

Science Long Term Overview – Broken Down into Small Steps

Year 1

Unit	Learning Objectives	Disciplinary Knowledge	Substantive Knowledge
The Human Body	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	Asking simple questions and recognising that they can be answered in different ways.	The body has lots of parts. Each of these body parts has a name. Most bodies have a neck, arms, elbows, legs, knees, face, ears, eyes, hair, mouth and teeth.
	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	Using their observations and ideas to suggest answers to questions.	Humans use their eyes to see. You can see when there is light. You cannot see in the dark. Some people cannot see
	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	Using their observations and ideas to suggest answers to questions.	Humans use their eyes to see. You can see when there is light. You cannot see in the dark. Some people cannot see
	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	Performing simple tests.	Humans use their ears to hear sounds. When sounds are quiet, they can be hard to hear. When sounds are loud, they are easier to hear
	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	Performing simple tests.	The tongue helps humans to taste. The tongue is in the mouth. There are five basic tastes – sweet, salty, sour, bitter and savoury.
	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	Performing simple tests.	The skin is the body part that helps us to sense touch. Skin covers the whole body. We can sense touch using different body parts
	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	Performing simple tests.	The nose helps us to sense smell. The nose is on the face. Some items have a stronger smell than others.
Seasonal Changes – Autumn	Observe changes across the four seasons.	Asking simple questions and recognising that they can be answered in different ways.	There are four seasons in one year. The seasons are spring, summer, autumn and winter. In autumn, the days are starting to become shorter and the nights are starting to become longer. Some trees lose their leaves in autumn.
	Observe and describe weather associated with the seasons and how day length varies.	Gathering and recording data to help in answering questions.	There are four seasons in one year – spring, summer, autumn, and winter. In autumn, the days are starting to become shorter and the nights are starting to become longer. The weather changes often in autumn.
Materials	Describe the simple physical properties of a variety of everyday materials.	Identifying and classifying.	Objects are made from different materials. Materials can have different textures.
	Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.	Observing closely, using simple equipment	There are different types of rocks. Rocks come in different shapes, sizes and textures. Rocks can also be used to build things such as walls or buildings.
	Distinguish between an object and the material from which it is made.	Identifying and classifying.	Objects are made from different materials. Some objects can be made from different materials depending on what they are used for.
	Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.	Performing simple tests.	When water freezes, it turns to ice. When ice melts, it turns to water.
	Compare and group together a variety of everyday materials on the basis of their simple physical properties	Gathering and recording data to help in answering questions.	Some materials float in water. This means they stay at the top. Some materials sink in water. This means they fall to the bottom.
	Compare and group together a variety of everyday materials on the basis of their simple physical properties.	Using their observations and ideas to suggest answers to questions.	
	Compare and group together a variety of everyday materials on the basis of their simple physical properties.	Using their observations and ideas to suggest answers to questions.	

Seasonal Changes - Winter	Observe changes across the four seasons.	Asking simple questions and recognising that they can be answered in different ways.	There are four seasons in one year. The season names are spring, summer, autumn and winter. In winter, there are fewer hours of daylight and the nights are longer. The weather is often colder in winter.
	Observe and describe weather associated with the seasons and how day length varies.	Gathering and recording data to help in answering questions.	There are four seasons in one year – spring, summer, autumn and winter. In winter, there are fewer hours of daylight and the nights are longer.

Plants (A)	Identify and describe the basic structure of a variety of common flowering plants, including trees.	Asking simple questions and recognising that they can be answered in different ways.	A plant is a living thing that usually grows in soil. Some plants have roots, a stem, leaves and flowers. A seed can be planted to grow into a new plant. Some seeds can be planted in winter but must be kept warm to grow.
Animals	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.	Asking simple questions and recognising that they can be answered in different ways.	Mammals have fur or hair on their bodies. Some mammals can be kept as pets. Some mammals live in the wild.
	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.	Gathering and recording data to help in answering questions.	Birds have beaks, wings and feathers. Some birds can fly. Some birds cannot fly. Some birds can swim. Some birds cannot swim.
	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.	Identifying and classifying.	Fish live in water. Some fish have scales on their bodies. Fish have fins to help them swim. Most fish have gills that help them breathe underwater.
	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.	Identifying and classifying.	Amphibians live on land and in water. Amphibians have webbed feet. Frogs, toads and newts are amphibians.
	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.	Using their observations and ideas to suggest answers to questions.	Reptiles have dry skin. Reptiles have scales on their bodies. Lizards, snakes, crocodiles and turtles are reptiles.
	Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets).	Identifying and classifying.	There are different types of animals. Animals have different features.
	Identify and name a variety of common animals that are carnivores, herbivores and omnivores.	Identifying and classifying	Some animals are carnivores. Carnivores eat other animals. Many carnivores have sharp teeth and claws.
	Identify and name a variety of common animals that are carnivores, herbivores and omnivores.	Identifying and classifying	Some animals are herbivores. Herbivores eat plants including grass, fruits and vegetables. Some herbivores eat seeds and nuts. Herbivores have flat teeth for chewing plants.
	Identify and name a variety of common animals that are carnivores, herbivores and omnivores.	Identifying and classifying	Omnivores eat other animals and plants. Some animals are carnivores. Some animals are herbivores. Some animals are omnivores.
Caring for the planet	N/A	Explore the world around them and raise their own questions (non-statutory).	Everyone should look after the planet. Some actions help the Earth. Some actions harm the Earth. Looking after the planet helps to care for humans, other animals and plants.
	N/A	Using their observations and ideas to suggest answers to questions.	Everyone should look after the planet. Some actions are helpful for the Earth. Some actions are harmful for the Earth. Looking after the planet helps to care for humans, other animals and plants.
Seasonal Changes - Spring	Observe changes across the four seasons.	Asking simple questions and recognising that they can be answered in different ways.	There are four seasons in one year. The season names are spring, summer, autumn and winter. In spring, plants start to grow. In spring, some trees regrow their leaves. In spring, there are more hours of daylight and the nights start to become shorter.
	Observe and describe weather associated with the seasons and how day length varies.	Gathering and recording data to help in answering questions.	In spring, plants start to grow. In spring, some trees regrow their leaves.

			There are more daylight hours and the nights are shorter in spring. The weather often changes quickly in spring.
Plants (B)	Identify and describe the basic structure of a variety of common flowering plants, including trees.	Observing closely, using simple equipment.	A plant is a living thing that usually grows in soil. Some plants have roots, a stem, leaves and flowers. A seed can be planted to grow into a new plant. The stem will grow in length. The plant will grow new leaves. The roots will become longer.
	Identify and describe the basic structure of a variety of common flowering plants, including trees.	Gathering and recording data to help in answering questions.	A plant is a living thing that usually grows in soil. Some plants have roots, a stem, leaves and flowers. Seeds can be planted to grow into new plants. In spring, the weather is usually warmer and plants can grow outside.

Planting	Identify and describe the basic structure of a variety of common flowering plants, including trees.	Identifying and classifying.	Plants have many parts. Each plant part has a name. Flowering plants have flowers, stems, roots and leaves.
	Identify and describe the basic structure of a variety of common flowering plants, including trees.	Identifying and classifying.	Trees are a type of plant. Trees can be different shapes and sizes. Trees have roots, a trunk, branches and leaves. Some trees have fruit.
	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.	Observing closely, using simple equipment.	Wildflowers have not been chosen by humans to grow in their garden. Most wildflowers have not been planted by humans. Garden plants have been chosen by humans to grow in their gardens.
	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.	Gathering and recording data to help in answering questions.	Wildflowers have not been chosen by humans to grow in their garden. Most wildflowers have not been planted by humans. Garden plants have been chosen by humans to grow in their gardens. There are different plants in our local area.
	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.	Identifying and classifying.	Deciduous trees lose their leaves in autumn. Horse chestnut, sycamore and oak trees are all deciduous.
	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.	Identifying and classifying.	Evergreen trees keep their leaves all year round. Some trees are evergreen. Holly and pine trees are evergreen.
	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.	Using their observations and ideas to suggest answers to questions.	Evergreen trees keep their green leaves all year round. Common evergreen trees include holly and pine trees. Deciduous trees lose their leaves in autumn. Common deciduous trees include horse chestnut and oak trees. Leaves that grow on deciduous trees change colour in autumn.
Plants (C)	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.	Observing closely, using simple equipment.	The stem will grow in length as the plant grows. The plant will grow new leaves. The roots will become longer.
	Identify and describe the basic structure of a variety of common flowering plants, including trees.	Gathering and recording data to help in answering questions.	A plant is a living thing that usually grows in soil. Some plants have roots, a stem, leaves and flowers. A seed can be planted to grow into a new plant. In summer, the weather is warmer so seeds and plants can grow outside.
Growing & Cooking	N/A	Asking simple questions and recognising that they can be answered in different ways.	Some fruit and vegetables can be grown for food. Farmers are people who grow crops to be used as food. Fruit is the part of a flowering plant that contains seeds. Vegetables are parts of plants that you can eat. Usually the stems, leaves and roots.
	N/A	Using their observations and ideas to suggest answers to questions	Many plants have parts that humans can eat. Crops are plants that farmers grow to be eaten. Much of the food we eat comes from crops
Seasonal Changes – Summer	Observe changes across the 4 seasons.	Asking simple questions and recognising that they can be answered in different ways.	There are four seasons in one year. The seasons are spring, summer, autumn and winter. Summer is usually the warmest season. There are the most daylight hours in summer and the nights are shorter. Many plants grow in summer. There are more animals active in summer.
	Observe and describe weather associated with the seasons and how day length varies.	Gathering and recording data to help in answering questions.	Summer is usually warmer than spring. Summer is normally the warmest season. There are more hours of daylight in summer and the nights are shortest.

	Observe changes across the 4 seasons.	Using their observations and ideas to suggest answers to questions.	There are four seasons in one year. Winter is usually the coldest season. Summer is usually the warmest season. Some trees start to lose their leaves in autumn. Some trees lose all their leaves in winter. Plants begin to flower in spring.
--	---------------------------------------	---	---