



<p>To recognise the difference between things that are alive, were once alive or have never been alive. Working scientifically: To classify objects into groups.</p>	<p>I can recall some of the life processes. I can name objects that are living, were once alive or have never been alive. I can classify objects into groups, giving reasons for my choices.</p>
<p>To identify plants and animals in different habitats.</p>	<p>I can name four different habitats. I can match animals and plants to their habitats. I can describe what a habitat is like.</p>

To identify how a habitat provides animals and plants with what they need to survive.

Working scientifically: To carry out research to find answers to questions.

Learning Objectives	Learning Outcomes
<p>Knowledge To name parts of the human body.</p> <p>Working scientifically To sort body parts into groups.</p>	<p>Knowledge I can draw and label human body parts I can identify some differences in animal body parts.</p> <p>Working scientifically I can use sorting rings to group same and different body parts.</p>
<p>Knowledge To name the body parts used for each sense.</p> <p>Working scientifically To spot patterns in data.</p>	<p>Knowledge I can draw and label the body parts used for each sense.</p> <p>Working scientifically I can measure using cubes. I can use patterns in data to answer a question.</p>
<p>Knowledge To identify the body parts used for the sense of taste and touch.</p> <p>Working scientifically To use the senses to make observations.</p>	<p>Knowledge I can use my sense of touch to identify an object.</p> <p>Working scientifically I can describe the taste of different foods. I can record describing words in a table.</p>
<p>Knowledge To identify the body parts used for the sense of smell and sight.</p> <p>Science in action To recognise that scientists are always making new discoveries.</p>	<p>Knowledge I can recall the body part used for smell. I can recall the body parts used for sight.</p> <p>Science in action I can understand the importance of research into sight.</p>
<p>Knowledge To identify the body part used for the sense of hearing.</p> <p>Working scientifically To investigate how sound changes as you move further away.</p>	<p>Knowledge I can name the body part used for hearing I can identify an object based on the sound it makes.</p> <p>Working scientifically I can use my observations to answer a question.</p>

Outcomes:

Name the four seasons in order and describe the typical weather in each.

Name some activities and events in the four seasons.

Complete a pictogram and use it to answer simple questions.

Recall that summer has the most daylight hours and winter has the least daylight hours.

Recording data about the temperature across the four seasons.

Label a map of the UK with capital cities and seasonal weather symbols.

Learning Objective	Learning Outcomes
To identify how the weather changes across the four seasons.	I can name the four seasons. I can name the twelve months of the year. I can describe the expected weather patterns for each season.
To identify events and activities that take place in different seasons.	

Outcomes:

Pupils who are secure will be able to:

- Name objects and identify the materials they are made from.
- Recognise that objects are made from materials that suit their purpose.
- Recall that a property is how a material can be described.

When working scientifically, pupils who are secure will be able to:

- Sort objects based on the materials they are made from.
- Group objects based on their properties.
- Suggest ways to test materials for their properties.
- Make predictions and recognise whether they were accurate.
- Use their observations to answer questions.
- Begin to recognise if a test is fair.

Learning Objectives	Learning Outcomes
To identify everyday materials. Working scientifically: To sort objects into groups based on the materials they are made from.	I can name everyday materials. I can identify the materials different objects are made from. Working scientifically: I can sort objects into groups.
To recognise the difference between objects and materials.	I can name objects. I can identify the material an object is made from. I can explain the difference between objects and materials.
To describe the properties of materials.	I can recall that property refers to how a material can be described. I can describe the properties of everyday materials. I can recognise that objects are made from materials which suit their purpose.
To group materials based on their properties (absorbency). Working scientifically: To make observations and record data.	I can name the properties of materials. I can sort materials into groups based on their properties. Working scientifically I can describe and record what I notice.
To group materials based on their properties (waterproofness).	I can suggest ways to test the properties of materials. I can make a prediction. Working scientifically: I can recognise when my prediction does not match the results.

Working scientifically: To plan a test and suggest what might happen.	
To group materials based on their properties (toughness). Working scientifically: To answer questions based on results.	I can describe how materials respond to pulling and tearing Working scientifically: I can use my observations to answer questions. Working scientifically: I can recognise if a test is fair.

[Unit 5A: Plants - Introduction to Plants](#)

Identifying the key features of a plant, children describe important structures and make comparisons between different plants. Pupils use investigative skills to record the growth of a plant over time and begin to reflect on factors that will affect its development. They begin to explore how plants are used by humans and grow their own herb garden.

Outcomes: (Available April 2024)

Learning Objectives	Learning Outcomes

[Unit 6A: Making Connections - TBC](#)

Outcomes:

Learning Objective	Learning Outcomes

Learning Objective	Learning Outcomes

[Unit 4B: Animals including Humans - Life Cycles and Health](#)

Outcomes: Available April 24

Learning Objectives	Learning Outcomes

Learning Objectives	Learning Outcomes
Working scientifically: To classify a variety of minibeasts.	I can name a variety of minibeasts. I can recognise the different characteristics of minibeasts. I can sort minibeasts into groups based on my observations. Working scientifically: I can organise questions to create

Lower Key Stage 2

Year A

<p>closely, using a magnifying glass.</p>	<p>I can observe the appearance of a rock in detail.</p>
<p>Knowledge To group rocks using their physical properties.</p> <p>Working scientifically To use the results for the physical properties of rocks to make predictions, suggest improvements and explain observations over time.</p>	<p>Knowledge I can group rocks by their absorbency. I can group rocks by their reaction to acid rain (vinegar). I can group rocks by their hardness.</p> <p>Working scientifically I can use my results to choose the appropriate rock type for a specific use. I can use my results to suggest a better choice of rock for a specific use. I can use my results to predict how a rock will be affected by the weather.</p>
<p>Knowledge To describe the process of fossil formation.</p> <p>Working scientifically To present research on fossil formation.</p>	<p>Knowledge I can list the different factors that break down rocks. I can use a model to demonstrate fossil formation. I can use a short film to sequence the steps of fossil formation.</p> <p>Working scientifically I can research fossil formation using a single source. I can present my research in short film form.</p>

Knowledge
To identify fossils and group rocks accordingly.

Working scientifically
To use the fossil record to answer questions

6EB.8.36 ref*EMC /Spa



When working scientifically, pupils who are secure will be able to:

Record measurements of different bones and use the data to sort them into size order.

Describe some ways scientific research has improved the field of bionics/prosthetics, such as the choice of materials or linking their movement to muscles in the arm.

Find relevant data on food packaging and make numerical comparisons.

Learning Objective	Learning Outcome
To explain the role of a skeleton. Working scientifically: To group animals based on their physical properties.	I can name the three key functions of the skeleton. I can recall key features of a vertebrate, invertebrate, endoskeleton and exoskeleton. I can group animals based on their skeletons. I can describe the role of joints in the skeleton.
To recognise the main bones in the body. Working scientifically: To measure and sort data.	I can name key bones in the human skeleton.

Science in action: To explore how knowledge has progressed over time and different jobs use this information.

I can describe some changes to scientific knowledge about nutrition.

I can identify some jobs that require knowledge of nutrition.

	<p>I can suggest suitable headings for the results table.</p> <p>I can record information in the correct columns.</p>
<p>To compare light reflecting on different surfaces.</p>	<p>Knowledge</p> <p>I can describe what happens when light reflects.</p> <p>I can give examples of reflective surfaces or materials.</p> <p>I can describe factors that may affect the quality of a reflected image.</p>

Knowledge

materials cast a shadow.

Unit 4B: Forces

<p>To recall how different people work with light and shadows.</p>	<p>I can name different examples of people who work with light and shadows. I can describe how different people work with light and shadows.</p>
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Unit 4B: Forces, Earth and Space - Forces and Magnets

Identifying examples of light sources, children learn that light is needed to see and how its absence causes darkness. Children investigate reflection and shadow formation, including how different factors change the shadows observed. They explore how shadows can be used to entertain in the arts and create shadow puppets to recount how different people work or experiment with light.

Outcomes:

<p>To recognise the effects and uses of forces.</p> <p>Working scientifically: To write a scientific conclusion identifying cause and effect.</p>	<p>I can list the effects of forces.</p> <p>I can list some uses of friction.</p> <p>I can describe how surface roughness affects friction.</p> <p>Working scientifically: I can use evidence to support my conclusion.</p>
<p>To interpret how and why things move differently on different surfaces.</p> <p>Working scientifically: To plan an investigation using variables.</p>	<p>I can describe and compare how things move on rough and smooth surfaces.</p> <p>I can explain why things move differently on rough and smooth surfaces.</p> <p>Working scientifically: I can identify the variables to change, measure and control.</p>

I identify solids, liquids and gases using their properties.

Describe melting, freezing, condensing and evaporating.

Describe the different stages of the water cycle.

Describe how temperature affects the rate of evaporation and therefore the water cycle.

When working scientifically, pupils who are secure will be able to:

To make predictions for new values about evaporation rates.

I can name the start and end states when melting and freezing materials.

Working scientifically

I can predict how temperature will affect evaporation rates.

I can predict how wind will affect evaporation rates.

Knowledge

To describe the different stages of the water cycle.

Knowledge

I can name the stages of the water cycle.

I can order the stages of the water cycle.

Working scientifically

To record the stages of the water cycle using a labelled diagram.

