

Scientific Enquiry at Captain Webb: Our BIG Science Questions

	Comparative and Fair Testing	Identifying, Classifying and Grouping	Pattern Seeking	Observation Over Time	Research
Year 1	Which material will stop Ted from getting wet? (Everyday Materials)	What plants and trees grow in our local area? (Plants)	Is there a pattern in the types of materials that are used to make objects in a school? (Everyday Materials)	Which season is the coldest? (Seasonal Changes) Maths measure link: Months of the year	Does the poo belong to an omnivore, carnivore or a herbivore? (Animals including Humans)
Year 2	What conditions are best for plants to grow? (Plants) What material makes the best bridge? (Materials)	Grouping living, dead and never alive things (Living Things and their Habitats) Maths statistic link: Simple table	Which habitats do worms prefer? Where can we find the most worms? (Living Things and their Habitats) Maths statistic link: Tally chart	Planting seeds and observing the changes (Plants) Maths measure link: Measure height	What food do you need to be healthy? (Animals including Humans)
Year 3	Which surface is best to stop you slipping? (Forces and Magnets) Maths measure link: Read with increased accuracy, and record and compare the time How does the distance between the puppet and the light source affect the size of the shadow created? (Light and Dark) Maths measure link: Measure and compare lengths	Can you group these rocks based on their appearance and properties? (Rocks)	Do male humans have larger skulls than female humans? (Animals including Humans)	What happens to celery when it is left in a glass of coloured water? (Plants)	How many bones does the human body have? Why do we need bones? Why do we need muscles? What is a muscle? (Animals including Humans) Maths statistic link: Interpret data
Year 4	How does the volume of a drum change as you move further away from it? (Sound) Does the type of chocolate affect the time it takes to melt? (States of Matter) Maths statistic link: Time graph	Which animals live in Dawley Pools? (Living Things in their Habitats) Maths statistic link: Pictogram	Which room in the school has the most electrical sockets? (Electricity) Maths statistic link: Bar chart	How does the volume of sound change over time in different parts of the school? (Sound) Maths measure link: Perimeter	What are the functions of the main parts of the digestive system? (Animals including Humans)

Year 5	<p>Which shape parachute takes the longest to fall? (Forces)</p> <p>Which fruit makes the best battery? (Electricity)</p>	Which material would be the most effective to create a blackout curtain? (Materials)	Does the child with the longest legs run the fastest? (Animals including Humans)	<p>How does a container of salt water change over time? (Materials)</p> <p>Maths statistic link: Line graph (one set of data and GD: two sets of data)</p>	What the components of blood and what's their purpose? (Animals including Humans)
Year 6	How does the type of liquid affect the angle at which the light refracts? (Light)	Compare the skeletons of apes, humans, and Neanderthals – how are they similar, and how are they different? (Evolution)	<p>Is there a relationship between a mammal's size and its gestation period? (Animals including Humans)</p> <p>Maths measure link: Converting between kilograms and grams (including decimal places)</p>	<p>Which classroom in school is the dirtiest? (Living Things and their Habitats)</p> <p>Why does the moon change every night? (Earth and Space)</p>	<p>What are the planets that make up our solar system? (Earth and Space)</p> <p>Child led research: E.g. Why do some people need to wear glasses to see clearly? Why some people are colour blind? (Light)</p> <p>What did Charles Darwin discover about the finches when he visited the Galapagos islands? (Evolution)</p> <p>Maths statistic link: Pie charts and the mean</p>