Year 2 Science Module Overview

Core Lessons / Consolidation Lessons

Module number and name	Lesson number and name	National curriculum links	Working scientifically links	Scientific enquiry type	Lesson summary
Year 2 Module Our Changing World	1: What lives in a habitat?	To identify and name a variety of plants and animals in their habitats, including microhabitats	Observing closely and gathering and recording data to help in answering questions	Grouping and classifying	In this series of lessons the children look at and identify some of the animals and plants that live in a habitat.
	2: How does a habitat change through the year?	To identify 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	Gathering and recording data to help in answering questions	Noticing patterns	In this series of lessons the children carry out surveys to see what animals are visible at different times of the year in the habitats studied in Lesson 1.
	3: How do the animals in a habitat depend on each other?	To 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	Using observations and ideas to suggest answers to questions	Finding things out using secondary sources of information	In this series of lessons the children use what they have learned throughout the year from studying habitats in Lessons 1 and 2 to construct a food chain.
	4: How do animals change?	To notice that animals, including humans, have offspring which grow into adults	Using observations and ideas to suggest answers to questions	Observing changes over time	This lesson is part of a series of lessons in which the children will observe how one particular animal changes over time.
	5: What shall we plant for our soup?	To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy	Asking simple questions and recognising that they can be answered in different ways	Finding things out using secondary sources of information	In this lesson children plan what bulbs and seeds to plant in order to be able to make a soup later in the year.
	6: How do plants grow	To observe and describe how seeds and bulbs grow into	Observing closely, using simple equipment	Observing changes over	During these lessons children plant and look after their crop. They observe and measure changes

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	and change over time?	mature plants		time	over time. In the final lesson of the series they harvest their crop and use it to make soup.
	7: How will we make our soup?	To observe and describe how seeds and bulbs grow into mature plants	Observing closely, using simple equipment	Observing changes over time	This lesson builds on the previous lessons where children planted crops and observed them as they grew. During this lesson they harvest their crops and use them to make different soups.
Year 2 Module 1 What Is In Your Habitat?	1: What is in your habitat?	To identify 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; to explore and compare the differences between things that are living, things that are dead and things that have never been alive	Using observations and ideas to suggest answers to questions	Grouping and classifying	In this lesson children visit several different habitats locally and look at what makes up the habitat. This will include looking at living things (plants and animals),things that once lived and things that have never been alive.
	2: What do different animals eat in their habitats?	To 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	Gathering and recording data to help in answering questions	Finding things out using secondary sources of information	In this lesson children learn how to show how animals in all habitats depend on plants and each other for food by creating simple food chains.
	3: Where can I live?	To identify 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	Using observations and ideas to suggest answers to questions	Grouping and classifying	In this lesson children consider how living things are suited to live in different habitats.

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Year 2 Module 2 The Apprentice Gardener	1: What will the seeds grow into?	Observe and describe how seeds and bulbs grow into mature plants	Observing closely, using simple equipment	Grouping and classifying	In this lesson children use their observations to describe and identify seeds.
	2: What do gardeners need to know?	Observe and describe how seeds and bulbs grow into mature plant, and find out and describe how plants need water, light and a suitable temperature to grow and to stay healthy	Asking simple questions and recognising that they can be answered in different ways	Observing changes over time	In this lesson children consider what they need to find out about seeds and growing plants. They start to plant a series of seeds that they will observe over the next few weeks, plant some bulbs to observe as a class and begin a class book to record their investigations.
	3: How should we plant the seeds?	Observe and describe how seeds and bulbs grow into mature plants	Performing simple tests	Carrying out simple comparative and fair tests	In this lesson children learn more about how to plant seeds.
	4: What is happening to our seeds?	Observe and describe how seeds and bulbs grow into mature plants, and find out and describe how plants need water, light and a suitable temperature to grow and to stay healthy	Gathering and recording data to help in answering questions	Observing changes over time; carrying out simple comparative and fair tests	This lesson follows on from the investigations set up in Lessons 2 and 3, which were the first parts of the two series of lessons investigating seed germination, and bean germination, respectively.
	5: How tall will they grow?	Observe and describe how seeds and bulbs grow into mature plants	Gathering and recording data to help in answering questions	Noticing patterns	In this lesson children investigate the connection between the size of a seed and the height of the plant that it grows into.
	6: How can we care for our plants?	Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy	Using observations and ideas to suggest answers to questions	Observing changes over time	In this lesson children compare a healthy and an unhealthy plant.

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	7: What happens when a seed germinates?	Observe and describe how seeds and bulbs grow into mature plants	Observing closely using simple equipment	Observing changes over time	In this lesson children will review their seed diaries and complete their observations of the germinating seeds.
	8: Does it matter how we plant the seeds?	Observe and describe how seeds and bulbs grow into mature plants	Gathering and recording data to help in answering questions	Carrying out simple comparative and fair tests	In this lesson children review how their bean seeds – which in Lesson 3 they planted at different depths and in different orientations – have grown.
	9: How expert are we?	Observe and describe how seeds and bulbs grow into mature plants	Using observations and ideas to suggest answers to questions	n/a	In this lesson children summarise their learning about growing plants from seeds using their observation of the seeds and bulbs they have grown during the module.
	10: What do plants need to grow and be healthy?	Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy	Gathering and recording data to help in answering questions	Observing changes over time	In this lesson children will summarise what they have learned from investigating the needs of mature plants.
	EL1: What can we plant our seeds in?	Observe and describe how seeds and bulbs grow into mature plants	Performing simple tests	Carrying out simple comparative and fair tests	In this lesson children plan a test to compare different growing media.
	EL2: Do plants need light?	Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy	Performing simple tests	Carrying out simple comparative and fair tests	In this lesson children investigate plants' need for light.
	EL3: Do plants need water?	Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy	Performing simple tests	Carrying out simple comparative and fair tests	This is a short lesson in which children will consider plants' need for water.

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	EL4: Do seeds and plants need soil?	Observe and describe how seeds and bulbs grow into mature plants, and find out and describe how plants need water, light and a suitable temperature to grow and stay healthy	Gathering and recording data to help in answering questions	Carrying out simple comparative and fair tests	In this lesson children make observations in the environment and review their observations of seeds germinating on different growing media
Year 2 Module 3 Materials: Good Choices	1: Can you describe the object?	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard, for particular uses	Identifying and classifying	Grouping and classifying	In this lesson children observe and compare features of objects.
	2: What material is it made of?	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard, for particular uses	Identifying and classifying	Grouping and classifying	In this lesson children look at objects made from different materials.
	3: Is that a good choice of material?	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard, for particular uses	Using observations and ideas to suggest answers to questions	Grouping and classifying	In this lesson children identify which materials are appropriate for certain objects and which are not.
	4: Which materials are good for a toddler's play dungarees?	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard, for particular uses	Performing simple tests	Carrying out simple comparative and fair tests	In this lesson children test a collection of fabrics by rubbing them on a rough stone surface to find out which ones are the most hardwearing.

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	5: What fabric will make a bedroom dark?	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard, for particular uses	Observing closely, performing simple tests and using observations to suggest answers to questions, and gathering and recording data to help in answering questions	Carrying out simple comparative and fair tests	In this lesson children test a collection of curtain fabrics to find out which ones let the least and the most light through, by placing them over a window in the top or lid of a box and looking through an eye-hole to check how light it is inside the box. They decide which fabric would be best for making the room dark.
	6: What shall we use to make a teabag?	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard, for particular uses	Using observations and ideas to suggest answers to questions	Carrying out simple comparative and fair tests	In this lesson children carry out a comparative test to find out which types of materials are appropriate or not appropriate to make a teabag.
	7: Which is the bounciest ball?	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard, for particular uses	Performing simple tests	Carrying out simple comparative and fair tests	In this lesson children compare different balls to find out how bouncy they are.
	8: What can you invent?	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard, for particular uses	Using observations and ideas to suggest answers to questions	n/a	In this lesson children find out about how inventors use materials in new ways to make something new and useful.
	EL1: What materials are suitable for covering a tent?	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard, for particular uses	Gathering and recording data to help in answering questions	Carrying out simple comparative and fair tests	In this lesson children consider what properties are important when choosing a material for a tent cover.

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	EL2: How good is our tent?	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard, for particular uses	Gathering and recording data to help in answering questions	Carrying out simple comparative and fair tests	In this lesson children use appropriate resources to build the framework or structure for a small model tent. They then cover the tent and add a groundsheet made of the material 'ordered' in the previous lesson. This tent is tested against design criteria that include how it withstands wind and rain.
Year 2 Module 4 Materials: Shaping Up	1: How can I make different shapes?	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	Using observations and ideas to suggest answers to questions	Grouping and classifying	In this lesson children use actions, gestures and drama to develop their understanding of the words squash, stretch, bend and twist.
	2: How can I change the shape of an object?	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	Gathering and recording data to help in answering questions	Grouping and classifying	In this lesson children will test different objects and sort them according to which actions can be used to change their shapes.
	3: What property allows a material to be changed?	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	Performing simple tests and recording data	Carrying out simple comparative and fair tests	In this lesson children link the actions from previous lessons to the properties of materials, and test materials for those properties.
	4: Which material should I choose?	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses	Using observations and ideas to suggest answers to questions	Grouping and classifying	In this lesson children use their charts and tables from Lesson 3 to help them to decide suitable uses for different materials.

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	5: Which elastic should I choose for my catapult?	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses	Observing closely, using simple equipment	Carrying out simple comparative and fair tests	In this lesson children test different types of elastic to see how well they stretch.
	6: What shall we use to make a catapult?	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses		Carrying out simple comparative and fair tests	In this lesson children will use different materials to make a catapult.
	EL1: What can pushes and pulls make?	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	Gathering and recording data to help in answering questions	Carrying out simple comparative and fair tests	In this lesson children explore the effects of pushes and pulls and make a clay model.
Year 2 Module 5 Take Care	1: How can we sort this food?	Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene	Identifying and classifying	Grouping and classifying	In this lesson children first think about what they need to do to stay safe and healthy. They then sort food, choosing their own ways of grouping.
	2: What food should we eat?	Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene	Using observations and ideas to suggest answers to questions	Grouping and classifying	In this lesson children explore different types of food, sorting them into different categories and planning meals.
	3: How can we stay fit?	Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene	Using observations and ideas to suggest answers to questions	Finding things out using secondary sources of information	In this lesson children explore how it feels to take part in a physical activity.

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	4: How can we stay clean?	Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene	Using observations and ideas to suggest answers to questions	Finding things out using secondary sources of information	In this lesson children learn about keeping their bodies clean.
	EL1: How can we stay healthy?	Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene	Using observations and ideas to suggest answers to questions	n/a	In this lesson children create a picture book for younger children, to demonstrate what they know about keeping healthy.
Year 2 Module 6 Growing Up	1: What do babies need?	Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)	Identifying and classifying	Grouping and classifying	In this lesson children compare a doll and a baby and identify the potential needs of a baby.
	2: How have we changed?	Notice that animals, including humans, have offspring that grow into adults	Using observations and ideas to suggest answers to questions	Observing changes over time	In this lesson children draw on a range of information sources to identify the changes that have occurred as they have grown from a baby into a child.
	3: How do we change throughout our lives?	Notice that animals, including humans, have offspring that grow into adults	Gathering and recording data to help in answering questions	Finding things out using secondary sources of information	In this lesson children learn about stages in human life.
	4: Do older children have bigger heads?	Notice that animals, including humans, have offspring that grow into adults	Gathering and recording data to help in answering questions	Noticing patterns	In this lesson children carry out a pattern-seeking investigation based on measuring the head sizes of children of different ages.

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	EL1: What can we find out about babies?	Notice that animals, including humans, have offspring that grow into adults, and find out about and describe the basic needs of animals, including humans, for survival (water, food and air)	Gathering and recording data to help in answering questions	Finding things out using secondary sources of information	In this lesson children find out more about babies by questioning an expert (a parent or health professional). They may also meet a baby.
	EL2: Do all our body parts grow as we get older?	Notice that animals, including humans, have offspring that grow into adults	Gathering and recording data to help in answering questions	Noticing patterns	In this lesson children investigate questions about growing.