

The Northway Curriculum

Year Four Science Unit One Electricity



LO: To investigate the difference between mains and battery power

LO: To investigate circuits and their different components

LO: Testing objects to see if they are conductors or insulators

LO: To investigate the purpose of conductors and insulators

LO: To plan an experiment (dimming and brightening the bulb)

LO: I can label circuit symbols

Year Four Science States of matter

Year Four Science Working scientifically

I can ask relevant questions and use different types of scientific enquiries to answer them

I can set up simple practical enquiries, comparative and fair tests

I can make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers

I can gather, record, classify and present data in a variety of ways to help in answering questions

I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables

I can report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions

I can use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions

I can identify differences, similarities or changes related to simple scientific ideas and processes

I can use straightforward scientific evidence to answer questions or to support their findings.

The Northway Curriculum

Year Four

Science

Unit Two

States of Matter



LO: I can compare and group materials based on whether they are solid or liquid

LO: I can explore and identify the properties of gases

LO: I can investigate if all materials melt at the same temperature

LO: I can investigate the different melting point and plot them on graph

LO: I can design and experiment to investigate evaporation

LO: I can understand the process of condensation

LO: I understand the water cycle

Year Two

Science

States of matter

I can find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Year Four

Science

Working scientifically

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Year Four

Science

Unit 3

Living things and their habitats



LO: I can identify a variety of habitats and say why animals live there.

LO: I can group organisms according to their characteristics.

LO: I can classify animals into specific groups.

LO: I can use a classification key to identify animals.

LO: I can identify and identify and classify a range of British plants.

LO: I can explore the human impact on habits and environments.

Year 2

Science

Previous Knowledge

I can explore and compare the differences between things that are living, dead, and things that have never been alive

I can 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

I can identify and name a variety of plants and animals in their habitats, including microhabitats

I can 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.

Year Four

Science

Working scientifically

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Year Four

Science

Unit 4

Sound



LO: I can find out when sounds are made when objects vibrate.

LO: I can investigate when sounds can travel through different materials.

LO: I can explore the relationship between distance and volume.

LO: I can investigate that insulate sound by blocking vibration.

LO: I can investigate how sounds can be different pitches and volumes.

LO: I can find out how the length, thickness and tightness of a string affects its pitch.

LO: I can find out how sounds can be made with air vibrations and how to change the pitch.

Year Four
Science
Previous knowledge

Year Four

Science

Working scientifically

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Year Four

Science

Unit Five

Human digestion



LO: I can identify and classify carnivores, omnivores and herbivores.

LO: I can construct and interpret a variety of food chains.

LO: I can identify the different types of teeth in humans and identify their functions.

LO: To explore ways of keeping teeth healthy.

LO: I can investigate how the human body digests food.

LO: I can identify the functions of the basic parts of the digestive system.

Year Two

Science

States of matter

I can identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.

Year Four

Science

Working scientifically

I can ask relevant questions and use different types of scientific enquiries to answer them

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I can make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers

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