Pendragon Primary School Science curriculum plan

2015/16	Autumn		Spring		Summer	
Year group	1st half term	2nd half term	1st half term	2nd half term	1st half term	2nd half term
1	**Physics: Light, electricity and sound.** **Chemistry: Materials** • 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	**Physics: Seasonal Changes.** • Observe changes across the four seasons. • Observe and describe weather associated with the seasons and how day length varies.	**Chemistry: Materials** • 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.	**Biology: Animals and Humans, habitats** • Identify name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. • 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, including pets).	**Biology: Plants** • 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.	**Chemistry: Materials** • 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.
2	**Biology: Animals and Humans** • Notice that animals, including humans, have offspring which grow into adults. • Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). • Describe the importance for	**Physics: Light and Sound** • Identify sources of light and that dark is the absence of light. • Observe how sound causes vibrations and discuss how sound travels.	**Chemistry:** **Uses of everyday materials** • Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. • Find out how the shapes of solid	**Biology:** **Living things and their habitats** • Explore and compare the differences between things that are living, dead, and things that have never been alive. • Identify that most living things live in habitats to which they are suited and describe how	**Biology:** **Plants** • Observe and describe how seeds and bulbs grow into mature plants. • Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	**Physics:** **Electricity** • Investigate how to create and then draw a simple circuit.

	humans of exercise, eating the right amounts of different types of food, and hygiene.		objects made from some materials can be changed by squashing, bending, twisting and stretching.	different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other. • Identify and name a variety of plants and animals in their habitats, including micro-habitats. • 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.		
3 4	**Biology** **Animals, including humans** • I can describe and explain the skeletal system of a human. • I can describe and explain the muscular system of a human. • I can describe the purpose of the skeleton in humans and animals. **Humans and animals** ▪ (Year 4) I can use food chains to identify producers, predators and prey. ▪ I can construct food chains to identify producers, predators and prey.		**Physics** **Forces and Magnets** ▪ I can explore and describe how objects move on different surfaces. ▪ I can explain how some forces require contact and some do not, giving examples. ▪ I can explore and explain how objects attract and repel in relation to objects and other magnets. ▪ I can predict whether objects will be magnetic and carry out an enquiry to test this out. ▪ I can describe how magnets work. ▪ I can predict whether magnets will attract or repel and give a reason.		**Biology** **Living things and their habitats** ▪ I can group living things in different ways. ▪ I can use classification keys to group, identify and name living things. ▪ I can create classification keys to group, identify and name living things (for others to use). ▪ I can describe how changes to an environment could endanger living things.	**Chemistry** **States of matter** • I can group materials based on their state of matter (solid, liquid, gas). • I can describe how some materials can change state. • I can explore how materials change state. • I can measure the temperature at which materials change state. • I can describe the water cycle. • I can explain the part played by evaporation and condensation in the water cycle.
5	**Living things and their habitats**	**Forces**	**Properties and changes of materials**		**Earth and space**	**Animals including humans-SRE**

6	**Living things and their habitats Classification**	**Forces**	**Earth and space**	**Properties and changes of materials**	**Animals including humans-SRE**