Singleton Church of England Primary School
Progression of knowledge
Science – Y2 (Cycle B)

	Year 2 – Unit 1 **Our Local Environment**	**Year 2 – Unit 2** **Healthy Me**	**Year 2 – Unit 3** **Young Gardeners**
SUBSTANTIVE CONCEPTS Substantive concepts are concepts that children will come across repeatedly throughout their education in Science	Plants Living Things and Their Habitats Animals Including Humans Evolution and Inheritance Seasonal Changes Materials Rocks Light Forces Sound Electricity Earth and Space	Plants Living Things and Their Habitats Animals Including Humans Evolution and Inheritance Seasonal Changes Materials Rocks Light Forces Sound Electricity Earth and Space	Plants Living Things and Their Habitats Animals Including Humans Evolution and Inheritance Seasonal Changes Materials Rocks Light Forces Sound Electricity Earth and Space
KEY VOCABULARY	living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, water, air, survive, survival, names of local habitats names of micro-habitats, conditions, light, dark, shady, sunny, wet, damp, dry, hot, cold, names of living things in the habitats and micro-habitats studied	survive, survival, water, food, air, exercise, heartbeat, breathing, hygiene, germs, disease, food types (e.g. meat, fish, vegetables, bread, rice, pasta, dairy)	light, shade, Sun, warm, cool, water, space, grow, healthy, bulb, germinate, shoot, seedling
SUBSTANTIVE KNOWLEDGE Substantive knowledge refers to the residual knowledge that children should take away from the unit after it has been taught. It consists of the core facts in terms of Scientific knowledge. In this progression map, you will find a concise summary of the substantive knowledge for each unit.	• Knows and can compare the differences between things that are living, dead, and things that have never been alive. • Knows 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. • Knows a variety of plants and animals in their habitats, including microhabitats. • Knows 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.	• Knows about the basic needs of animals, including humans, for survival (water, food and air). • Knows the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	• Knows and can identify and name a variety of plants and animals in their habitats, including microhabitats • Knows how to observe and describe how seeds and bulbs grow into mature plants • Knows how plants need water, light and a suitable temperature to grow and stay healthy
MAKING CONNECTIONS **Key knowledge**	**Year 1** • Knows a variety of common wild and garden plants, including deciduous and evergreen trees. • Knows the basic structure of a variety of common flowering plants, including trees. • Knows a variety of common animals including fish, amphibians, reptiles, birds and mammals. • Knows 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). • Observe changes across the four seasons.	**Year 1** • Knows a variety of common animals including fish, amphibians, reptiles, birds and mammals. • Knows a variety of common animals that are carnivores, herbivores and omnivores. • Knows how to describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). • Knows how 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.	**Year 1** • Knows and can describe the basic structure of a variety of common flowering plants, including trees. • Knows and can identify a variety of common wild and garden plants, including deciduous and evergreen trees. **Year 3** • Knows and can identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. • Knows 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. • Knows the way in which water is transported within plants.

	Year 3 • Knows the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.	**Year 3** • Knows 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. • Knows that humans and some other animals have skeletons and muscles for support, protection and movement.	• Knows the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.
Working Scientifically	• Observe micro-habitats and mini-beasts		• Observe and describe how seeds and bulbs grow into mature plants