YEAR 1	**Science**	
Topic 1: Our Story (5)		
KNOW	DO	UNDERSTAND
NC Content: S: identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. *Vocabulary:* *Human, body, sense, hear, see, feel, taste, smell (see vocabulary below).* Children know the names of the main body parts - head, neck, arms, elbows, legs, knees, face, ears, eyes, hair, mouth, teeth. Children can identify which part body is linked with each sense.	**NC Content:** WS: Begin to recognise different ways in which they might answer scientific questions WS: Ask people questions and use simple secondary sources to find answers Children can label and draw basic parts of the body. Children can ask simple questions about different parts of the body and their functions. Children can ask simple questions about different body parts and the senses. Children can watch videos associated with their questions to find out the answers.	*PRIOR LEARNING: Children will understand that everyone has the same key body parts, apart from the differences between boys and girls. They will look at their family and adults in school.* Children will understand that people might experience sense in slightly different ways – what might be an unpleasant smell to some, might not be to others. They will understand how to wash and look after our bodies (link to PSHE). *Questions:* - *Do we all like the same smells?* - *Can you tell me a smell that you like, that your friend doesn't?* - *How do we look after our bodies?*
Topic 2: Whizz, Bang, Pop! (5)		
KNOW	DO	UNDERSTAND
Topic 3: Wild Weather (5)		
KNOW	DO	UNDERSTAND
NC Content: S: Observe changes across the four seasons. S: Observe and describe weather associated with the seasons and how day length varies. *Vocabulary:* *Seasons, Summer, Autumn, Spring, Winter, warmer, cooler, brighter, darker, cold, cloudy, day, daytime, seasonal changes, observation.* Children know the names of the four seasons and describe key aspects of them, e.g in summer, it is hotter and less rain.	**NC Content:** WS: using their observations and ideas to suggest answers to questions WS: Talk about what they have found out and how they found it out WS: Observe closely using simple equipment WS: With help, observe changes over time Children can watch videos and read books about seasonal changes and use their observational skills to suggest answers to their questions. Children can use measuring equipment to measure the	*PRIOR LEARNING: Children learn about seasons in EYFS. This is building on their understanding of seasons, talking about the different weather and how the lengths of the days change.* Children explore the different seasons and weather in the world. They learn about the earth, the different oceans and countries. They also look at how other countries experience seasons – in the Artic etc. Children are first exposed to the fact that the Earth goes round the Sun and how this affects the length of day.

Children know that in summer in days are longer and in the winter the nights are longer. *Questions:* - *Can you name the 4 seasons?* - *Tell me 2 main differences between Autumn and Summer.* - *Are the days longer in Winter or in Summer?*	amount of rainfall over a few days. Children can create a table on the computer to show the results. *Questions:* - *When you did this experiment, what did you observe?* - *What did you use to measure this?*	*Questions:* - *Can you tell me a country that has hotter weather than the UK?* - *Can you tell me a country that has cooler weather than the UK?*
Topic 4: Waste Warriors (5)		
KNOW	DO	UNDERSTAND
<u>NC Content:</u> S: Distinguish between an object and the material from which it is made. S: Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. S: Describe the simple physical properties of a variety of everyday materials. S: Compare and group together a variety of everyday materials on the basis of their simple physical properties. *Vocabulary:* *Wood, plastic, glass, metal, water, rock, rough, smooth, waterproof, absorbent, opaque, transparent, properties, material, bendy, floppy, breaks, see-through.* Children know what everyday materials look and feel like. Children know how to describe properties of materials, e.g. hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent; opaque/transparent. Children know how to group similar materials together, in terms of their properties. *Questions:* - *What object is this and what is it made from?*	**<u>NC Content:</u>** WS: Observing closely, using simple equipment. WS: Gathering and recording data to help in answering questions WS: Carry out simple tests WS: Use simple features to compare objects, materials and living things and, with help, decide how to sort and group them (identifying and classifying) Children can carry out basic tests to check whether a material is waterproof, transparent etc. Children can identify problems with materials and then think about what they could use instead. Children can observe closely when carrying out these tests and then start answering their own questions. Children can suggest the best material to use for different jobs, e.g. how could you keep something waterproof. *Questions:* - *What would happen if I built a house from paper? What would be the problems?* - *How could I find out whether plastic is waterproof?*	*PRIOR LEARNING: Children have used different materials in reception to build houses. They can compare similarities and differences based on place, object, material or living thing.* In Year 1, they learn the scientific names for properties and they can now test them. Children understand that some materials are not suitable for some tasks, but they can suggest better materials more suitable. Children have a basic understanding of recycling. *Questions:* - *What objects can be recycled? What are they made out of?*

- *How is a stone different to a mirror?* - *Which objects are similar and which objects are different?*		
ART WEEK		
KNOW	DO	UNDERSTAND
Topic 5: Wild Safari (4)		
KNOW	DO	UNDERSTAND
<u>NC Content:</u> S: Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. S: Identify and name a variety of common animals that are carnivores, herbivores and omnivores. S: Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). *Vocabulary:* *Fish, amphibian, reptiles, birds, mammals, carnivores, herbivores, omnivores, local, global, body, eyes, wings, claw, fin, scales, vertebrate and invertebrate.* Children know what local animals we might have in Sparkhill Park – worms, spiders, squirrels etc. Children know how important it is to return animals to their local environment after looking at them. Children know the terms fish, amphibians, reptiles, birds and mammals and give some examples of each. Children can define: carnivores, herbivores and omnivores. They can also give examples of animals that fit into those categories. *Questions:* - *What animals might you find in the park?* - *Is a squirrel a reptile, mammal or amphibian?*	**<u>NC Content:</u>** WS: Asking simple questions and recognising that they can be answered in different ways WS: Using their observations and ideas to suggest answers to questions - use simple scientific language WS: Observing closely, using simple equipment. WS: Gathering and recording data to help in answering questions Identifying and classifying Children can explore the local environment to spot any animals in the park. They can observe these animals closely (without harming them) and identify what type of animal it is. They can use equipment, like a magnifying glass, to observe closely. Children can record what they find out and answer their questions. Children can classify animals – this could be done on the computer. *Questions:* - *What did you observe when you looked in the park for animals?* - *If you wanted to see an animal really closely, what could you use?*	*PRIOR LEARNING: In Reception children make observations of animals and plants and explain why some things occur, and talk about changes. They make observations of animals and plants and explain why some things occur and talk about changes. (Early Learning Goal).* In Year 1, they will learn scientific language, like the names of different animals and how they might be classified. Children can compare one animal to the other. They understand that the world has so many different types of animal. They are excited to find out more about them. They understand that they need to the treat these animals with respect. *Questions:* - *Can you name an animal that lives in another country?* - *Why should we treat animals with respect?*

- *Can you give me an example of a reptile?* - *What is a carnivore? Can you give me an example?*		
Topic 6: Dungeons and Dragons (5)		
KNOW	DO	UNDERSTAND
MUSIC WEEK		
KNOW	DO	UNDERSTAND
Topic 7: Green Fingers (5)		
KNOW	DO	UNDERSTAND
NC Content: S: Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. S: Identify and describe the basic structure of a variety of common flowering plants, including trees. *Vocabulary:* *Wild, common, garden, deciduous, evergreen, stem, flower, roots, petals, fruit, seed, bulb, trunk, branches, leaf, bark.* Children know the different names for a variety of wild and house flowers and trees. Children can identify these plants and trees. Children know the definition of deciduous (leaves renew every year) and evergreen (leaves remain all year round) and they know how to identify them. Children know the basic structure of a flowering plant. (including leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, stem).	**NC Content:** WS: Using their observations and ideas to suggest answers to questions. WS: Use simple measurements and equipment (e.g. hand lenses, egg timers) to gather data WS: Gathering and recording data to help in answering questions WS: Performing simple tests WS: Identifying and classifying Children observe the local park, looking at a variety of plants and trees. They will ask questions. Children will use magnifying glasses and a specimen bag to collect any interesting items (flowers that have fallen off, leaves etc). Children will then examine these items and classify them (deciduous, stem, flower etc). Children will observe a plant growing and they will create a hypothesis of how quickly it will grow. Pupils might keep records of how plants have changed over time, for example the leaves falling off trees and buds opening; and compare and contrast what they have found out about different plants.	*PRIOR LEARNING: Children will have looked at different plants in EYFS. They will be able to talk about the features of their immediate environment and how this might change in another environment. They can make observations about animals and plants and can explain why there are some changes.* Children have a real understanding of their local area. They have looked at different animals and now, they will look at different plants. They will understand where food comes from and have some understanding of different plants we can eat.
DT WEEK		
KNOW	DO	UNDERSTAND