St Barnabas CE Primary Academy Key Learning in Science- Year 1

- Animals (Autumn 1)
- Seasonal change (Autumn 2)
- Seasonal change (Spring 1)
- Plants (Spring 2)
- Materials (Summer 1)
- Humans (Summer 2)
- Ongoing

Statutory (NC)

Working scientifically

- Asking simple questions and recognising that they can be answered in different ways (simple questions).
- Observe closely, using simple equipment (e.g. hand lenses, egg timers).
- Performing simple tests (Perform simple tests/comparative tests, experiment with a wide variety of things, answer questions).
- Identifying and classifying (decide how to sort and group, draw similarities and differences, recognise features).
- Using their observations and ideas to suggest answers to questions (scientific language, over time, real world).
- Gathering and recording data to help in answering questions (using simple equipment (Observe using non-standard units e.g. how many lolly sticks/cubes/handfuls, etc).

Plants: Common Names and Basic Structure	Animals - Humans	Animals - Other Animals
Pupils should be taught to: ▪ Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. ▪ Identify and describe the basic structure of a variety of common flowering plants, including trees. **Notes and Guidance (non-statutory):** Pupils should use the local environment throughout the year to explore and answer questions about plants growing in their habitat. Where possible, they should observe the growth of flowers and vegetables that they have planted. They should become familiar with common names of flowers, examples of deciduous and evergreen trees, and plant structures (including leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, stem). **Pupils might work scientifically by:** ▪ Observing closely, perhaps using magnifying glasses. ▪ Comparing and contrasting familiar plants. ▪ Describing how they were able to identify and group them, and	Pupils should be taught to: ▪ Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. ▪ Recognise that humans are animals. ▪ Compare and describe differences in their own features (eye, hair, skin colour, etc.). ▪ Recognise that humans have many similarities. **Notes and Guidance (non-statutory):** Pupils should have plenty of opportunities to learn the names of the main body parts (including head, neck, arms, elbows, legs, knees, face, ears, eyes, hair, mouth, teeth) through games, actions, songs and rhymes. **Pupils might work scientifically by using their observations to:** ▪ Compare and contrast animals (humans) at first hand or through videos and photographs. ▪ Using their senses to compare different textures, sounds and smells.	Pupils should be taught to: ▪ Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. ▪ Identify and name a variety of common animals that are carnivores, herbivores and omnivores. ▪ Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, and including pets). ▪ Find out and describe how animals look different to one another. ▪ Group together animals according to their different features. ▪ Recognise similarities between animals: – Structure: head, body, way of moving, senses, body covering, tail. ▪ Animals have senses to explore the world around them and to help them to survive. ▪ Recognise that animals need to be treated with care and sensitivity to keep them alive and healthy. ▪ Animals are alive; they move, feed, grow, use their senses and reproduce. **Notes and Guidance (non-statutory):** Pupils should use the local environment throughout the year to explore and answer questions about animals in their habitat. They should understand how to take care of animals taken from their local environment

▪ Drawing diagrams showing the parts of different plants including trees. ▪ Keeping records of how plants have changed over time, for example the leaves falling off trees and buds opening. ▪ Comparing and contrasting what they have found out about different plants.		and the need to return them safely after study. Pupils should become familiar with the common names of fish, amphibians, reptiles, birds and mammals, including those that are kept as pets. **Pupils might work scientifically by using their observations to:** ▪ Compare and contrast animals at first hand or through videos and photographs. ▪ Describing how they identify and group them. ▪ Grouping animals according to what they eat. ▪ Using their senses.

Material Properties – Everyday Materials	**Light and Astronomy – Seasonal Change**
Pupils should be taught to: ▪ Distinguish between an object and the material from which it is made. ▪ Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. ▪ Describe the simple physical properties of a variety of everyday materials. ▪ Compare and group together a variety of everyday materials on the basis of their simple physical properties. **Notes and Guidance (non-statutory):** Pupils should explore, name, discuss and raise and answer questions about everyday materials so that they become familiar with the names of materials and properties such as: hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent; opaque and transparent. Pupils should explore and experiment with a wide variety of materials, not only those listed in the programme of study, but including for example: brick, paper, fabrics, elastic, foil. **Pupils might work scientifically by:** ▪ performing simple tests to explore questions, for example: – 'What is the best material for an umbrella? …for lining a dog basket? …for curtains? …for a bookshelf? …for a gymnast's leotard?'	Pupils should be taught to: ▪ Observe changes across the four seasons. ▪ Observe and describe weather associated with the seasons and how day length varies. **Notes and Guidance (non-statutory):** Pupils should observe and talk about changes in the weather and the seasons. **Note:** Pupils should be warned that it is not safe to look directly at the Sun, even when wearing dark glasses. **Pupils might work scientifically by:** ▪ Making tables and charts about the weather and ▪ Making displays of what happens in the world around them, including day length, as the seasons change. Additional suggestion from Lancashire for working scientifically opportunities which enhance learning and support using ICT across the curriculum ▪ This unit provides an ideal opportunity for using data logging equipment to record temperatures