

Science Intention Map

Key Stage One



KS1 Intention Map 2024 - 2025

Placing learning at the heart of everything we do.



Human Survival

(Superheroes)



Learning Intentions

Week 1	Who was Maria Sibylla Merian? <ul style="list-style-type: none">• <i>Ask simple questions and recognise that they can be answered in different ways.</i>
Week 2	Can you match young animals to their adults? <ul style="list-style-type: none">• <i>Identify and classify offspring with their parents.</i>
Week 3	What is the life cycle of a butterfly? <ul style="list-style-type: none">• <i>Use their observations and ideas to suggest answers to questions.</i>
Week 4	How do animals change as they grow into adults? <ul style="list-style-type: none">• <i>Use their observations and ideas to suggest answers to questions.</i>
Week 5	What happens to humans as they grow? <ul style="list-style-type: none">• <i>Use their observations and ideas to suggest answers to questions.</i>
Week 6	What do animals need to survive? <ul style="list-style-type: none">• <i>Use their observations and ideas to suggest answers to questions.</i>

The Laboratory



Maria Sibylla Merian

National Curriculum

Sc1/1.1 Sc1/1.4

Sc1/1.5

Sc2/2.3a Sc2/2.3b



Knowledge Intentions

Week 1	<ul style="list-style-type: none">• Explain who Maria Sibylla Merian was and her work with insect life cycles.
Week 2	<ul style="list-style-type: none">• Notice that animals, including humans, have offspring which grow into adults.
Week 3	<ul style="list-style-type: none">• Explain the life cycle of a butterfly.
Week 4	<ul style="list-style-type: none">• Notice that animals, have offspring which grow into adults and explain some changes you may see as animals grow.
Week 5	<ul style="list-style-type: none">• Notice that humans have offspring which grow into adults and explain some changes you may see as animals grow.
Week 6	<ul style="list-style-type: none">• Find out about, and describe, the basic needs of animals, including humans, for survival (water, food and air).

Assessment

Draw and label a life cycle of an animal.

Reference Units



Human Survival (CP)



Animal Survival (CP)



Materials

(Moonzoom)



Learning Intentions

The Laboratory



John Boyd Dunlop

Week 1	Who is John Boyd Dunlop? <ul style="list-style-type: none">• <i>Ask simple questions and recognise that they can be answered in different ways.</i>
Week 2	How can we describe different materials? <ul style="list-style-type: none">• <i>Use observations and ideas to suggest answers to questions.</i>• <i>Identify and classify materials by their physical properties.</i>
Week 3	How does it feel? <ul style="list-style-type: none">• <i>Perform simple tests.</i>• <i>Observe closely.</i>• <i>Use their observations and ideas to suggest answers to questions.</i>
Week 4	How does it move? <ul style="list-style-type: none">• <i>Perform simple tests.</i>• <i>Gather and record data to help in answering questions.</i>
Week 5	What materials do we use every day in the classroom? <ul style="list-style-type: none">• <i>Use observations to suggest answers to questions.</i>
Week 6	What material would be best for a space suit? <ul style="list-style-type: none">• <i>Perform simple tests.</i>• <i>Gather and record data to help in answering questions.</i>

National Curriculum

Sc1/1.1 Sc1/1.2
Sc1/1.3 Sc1/1.4
Sc1/1.5 Sc1/1.6
Sc1/3.1a Sc1/3.1b
Sc2/3.1c Sc2/3.1d



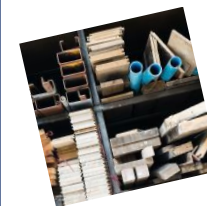
Knowledge Intentions

Week 1	<ul style="list-style-type: none">• Explain who John Boyd Dunlop is and his invention of the tyre.
Week 2	<ul style="list-style-type: none">• Describe the simple physical properties of a variety of everyday materials such as hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent; opaque/transparent.• Identify and name different materials.
Week 3	<ul style="list-style-type: none">• Describe the simple physical properties of a variety of everyday materials.• Group materials based on their physical properties.
Week 4	<ul style="list-style-type: none">• Compare the suitability of everyday materials.• Describe the physical properties of everyday materials.
Week 5	<ul style="list-style-type: none">• Distinguish between an object and the material it is made from.• Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.
Week 6	<ul style="list-style-type: none">• Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.

Assessment

Sort materials based on their properties.

Reference Units



Everyday Materials (CP)

Do all balls bounce? (SI)



Uses of materials (CP)



Animals Including Humans

(Memory Box)



Learning Intentions

Week 1	Who was Aristotle? <ul style="list-style-type: none">• <i>Ask simple questions and recognise that they can be answered in different ways.</i>
Week 2	Can you name the parts of your body? <ul style="list-style-type: none">• <i>Use their observations and ideas to suggest answers to questions.</i>
Week 3	What are the 5 senses? <ul style="list-style-type: none">• <i>Observe closely, using simple equipment.</i>• <i>Perform simple tests.</i>• <i>Gather and record data to help in answering questions.</i>
Week 4	What body parts are linked to our senses? <ul style="list-style-type: none">• <i>Observe closely, using simple equipment.</i>• <i>Perform simple tests.</i>• <i>Gather and record data to help in answering questions.</i>
Week 5	Why are our senses important? <ul style="list-style-type: none">• <i>Ask simple questions and recognise that they can be answered in different ways.</i>
Week 6	Why do we have two eyes? <ul style="list-style-type: none">• <i>Use their observations and ideas to suggest answers to questions.</i>

The Laboratory



Aristotle

National Curriculum

Sc1/1.1 Sc1/1.2 Sc1/1.3

Sc1/1.5 Sc1/1.6

Sc1/2.2d



Knowledge Intentions

Week 1	• Explain who Aristotle was and his work with naming the 5 senses.
Week 2	• Identify, name, draw and label the basic parts of the human body.
Week 3	• Name the 5 senses.
Week 4	• Identify which part of the body is associated with each sense.
Week 5	• Explain why our senses are important.
Week 6	• Use their working scientifically skills to investigate why we have two eyes.

Assessment

Draw and label the parts of the human body.

Reference Units

How does it feel? (SI)



Human Senses (CP)



Plants

(Scented Garden)



Learning Intentions

Week 1	<p>Who was Agnes Arber?</p> <ul style="list-style-type: none"> • <i>Ask simple questions and recognise that they can be answered in different ways.</i>
Week 2	<p>What is different about the plants?</p> <ul style="list-style-type: none"> • <i>Observe closely, using simple equipment.</i> • <i>Use their observations and ideas to suggest answers to questions.</i>
Week 3	<p>What plants grow fruit and veg?</p> <ul style="list-style-type: none"> • <i>Ask simple questions and recognise they can be answered in different ways.</i>
Week 4	<p>What is the life cycle of a plant?</p> <ul style="list-style-type: none"> • <i>Observe closely.</i> • <i>Use observations to suggest answers to questions.</i>
Week 5	<p>What do plants need to stay healthy?</p> <ul style="list-style-type: none"> • <i>Perform simple tests.</i> • <i>Make observations using simple equipment.</i> • <i>Gather and record data to help answer questions.</i>
Week 6	<p>How do plants grow in different environments?</p> <ul style="list-style-type: none"> • <i>Ask simple questions and recognise they can be answered in different ways.</i>

The Laboratory



Agnes Arber

National Curriculum

- Sc1/1.1 Sc1/1.2 Sc1/1.3*
Sc1/1.5 Sc1/1.6
Sc1/2.1a Sc1/2.1b
Sc2/2.2a Sc2/2.2b



Knowledge Intentions

Week 1	• Explain who Agnes Arber was and her work on botany.
Week 2	• Identify and describe the basic structure of a variety of common flowering plants, including trees.
Week 3	• Identify and name a variety of plants that grow fruit and vegetables.
Week 4	• Observe and describe how seeds and bulbs grow into mature plants.
Week 5	• Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.
Week 6	• Find out how different plants have different requirements to stay healthy.

Assessment

Label and identify the parts of the plant and explain what a plant needs to grow.

Reference Units



Plant Parts (CP)

Can seeds grow anywhere? (SI)



Plant Survival (CP)





Living Things

(Wiggle & Crawl)



Learning Intentions

The Laboratory



**Charles H
Turner**

Week 1	Who was Charles H. Turner? <ul style="list-style-type: none"> Ask simple questions and recognise that they can be answered in different ways.
Week 2	Alive, dead or never lived? <ul style="list-style-type: none"> Identify and classify.
Week 3	How are animals suited to their habitat? <ul style="list-style-type: none"> Identify and classify animals based on their habitat. Use observations and ideas to suggest answers to questions.
Week 4	What lives in our local habitat? <ul style="list-style-type: none"> Observe closely, using simple equipment. Gather and record data to help in answering questions.
Week 5	What is a microhabitat? <ul style="list-style-type: none"> Identify and classify animals based on their microhabitat. Ask simple questions and recognise they can be answered in different ways.
Week 6	How do animals get their food? <ul style="list-style-type: none"> Ask simple questions and recognise they can be answered in different ways.

National Curriculum

Sc1/1.1 Sc1/1.2 Sc1/1.3
Sc1/1.4 Sc1/1.5 Sc1/1.6

Sc2/2.1a Sc2/2.1b
Sc2/2.1c Sc2/2.1d



Knowledge Intentions

Week 1	<ul style="list-style-type: none">• Explain who Charles H. Turner was and say how he contributed to the study of insects.
Week 2	<ul style="list-style-type: none">• Explore and compare the differences between things that are living, dead, and things that have never been alive.
Week 3	<ul style="list-style-type: none">• 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.
Week 4	<ul style="list-style-type: none">• Identify and name a variety of plants and animals in their habitats, including microhabitats.
Week 5	<ul style="list-style-type: none">• Explain what a microhabitat is and name a variety of plants and animals that live in different microhabitats.
Week 6	<ul style="list-style-type: none">• 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.

Assessment

Draw a food chain.

Reference Units



Animal Survival (CP)

Habitats (CP)





Exercise & Germs

(Street Detectives)



Learning Intentions

Week 1	<p>Who is Joe Wicks?</p> <ul style="list-style-type: none"> Ask simple questions and recognise that they can be answered in different ways.
Week 2	<p>What do humans need to survive?</p> <ul style="list-style-type: none"> Ask simple questions and recognise they can be answered in different ways.
Week 3	<p>Why should I exercise?</p> <ul style="list-style-type: none"> Perform simple tests. Gather and record data to help answer questions. Observe closely, using simple equipment.
Week 4	<p>How do germs spread?</p> <ul style="list-style-type: none"> Perform simple tests. Observe closely. Use observations and ideas to suggest answers to questions.
Week 5	<p>What makes a healthy balanced diet?</p> <ul style="list-style-type: none"> Ask simple questions and recognise they can be answered in different ways.
Week 6	<p>Can you design a healthy meal?</p> <ul style="list-style-type: none"> Ask simple questions and recognise they can be answered in different ways.

The Laboratory



Joe Wicks

National Curriculum

Sc1/1.1 Sc1/1.2 Sc1/1.3

Sc1/1.5 Sc1/1.6

Sc2/2.3b Sc2/2.3c



Knowledge Intentions

Week 1	• Explain who Joe Wicks is and his work with healthy diet and exercise.
Week 2	• Explain the basic needs of humans to survive (Water, food, air)
Week 3	• Explain the importance for humans to exercise and the impact it has on the body.
Week 4	• Explain how germs are spread and say why it's important humans have good hygiene.
Week 5	• Describe the importance of eating the right amounts of different types of food for humans.
Week 6	• Identify and explain what makes a healthy meal.

Assessment

Design a poster on how to stay healthy.

Reference Units



Why should I exercise (SI)

Remarkable Recipes (CP)

