Science KPI Indicators for 2023-24

Here are the KPI's for Science for the 2023-24 academic year. The table indicates the KPI and the milestones that will ensure students make expected progress within their year group.

Working scientifically is woven into all units, across both key stages, ensuring that all students are competent in investigating science.

Year 6:

KPI	Milestones
Biology	
Nature Library	Describe the life cycles of butterflies
	Describe the behaviour of invertebrates in their habitats
	Describe how classification works
	Describe the key features of vertebrates
	Describe the key features of invertebrates
	Describe the features of the 3 Kingdoms: Fungi, Bacteria and Protista
The Body	Identify the main parts of the circulatory system and the heart
	Describe the functions of the heart
	Describe the different blood vessels in body and what they transport throughout the body
	Describe the four main food groups
	Are able to take their pulse rate and collect data on the effect of exercise on their pulse rate
	Describe how exercise forms part of a healthy lifestyle
	Describe the effects of drugs and smoking on our health
Everything Changes	Describe the advantages and disadvantages of selective breeding of food
	Describe how living things are adapted to their environment
	Describe why living things become extinct
	Explain how fossils are used to look into the past
	Describe natural selection
Chemistry	
Marvellous Mixtures	Describe the effect of dissolving, evaporating & condensing on separating solutions

	Write a method of how to separate pure salt from a rock salt mixture
	Describe what happens when oil and lemonade mix

Physics	
Electricity	Make simple Circuits
	Explain the role of electrons in circuits and how resistance occurs
	Identify electrical symbols
	Can construct a burglar alarm
Light	Create a model to explain how light travels
	Describe how a pinhole camera works
	Investigate how different variables affect shadow sizes; and then describe how they form
	Draw a labelled ray diagram explaining i=r
	Explain what happens when light travels through a lens
	Explain why a prism forms a spectrum and how secondary colours are formed