					
To recognise some common conductors and insulators, and associate metals with being good conductors.					
To identify that humans and some other animals have skeletons and muscles for support, protection and movement.					



## TWO RIVERS

### HIGH SCHOOL

To recognise that soils are made from rocks and organic matter.					
To describe in simple terms how fossils are formed when things that have lived are trapped within rock.					
To compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.					
To recognise that living things can be grouped in a variety of ways					
To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment					
To recognise that environments can change and that this can sometimes pose dangers and have an impact on living things.					
To construct and interpret a variety of food chains, identifying producers, predators and prey.					
To identify how sounds are made, associating some of them with something vibrating.					
To recognise that vibrations from sounds travel through a medium to the ear.					
To find patterns between the pitch of a sound and features of the object that produced it.					
To find patterns between the volume of a sound and the strength of the vibrations that produced it					



TWO RIVERS

HIGH SCHOOL

To recognise that sounds get fainter as the distance from the sound source increases.					
<b>Working scientifically key skills:</b>					
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