	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Observing Over Time	How does my sunflower change each week? In which season does it rain the most? How does my height change over the year?	How much food and drink do I have over a week? What happens to my bean after I have planted it?	What happens to plants in different soils? If we magnetise a pin, how long does it stay magnetised for?	How does an egg shell change when it is left in cola? How does the level of water in a container change when left on a window ledge?	Observe the life cycle of an insect found in the local environment and compare this to the life cycle of insect found around the world. How does a dish of salt water change over time?	How does my heart rate change over the day?
Pattern Seeking	Is there a pattern in the types of materials that are used to make different objects in a school.	Which habitat do woodlice prefer? - Where can we find the most woodlice? Do bigger seeds grow into bigger plants?	Which foods give us most energy? Does the size and shape of a magnet affect how strong it is? How do shadows move and change shape?	Is there a specific type of habitat that minibeasts prefer on our school field?	Do all objects fall through water in the same way? Is there a pattern between the size of a planet and the time it takes to travel around the sun?	How does a mirror work? How do we increase the number of reflections? Is there a pattern between the size and shape of a bird's beak and the food it will eat?
Research	Do all animals have the same senses as humans? Are there plants that flower every season? What are they? Which materials can be recycled?	How does the habitat of the Australian Rainforest compare with the Australian outback?	Who was Mary Anning and what was she famous for? Can you name the different food groups? What would be your 'perfect' balanced meal? What are all the different ways that seeds can be dispersed?	How do dentists repair/fix damaged teeth? Can we find other animals to add complexity to our classification key?	Can you provide a range of factual information about a planet in our solar system? What are the stages in the life cycle of an insect/amphibian/bird? Research the features of reusable coffee cups.	Who were 'The Fathers of Electricity?' What happened when Charlies Darwin visited the Galapagos Islands?

Identifying & Classifying	How can we sort the leaves that we collected on our walk? How can we organise all the zoo animals?	Which types of materials are used for which purpose? Which offspring belong to which animal?	Can I identify and classify different rocks? Which foods belong in which food groups? Which materials are magnetic? How do skeletons vary between animals?	How can we organise the different types of teeth we have into groups? Use a simple series circuit to test and group whether an object is a conductor or not.	Can you label and name all the forces acting on objects in a range of situations e.g. when a car is travelling on a road. Can you observe and identify all the phases in the cycle of the moon?	How are certain animals adapted to their environments? Can I classify animals based on specific characteristics? Create a classification key for a group of organisms.
Comparative Tests	Is our sense of smell better when we can't see?	Which material is most waterproof? Do cress seeds grow quicker inside or outside?	Which magnet is the strongest?	Which material is best for using to muffle sound in ear defenders? Which material is the best conductor of electricity?	Does the length of a spinner's wings affect how long it takes to fall? Which materials are the best for making a reusable coffee cup? Design and carry out comparative tests between 2 or more materials. How does the material a surface is made from effect the amount of friction it produces?	What happens to the brightness of the bulb when I change the voltage of cells in a circuit? Which objects produce the darkest shadows? Which type of exercise has the greatest effect on our heart rate?
Fair Tests			How does the length of the carnation stem affect how long it takes for the food colouring to dye the petals?	How does the volume of a drum change as you move further away from it? How long does it take different sized ice lollies to melt?	How does the temperature of water affect how long it takes for sugar to dissolve? How does age affect a human's reaction time?	How does the thickness of a wire affect how bright the lamp is?