

Year 1

Animals including Humans



Animals



The Human Body

Everyday Materials



Materials and Matter

Plants



Plants

Seasonal Changes



Earth and Space



Year 1 Unit Overview – Everyday Materials (Materials and Matter Strand)

National Curriculum:

Pupils should be taught to:

- **Distinguish between an object and the material from which it is made**
- **Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock**
- **Describe the simple physical properties of a variety of everyday materials**
- **Compare and group together a variety of everyday materials on the basis of their simple physical properties**

Outcomes:

Core Knowledge

Core knowledge, vocabulary and progression are outlined in the Science Knowledge Progression document (Materials and Matter strand) and should be explicitly taught and revisited. This knowledge builds on prior learning and prepares pupils for future learning within the Materials and Matter strand.

By the end of this unit all pupils should have had the opportunity to:

- Observe a range of everyday materials in the local environment
- Identify and name common materials (e.g. wood, plastic, metal, glass, water, rock)
- Describe the simple physical properties of materials (e.g. hard, soft, rough, smooth, shiny, dull)
- Compare different materials (similarities and differences)
- Sort and group materials based on their properties

Teacher Support

Teachers are supported through high-quality, nationally recognised resources such as Oak National Academy, Explorify, TAPS Resources, ASE (Association for Science Education) and STEM Learning, ensuring consistency while maintaining professional autonomy

Working Scientifically

By the end of this unit pupils should have developed the following working scientifically skills:

Working Scientifically (TAPS framework)

Observe closely, using simple equipment

Identify and classify

Perform simple tests

Use observations and ideas to suggest answers to questions

TAPS Enquiries: Reflection Tests, Floating and Sinking

Other Enquiry Opportunities:

Identify and classify materials based on observable properties

Ask simple questions (e.g. “Which material is the strongest?” “Which material is waterproof?”)

Use simple tests to explore how materials behave (e.g. bending, stretching, squashing)

Use observations to answer questions about materials

Possible Evidence and Assessment Opportunities:

Assessment is based on retrieval of sticky knowledge and application through discussion and practical work.

Retrieval of sticky knowledge (quizzes)

Observation of practical work

Use of scientific vocabulary in discussion

TAPS enquiry assessments

Retrieval Opportunities

Review prior knowledge at the start of lessons

Use low-stakes quizzes to secure sticky knowledge throughout the unit



Year 1 Unit Overview – Plants (Plants Strand)

National Curriculum:

Pupils should be taught to:

- **Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees**
- **Identify and describe the basic structure of a variety of common flowering plants, including trees.**

Outcomes:

Core Knowledge

Core knowledge, vocabulary and progression are outlined in the Science Knowledge Progression document (Plants strand) and should be explicitly taught and revisited. This knowledge builds on prior learning and prepares pupils for future learning within the Plants strand.

By the end of this unit all pupils should have had the opportunity to:

- Observe plants in the local environment
- Identify and name plants and trees
- Label parts of a plant
- Compare different plants (similarities and differences)
- Sort plants into simple groups

Teacher Support

Teachers are supported through high-quality, nationally recognised resources such as Oak National Academy, Explorify, TAPS Resources, ASE (Association for Science Education) and STEM Learning, ensuring consistency while maintaining professional autonomy

Working Scientifically

By the end of this unit pupils should have developed the following working scientifically skills:

Working Scientifically (TAPS framework)

Observe closely, using simple equipment

Identify and classify

Use observations and ideas to suggest answers to questions

TAPS Enquiries: Structure

Other Enquiry Opportunities:

Identify and classify plants based on observable features

Ask simple questions (e.g. “Do all plants have flowers?”)

Use observations to answer questions

Possible Evidence and Assessment Opportunities:

Assessment is based on retrieval of sticky knowledge and application through discussion and practical work.

Retrieval of sticky knowledge (quizzes)

Observation of practical work

Use of scientific vocabulary in discussion

TAPS enquiry assessments

Retrieval Opportunities

Review prior knowledge at the start of lessons

Use low-stakes quizzes to secure sticky knowledge throughout the unit



Year 1 Unit Overview – Seasonal Changes (Earth and Space Stand)

National Curriculum:

Pupils should be taught to:

- **Observe changes across the four seasons**
- **Observe and describe weather associated with the seasons and how day length varies.**

Outcomes:

Core Knowledge

Core knowledge, vocabulary and progression are outlined in the Science Knowledge Progression document (Earth and Space strand) and should be explicitly taught and revisited. This knowledge builds on prior learning and prepares pupils for future learning within the Earth and Space strand.

By the end of this unit all pupils should have had the opportunity to:

- Observe changes across the four seasons in the local environment
- Identify and name the four seasons
- Describe typical weather in each season
- Describe some other features of their surroundings, themselves, animals, plants that change over the seasons
- Compare seasonal changes (e.g. temperature, daylight, plants, clothing)
- Observe and record changes over time (e.g. length of day, weather patterns)

Teacher Support

Teachers are supported through high-quality, nationally recognised resources such as Oak National Academy, Explorify, TAPS Resources, ASE (Association for Science Education) and STEM Learning, ensuring consistency while maintaining professional autonomy

Working Scientifically

Working Scientifically (TAPS framework)

Observe closely, using simple equipment

Identify and classify

Use observations and ideas to suggest answers to questions

Gather and record data to help answer questions

TAPS Enquiries: Seasonal Changes (Observing over time)

Other Enquiry Opportunities:

Ask simple questions (e.g. “How does the weather change over time?”)

Observe and record weather patterns

Use simple equipment (e.g. thermometers, rain gauges where appropriate)

Use observations to answer questions about seasonal changes

Possible Evidence and Assessment Opportunities:

Assessment is based on retrieval of sticky knowledge and application through discussion and practical work.

Retrieval of sticky knowledge (quizzes)

Observation of practical work

Use of scientific vocabulary in discussion

TAPS enquiry assessments

Retrieval Opportunities

Review prior knowledge at the start of lessons

Use low-stakes quizzes to secure sticky knowledge throughout the unit



Year 1 Unit Overview – Animals Including Humans (Animals and The Human Body Strands)

National Curriculum:

Pupils should be taught to:

- **Identify and name a variety of common animals including fish, amphibians, reptiles, mammals and birds**
- **Identify and name a variety of common animals that are carnivores, herbivores and omnivores**
- **Describe and compare the structure of a variety of common animals (birds, fish, amphibians, reptiles, and mammals, including pets)**
- **Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.**

Outcomes:

Core Knowledge

Core knowledge, vocabulary and progression are outlined in the Science Knowledge Progression document (Animals and The Human Body strands) and should be explicitly taught and revisited. This knowledge builds on prior learning and prepares pupils for future learning within the Animals and The Human Body strands.

By the end of this unit all pupils should have had the opportunity to:

- Identify and name a variety of common animals (including fish, amphibians, reptiles, birds and mammals)
- Describe and compare the basic structure of different animals (e.g. wings, legs, tails, heads)
- Identify and group animals based on their features
- Identify and describe what different animals eat (herbivores, carnivores, omnivores)
- Compare different animals (similarities and differences)

Working Scientifically

By the end of this unit pupils should have developed the following working scientifically skills:

Working Scientifically (TAPS framework)

Observe closely, using simple equipment

Identify and classify

Use observations and ideas to suggest answers to questions

TAPS Enquiries: Animal Classification (Identifying and classifying)

Other Enquiry Opportunities:

Identify and classify animals based on observable features

Ask simple questions (e.g. “How are these animals the same or different?” “What do animals eat?”)

Use observations to compare animals

Use simple sorting activities to group animals

Possible Evidence and Assessment Opportunities:

Assessment is based on retrieval of sticky knowledge and application through discussion and practical work.

Retrieval of sticky knowledge (quizzes)

Observation of practical work

Use of scientific vocabulary in discussion

TAPS enquiry assessments

Retrieval Opportunities

Review prior knowledge at the start of lessons

Use low-stakes quizzes to secure sticky knowledge throughout the unit