Year 6 Learning Journal – Science 2023-24

	Animals Including Humans	Light	Evolution & Inheritance	Electricity	Classifying Living Organisms	End of Year Target	
Mastery						Mastery	
%						Mastery	
Secure						Secure	
%							
Developing						Developing	
%						Developing	
Emerging						Emerging	
%						Lineignig	

Term	Progress	Topic	Experiment Skills
Autumn	What are you most confident with?	•	□ Predicting □ Listing equipment □ Writing a method □ Results Table
	What do you need to develop?		 □ Predicting □ Listing equipment □ Writing a method □ Showing results in a table or graph □ Describing results □ Writing a conclusion □ Suggesting improvements (Evaluation)
Spring	What are you most confident with?		□ Predicting □ Listing equipment □ Writing a method □ Showing results in a table or graph □ Describing results □ Writing a conclusion □ Suggesting improvements (Evaluation)
	What do you need to develop?		 □ Predicting □ Listing equipment □ Writing a method □ Showing results in a table or graph □ Describing results □ Writing a conclusion □ Suggesting improvements (Evaluation)
Summer	What are you most confident with?		 □ Predicting □ Listing equipment □ Writing a method □ Showing results in a table or graph □ Describing results □ Writing a conclusion □ Suggesting improvements (Evaluation)
	What do you need to develop?		 □ Predicting □ Listing equipment □ Writing a method □ Showing results in a table or graph □ Describing results □ Writing a conclusion □ Suggesting improvements (Evaluation)

	Emerging	Developing	Secure	Mastery
Animals Including Human	Identify the heart from body organs	State the function of the heart	Describe the functions of the heart, blood vessels and blood	Describe how blood moves around the heart
	Name the main parts of the human circulatory system	Define the function of different blood vessels	Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function	Explain issues surrounding restricted arteries
	Define the uses of different drugs	Describe the impact of drugs/alcohol on health	Describe how nutrients and water are transported within animals, including humans.	Explain how lifestyle choices can affect health and suggest improvements
Light	State that light appears to travel in straight lines	Annotate a diagram to represent	Draw a diagram to represent light	Draw a diagram to represent light
	Recall light is reflected off surfaces so that we can see it	light Define reflection	Define reflection using examples	Explain the difference between regular and irregular reflection
	Recall that shadows can	Describe how a periscope works	Describe how a periscope works and represent in a diagram	Explain how reflection can be used to help us see, giving examples
	change Describe how to create a shadow	Describe how a shadow can change shape	Conduct an experiment to investigate shadow changes	Design an experiment to investigate shadow changes
Ce	State some inherited characteristics		Suggest why offspring look similar but not identical to their parents	Compare inherited and environmental characteristics
Evolution and Inheritance	State characteristics of a camel that help it survive	Sort characteristics into inherited or environmental characteristics Describe an organism's adaptation that help it to survive in the habitat Describe the purpose of a fossil Define natural selection	Explain how an organism's adaptation helps it to survive in the habitat	Predict how an organism would have to adapt to suit a different habitat
	Suggest adaptations of a cactus or simple plant Define Extinct		Use evidence from fossils to suggest some conclusions about life in the past	Use evidence from fossils, compare extinct animals with those that are living
Evol	Identify how living things have changed over time	Define Hatural Selection	Describe how natural selection causes living things to evolve over time	Explain why the theory of evolution was not accepted at first
	Identify components from their symbol	Identify components from their symbol and definitions Use a voltmeter to measure voltage independently Identify problems in a circuit	Describe how the brightness of a bulb is affected by the voltage/number of cells in the circuit	Explain how the brightness of a bulb is affected by the voltage/number of cells in the circuit
city	Use a voltmeter to measure		Describe problems in a circuit	Explain how to fix issues in a circuit
Electricity	voltage, with support Identify problems in a circuit		Recognise materials which are insulators and materials which are conductors	Compare the results and the output of their circuit by changing the connections and recording
	Create a simple circuit that can turn on lights, with support	Create a simple circuit that can turn on lights	Describe the effects on components from use of a variable resistor; a bulb is brighter or dimmer, a buzzer is louder or softer	Explain why an individual component's output is affected by turning a variable resistor
Classifying Living Organisms	State different types of living things Name the six kingdoms of life		Describe the differences between the six kingdoms of life	Explain the common characteristics that all living things share
	Recall some kingdoms of life	Name the groups of classification	Identify living things belonging to each group by their characteristics	Explain how to identify and classify living things, identifying the
	Name some groups of classification Define "Vertebrates"	Identify the different types of vertebrates	Describes some different vertebrates and gives information that helps to help classify them	differences between the groups Explain why vertebrates are classified into certain groups

