

Year 1 Science Learning Sequence

Term 1 – Animals Including Humans (Biology)

Resources to support planning: <https://grammarsaurus.co.uk/portal/tag/year-1-animals-including-humans/>

By the end of this unit I will know....

Children will identify and name a variety of common animals including: (Lesson 1)

- Fish
- Amphibians
- Reptiles
- Birds
- Mammals

Children will identify and name a variety of *common animals that are* (Lesson 3)

- Carnivores
- Herbivores
- omnivores

Children will describe and compare the structure of a variety of common animals: (Lesson 2)

- Fish
- Amphibians
- Reptiles
- birds
- mammals including pets

Children will identify, name, draw and label the basic parts of the human body (including head, neck, arms, elbows, legs, knees, face, ears, eyes, hair, mouth, teeth) (Lesson 6) and say which part of the body is associated with each sense. (Lesson 5)

Children will know that animals reproduce and grow through a life cycle (egg, chick, chicken; egg, caterpillar, pupa, butterfly; spawn, tadpole, frog; lamb, sheep). (Lesson 4, Lesson 3)

Children will notice that animals, including humans have offspring which grow into adults. (Lesson 3)

By the end of this unit I will be able to...

Children will understand how to and be able to **group** animals based on their **observations**.

Children will be able to **compare and contrast** based on their **observations**.

Children will be able to **ask and answer questions**.

Children will be able to **ask questions** and **suggest ways to answer them**. Children will be able to recognise that **questions can be answered in different ways**.

Children will understand how to and be able to **observe change over time**.

Children will **perform simple tests** to answer a question.

Children will gather and **record data to help in answering questions**.

Key Vocabulary:

Tier 3

amphibians

reptiles

mammals

birds

insects

carnivore

herbivore

omnivore

Prior knowledge to recap...

Children will recognise and name a variety of different animals including insects

Lesson 1

What is this animal called?

amphibians
reptiles
mammals
birds

Lesson 2

How are animals different?

Lesson 3

Do all animals eat the same food?

Carnivore
Herbivore
omnivore

Lesson 4

What are our babies called?

Lesson 5

What are the human body parts?

Lesson 6

What are the senses?

Assessment

Children will know the names of different body parts of humans (and animals that they have had experience of). Children will understand what some body parts do and how they help us learn (i.e listening ears) Children will sort and group animals according to key features (e.g these animals live in the sea, these fly). Children will ask questions about what they see.	insects						
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Term 2 – Plants (Biology)

Resources to support planning: <https://grammarsaurus.co.uk/portal/tag/year-1-plants/>

By the end of this unit I will know....

Children will identify and name a variety of plants (Lesson 3)

- common wild plants
- garden plants
- deciduous trees
- evergreen trees

Children will identify and describe the basic structure of (Lesson 1/2)

- common flowering plants (leaves, flowers, petals, roots, stem)
- common trees (leaves, trunk, branches, roots)

Children will observe and describe how (Lesson 4)

- Seeds grow into mature plants
- Bulbs grow into mature plants

Children will find out and describe how plants need water, light and a suitable temperature for germination, growth, survival and reproduction. (Lesson 5, 6)

By the end of this unit I will be able to...

Children will be able to **identify and classify**.

Children will be able to **describe** how they were able to identify and classify.

Children will understand how to and be able to **compare and contrast** living things.

Children will be able to use a **hands lens** to make observations.

Children will be able to **ask questions and set up a simple test to answer them**.

Children will be able to **observe change over time** and use their observations to **suggest answers to questions**.

Children will be able to **draw diagrams with labels to record their observations over time**.

Key Vocabulary:

Tier 3

seeds
bulbs
nutrients

<u>Prior knowledge to recap...</u>	<u>Lesson 1</u>	<u>Lesson 2</u>	<u>Lesson 3</u>	<u>Lesson 4</u>	<u>Lesson 5</u>	<u>Lesson 6</u>	<u>Assessment</u>
Children will have opportunities to explore what a plant / flower is, how it grows from a seed/bulb, has a stem and leaves, flowers have petals. Children will know where to see plants.	What are the parts of a plant?	What are the parts of a tree?	How can we group plants?	How do plants grow? Seeds Bulbs	What do plants need to survive? Nutrients	How can we investigate plants?	

Term 3 and 4 – Seasonal Changes (Physics)

Resources to support planning: <https://grammarsaurus.co.uk/portal/tag/year-1-seasonal-change/>

By the end of this unit I will know....

Children will observe changes across the four seasons.

- Know that there are 4 seasons and their names. (Lessons 1-4)

Children will observe and describe weather associated with the seasons and how day length varies. (Lesson 5)

Children should understand that it is not safe to look directly at the sun, even when wearing dark glasses. (Lesson 2)

By the end of this unit I will be able to...

Children will be able to **ask simple questions** and recognise that they can be answered in different ways.

Children will be able to **observe** and talk about change.

Children will be able to create **tables and charts** to record their observations for a display.

Children will understand how a **rain gauge (ml) and thermometer (degrees Celsius)** are used to measure the weather.

Key Vocabulary:

Tier 3

rain gauge
thermometer

**Prior knowledge
to recap**

Children will
notice and
describe different
weather patterns
across the year.

Lesson 1

What is spring?

Lesson 2

What is summer?

Lesson 3

What is Autumn?

Lesson 4

What is Winter?

Lesson 5

How does the day
length change?

Lesson 6

How can we
measure the
weather? (Link
with Geography)

rain gauge
thermometer

Assessment

Cumulative quiz

Ask all questions
at end of unit

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Term 5 and 6 - Everyday materials and their properties (Chemistry)

Resources to support planning: <https://grammarsaurus.co.uk/portal/tag/materials-science-year-1/>

By the end of this unit I will know....

Children will distinguish between an object and the material from which it is made. (Lesson 1)

Children will be able to identify and name a variety of everyday materials including wood, plastic, glass, metal, water and rock. (Lesson 1)

Children will be able to describe the simple physical properties of a variety of everyday materials (hard/soft, stretchy/stiff, shiny/dull, rough/smooth, bendy/not bendy, waterproof/not waterproof, absorbent/not absorbent, opaque/transparent). (Lesson 2)

Children will compare and group together a variety of everyday materials on the basis of their simple physical properties. (Lesson 3)

Children can identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. (Lesson 5)

Children will understand that some materials can be used for more than one thing (metal can be used for coins, cans, cars and table legs; wood can be used for matches, floors and telegraph poles). (Lesson 5)

Children can find out how the shapes of solid objects made from some materials can be changed by: (Lesson 4)

- Squashing
- Bending
- Twisting
- Stretching

Children will learn about people who have developed useful new materials (Anke Domaske and Walton Lincoln Hawkins). (Lesson 6)

By the end of this unit I will be able to...

Children will be able to perform **simple tests** to answer their own questions.

Children will be able to **gather and record data** to help in answering questions.

Children will be able to **compare** objects.

Children will be able to use their **observations to identify and classify objects**.

Children will be able to **ask questions and recognise that they can be answered in different ways**.

Children will be able to **record** their observations using a **table** to help in answering questions.

Key Vocabulary:

Tier 2

waterproof
bendy
stretchy
hard
soft
rough
smooth
material
property

Tier 3

opaque
transparent
absorbent

<u>Prior knowledge to recap...</u>	<u>Lesson 1</u>	<u>Lesson 2</u>	<u>Lesson 3</u>	<u>Lesson 4</u>	<u>Lesson 5</u>	<u>Lesson 6</u>	<u>Assessment</u>
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Children will recognise that everyday objects are made from different materials. Children will describe the properties of materials (hard, soft, smooth, etc) Children will describe some changes in state (each ice melts when heated and water freezes when cooled).	What are objects made from?	How can we describe materials? material	How can we compare materials? waterproof bendy stretchy hard soft rough smooth property	How can we change materials?	How can we investigate materials? opaque transparent absorbent	How have new materials been developed?	
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