Progression in Scientific Enquiry

EARLY YEARS				
EYFS Framework Understanding the World		**Opportunities for Enquiry**	**Key Vocabulary**	**Links to Learning in KS1 (Year 1)**
- Explore the natural world around them, making observations and drawing pictures of animals and plants; - Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class; - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.	**Curiosity**	- Encourage through their interests - Explore different environments regularly - Tinker tables	Imagine, build, plan, design, measure, sort, mix, join, paint, cut, thread, stick, mark, dab, press, print.	Pupils in years 1 and 2 should explore the world around them and raise their own questions. They should experience different types of scientific enquiries, including practical activities, and begin to recognise ways in which they might answer scientific questions.
	Animals	- Mini beast hunt - Bird watching - Small world play to allow exploration of animals from around the world e.g. blue whale, orangutan - Dove Marine into school - Beach visits/rock pooling	Human, animal, herbivore, carnivore, omnivore, fish, birds, insect. *Names of common pets and animals in the natural world.*	**Animals including humans** 1. Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. 2. Identify and name a variety of common animals that are carnivores, herbivores and omnivores. 3. Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).
	Plants	- Plant seeds - Care for plants - Visit the Station Masters Garden, Quarry, Rising Sun - Dissect plants - Draw plants and trees	Tree, petals, trunk, fruit, branch, roots, leaves, bulb, flowers, seed, stem.	**Plants** 1. Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. 2. Identify and describe the basic structure of a variety of common flowering plants, including trees.
	Materials	- Construction - Sorting (soft, smooth, rough) - Sink or float? - Explore magnets - Loose parts - Build a marble run from recycled materials	Material, metal, wood, rock, plastic, glass, paper, hard, soft, fabric, material, smooth, shiny, rough.	**Everyday Materials** 1. Distinguish between an object and the material from which it is made. 2. Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. 3. Describe the simple physical properties of a variety of everyday materials. 4. Compare and group together a variety of everyday materials on the basis of their simple physical properties.
	Human body	- Explore senses e.g. taste - is it sweet, sour, bitter and salty?	Head, eyes, nose, mouth, ears, hands, fingers, feet, toes, arm, face, hair, leg, back, knee, elbow.	**Animals including humans** 4. Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.
	Changes	- Weather station/chart - Make a wind sock, wind chimes, rainwater collector - Observe melting - Explore dissolving - Cornflour 'gloop'	Summer, Spring, Autumn, Winter, dark, light, day, night, season, Moon, Sun, star, planet, Earth, hot, cold, warm, melt, freeze, frozen.	**Seasonal Changes** 1. Observe changes across the four seasons. 2. Observe and describe weather associated with the seasons and how day length varies.

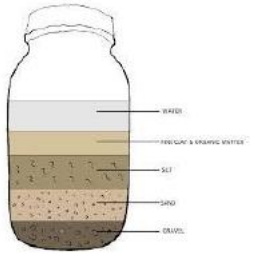
YEAR 1					
Curriculum Objectives	**Observing over time**	**Pattern Seeking**	**Classifying**	**Comparative/Fair testing**	**Researching**
Plants 1. Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. 2. Identify and describe the basic structure of a variety of common flowering plants, including trees.	Observe a tree throughout the year. Observe a trail/patch to identify how plants change through the year. *How did Beatrix Potter help our understanding of mushrooms and toadstools?*	Based on observations, encourage children to identify patterns e.g. after comparing the size of leaves on different plants, children may suggest "bigger plants have bigger leaves." *Do trees with bigger leaves lose their leaves first in autumn?* *Is there a pattern in where we find moss growing in the school grounds?*	Allow children to classify leaves, flowers, and seeds, choosing their own criteria. *How can we sort the leaves that we collected on our walk?*	*Not relevant* *Which type of compost grows the tallest sunflower?* *Which tree has the biggest leaves?*	Use secondary sources to name plants (including trees) based on observations of leaves, seeds, flowers, buds, and bark (Apps: Leafsnap UK and SEEK INaturalist, textbooks, Woodland Trust resources). *What are the most common British plants and where can we find them?* **Famous Scientist:** Beatrix Potter - Author and botanist
Animals including humans 1. Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. 2. Identify and name a variety of common animals that are carnivores, herbivores and omnivores. 3. Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). 4. Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.	Observe animals in the local environment throughout the year. *What strange ideas did Italian scientist Luigi Galvani have about animals in 1780? Why did he think that?* *How did French doctor Rene Laennec's ideas improve medicine?*	Children generate questions for investigation such as: Do people with longer arms have longer legs? Can more people identify prawn cocktail crisps than cheese and onion? Do all animals with … have …? *Do you get better at smelling as you get older?*	Classify animals they have seen/have first-hand experience of, choosing their own criteria to do so. Classify animals based on physical structure. Classify animals they have had first-hand experience of based on what they eat (plants, other animals, both). Complete this after the research. *How can we organise all of the zoo animals?* *What are the names for all parts of our bodies?*	Can I taste the difference between different flavoured crisps/skittles/smarties? *Is our sense of smell better when we can't see?*	Use secondary sources to name animals seen in the local environment that they may not currently be able to name (birds: magpies, blackbird) Research what animals they have first-hand experience of eat. *How are the animals in Australia different to the ones we find in Britain?* *Do all animals have the same senses as humans?* **Famous Scientist:** Chris Packham- Animal Conservationist

Everyday Materials 1. Distinguish between an object and the material from which it is made. 2. Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. 3. Describe the simple physical properties of a variety of everyday materials. 4. Compare and group together a variety of everyday materials on the basis of their simple physical properties.	*Not relevant* *How are building materials different now to when Queen Elizabeth I was on the throne?* *What ideas did Chinese monks have in 800CE that led to their discovery of gun powder?*	*Not relevant* *Is there a pattern in the types of materials that are used to make objects in a school?*	Classify objects made from same material (e.g. lots of things made from plastic) Classify one object made from different materials (e.g. cups made of different materials) Classify different fabrics based on texture (e.g. make a feely-box for a baby) Classify paper/plastic/fabrics *We need to choose a material to make an umbrella. Which materials are waterproof?* *Which materials float and which will sink?*	Test objects made of different materials to see how effective they are e.g. - umbrellas/hats/coats for waterproofness, - cloths/nappies for absorbency, socks for elasticity, - bounciness of balls, - sunglasses for protection from the sun, - picnic plates for stiffness, - door mats for wiping feet, - different paper for writing on/painting etc. *Which materials are the most flexible?* *Which materials are the most absorbent?*	*Not relevant* *How are bricks made?* *Which materials can be recycled?* **Famous Scientists:** William Addis - Toothbrush Inventor Charles Mackintosh - Waterproof coat
Seasonal Changes 1. Observe changes across the four seasons. 2. Observe and describe weather associated with the seasons and how day length varies.	Take weather measurements and make observations over time. Record/photograph what children are wearing Make observations of daylight hours e.g. send a diary and toy bear home children to record their activities. The bear must go to bed when it is dark and the children must record the time this happens (this gathers evidence, over time, that day length changes and so do the activities).	At the end of the year, look for patterns in evidence e.g. Does it rain more in the spring? Do we have more sunny days in the summer? Which was the coldest month? *Does the wind always blow the same way?*	*Not relevant* *How would you group these things based on which season you are most likely to see them in?*	*Not relevant* *In which season does it rain the most?*	*Not relevant* *Are there plants that are in flower in every season?* *What are they?* **Famous Scientists:** Dr Steve Lyons (Extreme Weather) Holly Green (Meteorologist)

YEAR 2					
Curriculum Objectives	**Observing over time**	**Pattern Seeking**	**Classifying**	**Comparative/Fair testing**	**Researching**
Plants 1. Observe and describe how seeds and bulbs grow into mature plants. 2. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	Plant seeds and bulbs and observe how they grow. *What ideas did botanist Alan Tansley have about habitats in 1935?* DO NOT LOOK AT PLANTS GROWN IN DIFFERENT CONDITIONS – YEAR 3 OBJECTIVE	Children generate questions for investigation such as: Do big seeds germinate more quickly? Does it matter which way round you plant a bulb or seed? Which comes first, the root or the shoot? *Do bigger seeds grow into bigger plants?*	Based on children's own criteria: classify seeds/bulbs *How can we identify the trees that we observe on our tree hunt?*	*Not relevant* *Is there the same level of light in the evergreen wood compared with the deciduous wood?*	Look at packets to decide how to plant and care for seeds e.g. how much water do they need? Do they need shade or full sun? *How does a cactus survive in a desert with no water?* **Famous Scientists:** Captain Cook- Botanist Agnes Arber - Botanist
Living things and their habitats 1. Explore and compare the differences between things that are living, dead, and things that have never been alive. 2. Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other. 3. Identify and name a variety of plants and animals in their habitats, including micro-habitats. 4. Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.	Explore animals in micro-habitats throughout the year (under rocks, logs, bushes and long grass) Explore plants in micro-habitats throughout the year *How did George Washington Carver use science to improve farming in America?*	Children generate questions for investigation. E.g. Are there more daisies in the meadow or field? Where do you see more ivy? Where do you see more butterflies? Where do snails live? *What conditions do woodlice prefer to live in?* *Which habitat do worms prefer – where can we find the most worms?*	Find things that are living/dead/things that have never been alive. Classify things found in the environment using own criteria leading to living, dead, never been alive. Classify minibeasts fund in the environment based on physical structure. Classify plants found in the environment. *How would you group these plants and animals based on what habitat you would find them in?*	*Not relevant* *Do amphibians have more in common with reptiles or fish?*	Use secondary sources to name plants, animals seen in local environment. Research what animals they have first-hand experience of eat. *How does a cactus survive in a desert with no water?* *How does the habitat of the Arctic compare with the habitat of the rainforest?* **Famous Scientists:** Rachel Carson- Marine Pollution Liz Bonnin - Conservationist

Animals including humans 1. Notice that animals, including humans, have offspring which grow into adults. 2. Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). 3. Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	Observe a life cycle (caterpillars, chicks, farm animals) *How did Florence Nightingale use maths to help her come up with ideas to improve nursing?*	*Not relevant*	Based on children's own criteria: Classify food items, classify animals *Which offspring belongs to which animal?*	*Not relevant* *Do bananas make us run faster?*	Research adult animals and their young e.g. googling pictures and names of animals babies – swan and cygnet. *What do you need to do to look after a pet dog/cat/lizard and keep it healthy?* **Famous Scientists:** Florence Nightingale - Pioneer of modern nursing in GB Elizabeth Garrett Anderson - First British female physician and surgeon Steve Irwin - Wildlife expert Robert Winston - Human Scientist
Uses of everyday materials 1. Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. 2. Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	*Not relevant* *How have processes such as glass making changed over time?*	*Not relevant*	Based on children's own criteria, classify materials e.g. samples of wood, metal, plastic etc *Which materials are shiny and which are dull?* *Which materials will let electricity go through them and which will not?*	Test materials for different uses. E.g. Which material can you use to make an aeroplane? Which fabric would you use for curtains? Which materials are best for Cinderella's mop? Which fabric would you use for Elastigirl's costume? *Which shapes make the strongest paper bridge?* *Which material would be best for the roof of the little pig's house?*	*How have materials we use changed over time?* *How are plastics made?* **Famous Scientists:** Charles Macintosh- Waterproof material John MacAdam- Tarmac

YEAR 3					
Curriculum Objectives	**Observing over time**	**Pattern Seeking**	**Classifying**	**Comparative/Fair testing**	**Researching**
Plants 1. Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. 2. 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. 3. Investigate the way in which water is transported within plants. 4. Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.	Observe celery (with roots and leaves) or white carnations in coloured water. Gather seeds and photographic evidence of blossoms/flowers and berries on a particular trail throughout year.	Investigate what happens when conditions are changed e.g. more/less light/water, change in temperature, nutrients *What colour flowers do pollinating insects prefer?*	Classify flowers based on the children's own criteria (good to assess prior knowledge) *How many different ways can you group our seed collection?*	*Not relevant* *Which conditions help seeds germinate faster?* *Does the length of the carnation stem affect how long it takes for the food colouring to dye the petals?*	Research functions of parts of flowering plants, different methods of seed dispersal or pollination **Famous scientists:** Joseph Banks- Botanist Ahmed Mumin Warfa – Botanist
Animals, including humans 1. Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. 2. Identify that humans and some other animals have skeletons and muscles for support, protection and movement.	*Not relevant* *How did the chemist Marie Maynard Daly use science to help us improve our diets?* *How did James Lind explain the cause of scurvy and what was his evidence?*	Children to generate own questions for investigation: *Objective 1:* Do 'healthy' drinks have less sugar? Does brown bread have more fibre? *Objective 2:* Do people with long arms throw further? Can people with short legs jump higher? Longer legs run faster? Bigger hands catch a ball more easily? *Do male humans have larger skulls than female humans?*	Based on own criteria: classify food items (leading to sorting by nutrients), classifying animals (leading to sorting by whether or not they have skeletons) *How do the skeletons of different animals compare? How can we group the foods that we eat?*	*Not relevant* *How does the skull circumference of a girl compare with that of a boy?* *How does the angle that your elbow/knee is bent affect the circumference of your upper arm/thigh?*	Look at food packaging to identify the amount of nutrients in different food items. Generate questions to research about the human skeleton. *Why do different types of vitamins keep us healthy and which foods can we find them in?* **Famous scientists:** Marie Curie- Radiation Wilhelm Rontgen - X rays Adelle Davis –Nutritionist Marie Maynard Daly – Biochemist

Rocks 1. Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. 2. Describe in simple terms how fossils are formed when things that have lived are trapped within rock. 3. Recognise that soils are made from rocks and organic matter.	Observe how soil separates into different layers in water  *How did Mary Anning's work help us to understand prehistoric life?*	*Not relevant* *Is there a pattern in where we find volcanoes on planet Earth?*	Based on the children's own criteria, classify rocks (beginning of topic more likely to focus on appearance leading to physical properties at end of unit). Look at different soils and discuss how similar/different. *Can you use an identification key to find out the name of the rocks in your collection?*	Test the hardness of different rocks. Test what happens when rocks are put in water. Test how quickly water runs through different types of soil. *Which soil absorbs the most water?* *How does adding different amounts of sand to soil affect how quickly water drains through it?*	Research how fossils are formed. *Who was Mary Anning and what did she discover?* **Famous scientists:** Mary Anning- Fossil hunter Dr Anjana Khatwa - Geologist William Smith Fossils strata Inge Lehrmasn -Earth's Mantle Katia Krafft - Geologist and Volcanologist
Light 1. Recognise that they need light in order to see things and that dark is the absence of light. 2. Notice that light is reflected from surfaces. 3. Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. 4. Recognise that shadows are formed when the light from a light source is blocked by an opaque object. 5. Find patterns in the way that the size of shadows change.	DO NOT LOOK AT HOW SHADOWS CHANGE THROUGHOUT THE DAY – YEAR 5 OBJECTIVE	*Not relevant*	Based on children's own criteria - Classifying light sources (leading to natural/man-made) - Classifying materials (leading to reflective/non-reflective, transparent/translucent or opaque) *How would you organise these light sources into natural and artificial sources?*	Test materials for reflectiveness, transparency. Investigate shadows (size and shape only) *Which pair of sunglasses will be the best for protecting our eyes?* *How does the number of layers of transparent plastic affect how much light passes through it?* *How does the distance between the shadow puppet and the screen affect the size of the shadow?*	**Famous scientists:** Justus Von Liebig - Mirrors James Clerk Maxwell - Visible and Invisible Waves of Light
Forces and magnets 1. Compare how things move on different surfaces. 2. Notice that some forces need contact between two objects, but magnetic forces can act at a	*Not relevant* *How have our ideas about magnets changed over time?*	*Not relevant* *Does the size and shape of the magnet affect how strong it is?*	Based on children's own criteria. Sort toys (leading to what makes them move e.g. push/pull) Sort materials (leading	Test how objects move on different surfaces e.g. cars, spinning tops, wind-up/clockwork toys. Test the strength of different magnets	Find out how magnets are used in everyday life. **Famous scientists:** Andre Marie Ampere- Electro-magnetism

distance. 3. Observe how magnets attract or repel each other and attract some materials and not others. 4. Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials. 5. Describe magnets as having two poles. 6.Predict whether two magnets will attract or repel each other, depending on which poles are facing.			towards metal/non-metal, magnetic/non-magnetic) *Which materials are magnetic?*	*Which magnet is the strongest?* *Which surface is the best to stop you from slipping?* *How does the mass of an object affect how much force is needed to make it move?*	The Wright Brothers - Aeroplanes Henry Ford- Cars

YEAR 4					
Curriculum Objectives	**Observing over time**	**Pattern Seeking**	**Classifying**	**Comparative/Fair testing**	**Researching**
Living things and their habitats 1. Recognise that living things can be grouped in a variety of ways. 2. Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. 3. Recognise that environments can change and that this can sometimes pose dangers to living things.	Observe living things in their local environment at different times of the year (e.g. a particular tree) *How have scientific tests for predicting the weather changed over time?*	Do animals with … have …? Do plants with … have …? *How has the use of insecticides affected the bee population?*	Based on children's own criteria. For example: Classifying living things in local/wider environment Introduce branching databases/dichotomous keys *Can we use classification keys to identify all the animals that we caught pond dipping?*	*Not relevant* *How does the average temperature of the pond water change in each season?* *Does the amount of light affect how many woodlice are around?*	Research and be able to name plants and animals in wider environment (e.g. polar, desert, jungle Research global environmental issues and the impact on living things. **Famous Scientists:** Jacques Cousteau -Marine Biology Cindy Looy - Environmental Change and Extinction Joean Beauchamp Procter - Zoologist Jane Goodall - Primate Scientist
Animals, including humans 1. Describe the simple functions of the basic parts of the digestive system in humans. 2. Identify the different types of teeth in humans and their simple functions. 3. Construct and interpret a variety of food chains, identifying producers, predators and prey.	*Not relevant* *How has the visit to the dentist changed since ancient times?*	*Not relevant* *Are foods that are high in energy always high in sugar?*	Compare and contrast different types of teeth (linking to simple functions) Classify jaw bones/teeth to aid making food chains *How can we organise teeth into groups?* *What are the names for all the organs involved in the digestive system?*	*Not relevant* *In our class, are omnivores taller than vegetarians?*	Research the different parts of the digestive system. (Children present what they've learnt in different ways: create a model, write a song, write a story, create a PPT, etc.) Research what different animals eat within a specific environment, e.g. coral, polar, African grasslands, in order to construct food chains. **Famous Scientists:** Joseph Lister-Antiseptic Ivan Pavlov- Digestive System Mechanisms Washington & Lucius

					Sheffield- Toothpaste in a tube
States of matter 1. Compare and group materials together, according to whether they are solids, liquids or gases. 2. 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 (°C). 3. Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	Watch ice melt (ice hands). Watch hand prints dry e.g. water hand prints on coloured paper towel. Watch frozen liquids melt.	*Not relevant* *Is there a pattern in how long it takes for different sized ice lollies to melt?*	Based on own criteria: Classify solids (including grains, crystals, powders: physical properties) and liquids *Can you group these materials and objects into solids, liquids and gases?*	What affects the melting rate of chocolate? What affect the rate an 'ice pole' melts? What affects the rate of evaporation? Does seawater evaporate quicker than fresh water? How does the mass of a block of ice affect how long it takes to melt?	Research melting point of metals. Research the water cycle **Famous Scientists:** Joseph Priestly – Discovered oxygen Lord Kelvin -Absolute zero (temperature) Anders Celsius -Temperature Scale Daniel Fahrenheit - Temperature Scale/ Invention of the Thermometer George Washington Carver- chemist
Sound 1. Identify how sounds are made, associating some of them with something vibrating. 2. Recognise that vibrations from sounds travel through a medium to the ear. 3. Find patterns between the pitch of a sound and features of the object that produced it. 4. Find patterns between the volume of a sound and the strength of the vibrations that produced it. 5. Recognise that sounds get fainter as the distance from the sound source increases.	*Not relevant* *How has our understanding and use of ultrasound changed over time?* *Since the 1800's, how has science helped people who are deaf?*	*Not relevant* *Is there a link between how loud it is in school and the time of day?*	Based on own criteria, sort musical instruments.	Measure the volume from different instruments. Measure how volume changes away from a source. Investigate string telephones. Explore pitch e.g. through a carousel of activities using milk bottles, straw pipes, rulers, elastic band guitars. *Which material is best to use for muffling sound in ear defenders?* *How does the volume of a drum change as you move further away from it?* *How does the length of a guitar string/tuning fork*	Research, make and play their own instruments based on what they learned about pitch and volume. **Famous Scientists:** Alexander Graham Bell - Invented the telephone Aristotle - Sound Waves Gailileo Galilei - Frequency and Pitch of Sound Waves

				affect the pitch of the sound?	
Electricity 1. Identify common appliances that run on electricity. 2. Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. 3. 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. 4. Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. 5. Recognise some common conductors and insulators, and associate metals with being good conductors.	*Not relevant* *Who actually invented the light bulb, Thomas Edison or Joseph Swan?*	*Not relevant* *Which room has the most electrical sockets in a house?*	Based on children's own criteria: classifying household appliances and/or toys (leading to electrical/not electrical, battery/mains) Test materials to classify into insulators and conductors	*Not relevant* *Which material is the best conductor of electricity?* *How does the thickness of a conducting material affect how bright the lamp is?*	**Famous Scientists:** Michael Faraday- Discovered relationship between magnets and electricity Thomas Edison- Light bulb Joseph Swan- Incandescent Light Bulb

CREST Star and Superstar investigations mapped to NC topics

- The tables below show how CREST Star and Superstar challenges link to the Science National Curriculum in England. NB. Some activities are suitable and can be adapted for use in the EYFS.
- Where a challenge can be linked to topics in a number of years, the topic in bold indicates where it is most strongly linked.
- Where challenges do not link directly to the Science National Curriculum but could be used as a whole school activity, this has been indicated.

CREST Star Challenges

Activity	Year 1	Year 2	KS2
Animal adventure		**Living things and their habitats**	
Be seen, be safe	Everyday materials	**Uses of everyday materials**	
Brilliant bubbles	Whole school activity		
Confusing cans			Forces and Magnets
Discovery bag	**Plants**		
Muddy mess		**Uses of everyday materials**	
Music maker			Sound
Peggy problem	Whole school activity		
Plant detectives	**Plants**		
Rainbow colour collectors	**Plants**		
Scrap yard scrapes		**Uses of everyday materials**	
Slippery slidey shoes			Forces and Magnets
Sneaky shadow			Light
Sniffly sneezes		**Uses of everyday materials**	
Speedy scooters			Forces and Magnets
Starting sounds			Sound
Tea bag trouble	**Everyday materials**		
Testing timers	Whole school activity		
Useless umbrellas		**Uses of everyday materials**	

Source: Primary Science Education Consultancy 2020

CREST Superstar Challenges

Activity	KS1	Year 3	Year 4
A hole in my bucket	Everyday materials		
A special new tree			Living things and their habitats
A sticky problem			
Band rollers		Forces and magnets	
Bowled over		Forces and magnets	
Bridge blunder	*Whole school activity*		
Brilliant birds	*Whole school activity*		
Bumblebee mystery	**Plants**		Living things and their habitats
Buy them and try them			Animals, including humans
Camouflaged creatures			Living things and their habitats
Cheesy challenge			States of matter
Colorado Brown Stain			Animals, including humans
Crafty rafts	Whole school activity		
Disappearing dinosaurs		Year 5 objective, however could be linked to Y3 fossils	
Discus dilemma	Whole school activity		
Drifting dandelions		Plants	
Fantastic fingerprints			
Fossil folly!		Rocks and Soils	
Get set jellies		**States of matter**	
Goodbye old tree			Living things and their habitats
Hoodie hearing			Sound
How do you drink yours?	Whole school activity		
Investigating ink			
Journey stick	Whole school activity		
Just my cup of tea			

Kite calamity	Whole school activity		
Making toothpaste			Animals, including humans
Outdoor gym			Animals, including humans
Over to you	Whole school activity		
Playground games			Animals, including humans
Polymer problem			
Protecting polymers			
Racing rockets		Forces and magnets	
Recycle, reuse			Living things and their habitats
Spinning solutions	Whole school activity		
Super spinners		Plants	
Surprising stains			
Testing and comparing tea			
Tomato sauce			States of matter
Tree trouble			Living things and their habitats
Tumbling toast	Whole school activity		
Under your feet			Living things and their habitats
Warm or cold?			Living things and their habitats
Windy ways	Whole school activity		
Worm charming	Whole school activity		
Yummy yoghurt			States of matter

Source: Primary Science Education Consultancy 2020