

Vocabulary

Mineral	A natural substance that makes up rock.
Rock	Made from one or more minerals.
Magma	Hot liquid rock.
Organic matter	Made up of both living and decaying animals and plants.
Hard	Resistant to scratching and pressure.
Density	How compact an object is.
Permeable	Allows water to pass through.
Erosion	Wind and rain gradually wear down rocks forming sediment.
Sediment	Small pieces of land that break down. The sediment can be grains of sand, mud, pebbles, minerals, fossils or plants.

Weathering processes

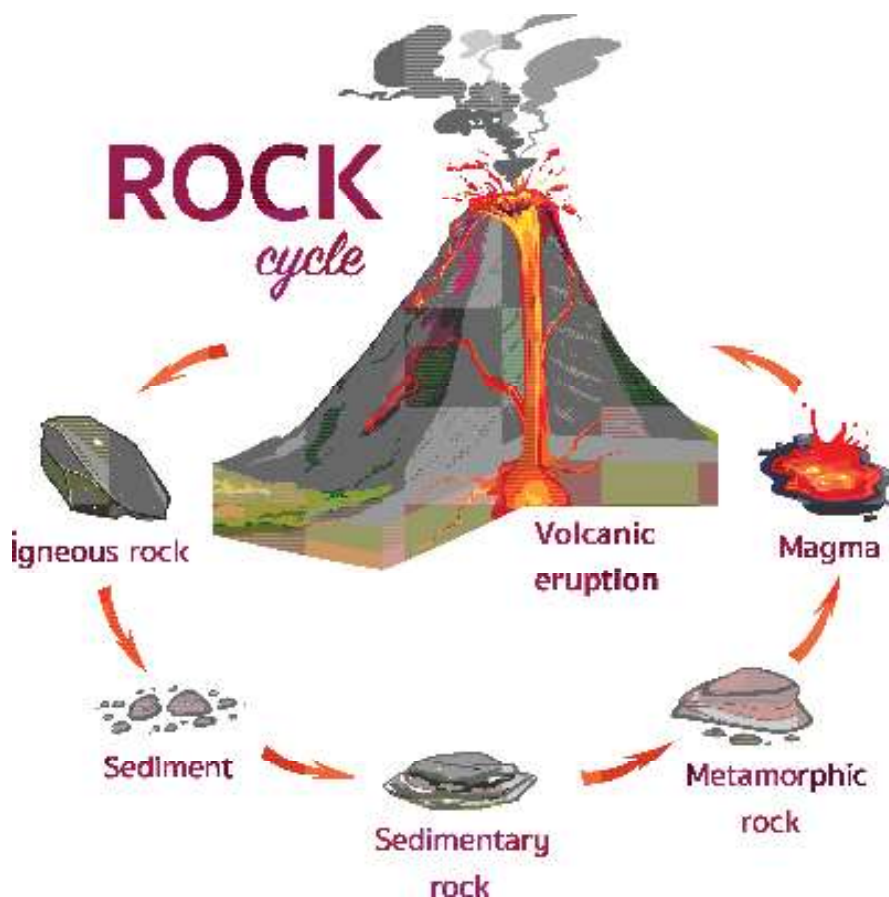
Physical weathering	Caused by physical processes such as changes in temperature, freezing and thawing, and the effects of wind, rain and waves.
Chemical weathering	Caused by rain water reacting with the mineral grains in rocks to form new minerals (clays) and soluble salts.
Biological weathering	Caused by animals and plants. For example, rabbits and other burrowing animals can burrow into a crack in a rock, making it bigger and splitting the rock.

Types of rock

Igneous rock	Made when magma cools to form rock.
Sedimentary rock	Made when layers of sediment settle on top of each. Over millions of years the bottom layers turn into rock.
Metamorphic rock	Heat and pressure inside the earth can change igneous and sedimentary rock into metamorphic rock.

Fossilisation process

1. Animal dies, its skeleton settles on the sea floor and is buried by sediment.
2. The sediment surrounding the skeleton thickens and begins to turn to stone.
3. The skeleton dissolves and a mould is formed.
4. Minerals crystallise inside the mould and a cast is formed.
5. The fossil is exposed in the Earth's surface.



Knowledge organiser

Vocabulary	
Clean energy	Energy processed in a way that does not cause pollution or release much carbon dioxide
Climate	General or average weather conditions over a very long period of time
Exports	Products that a country produces and sells to other countries
Fossil fuels	Coal, oil and gas: fuels that are formed from the remains of plants and animals changed by millions of years of heat and pressure
Mining	Digging up natural resources so they can be used
Natural resources	Materials used by humans that are formed naturally
Non-renewable	Able to run out; not able to be reproduced effectively
Pollution	Harmful substances released into the environment
Renewable	Not able to run out; always available
Reserves	Quantities of a substance not yet used

Ten important natural resources

Natural resource	What is it?	What is it usually used for?
Air	Mixture of gases	Breathing and photosynthesis
Coal	Fossil fuel: solid	Energy
Cobalt	Metal	Engines
Gold	Metal	Jewellery and electronics
Natural gas (mainly methane)	Fossil fuel: gas	Energy
Oil	Fossil fuel: liquid	Energy
Soil	Biomass	Agriculture
Uranium	Metal	Nuclear energy
Water	Liquid	Sustaining life on the planet
Wood	Biomass	Building homes and burning for fuel

Structure - Pavilions

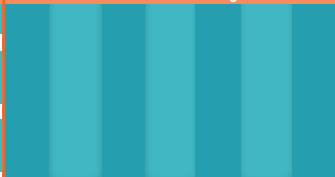
Aesthetic	How an object or product looks.
Cladding	A material put on top of another material or on a structure as protection or to improve appearance.
Design criteria	A set of rules to help designers focus their ideas and test the success of them.
Evaluation	When you look at the good and bad points about something, then think about how you could improve it.
Frame structure	A way of building something so that the inside supports are built first and the outside covering is added afterwards as cladding.
Function	The purpose of an object (for example a chair needs to hold a person when sitting down); or how the product works (for example a torch needs to provide light in a dark space).
Inspiration	To gain ideas from different sources such as the internet, magazines and books.
Pavilion	A decorative building or structure for leisure activities.
Reinforce	To make a structure or material stronger, especially by adding another material or element to it.
Stable	Object does not easily topple over.
Structure	Something that has been made and put together and can usually stand on its own (e.g. a building, a bridge, a chair).
Target audience	A person or particular group of people at whom a product is aimed.
Target customer	A person or particular group of people who you expect to buy the product.
Texture	The way that something feels when you touch it (e.g. soft, rough, smooth).
Theme	An idea or specific design that your product or structure is based on (e.g. space-themed).

You can create all sorts of textures for your cladding designs using different materials and techniques.

Weave



Concertina fold



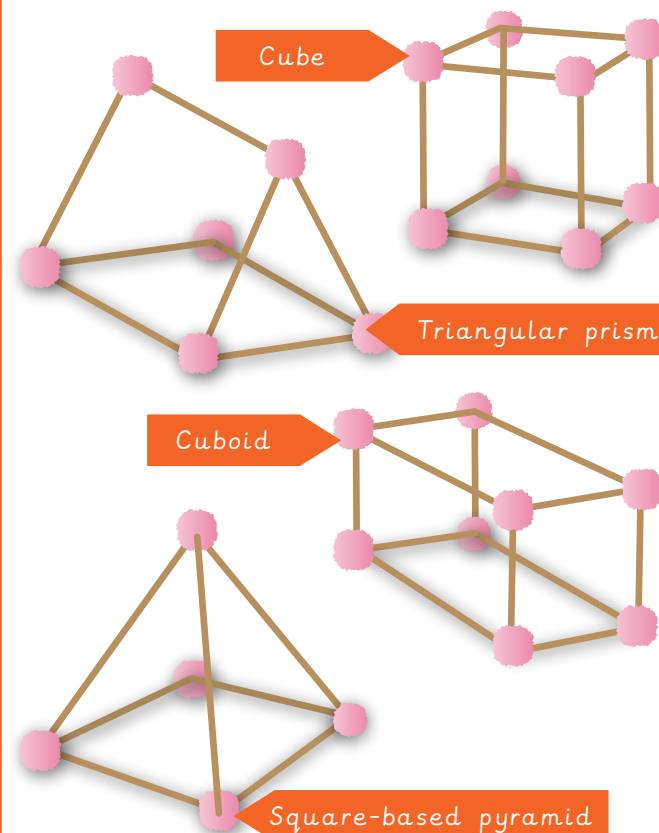
Cut-outs



Key facts



There are variety of ways to assemble a frame structure.



What materials and equipment could you use to make your structure?

Year 4: Body and tuned percussion (Rainforests)

Musical style: Body percussion

Body percussion is a style of music where you use your body to make sounds. You can make many different sounds by slapping, hitting, stamping, and rubbing!

Tapping foot

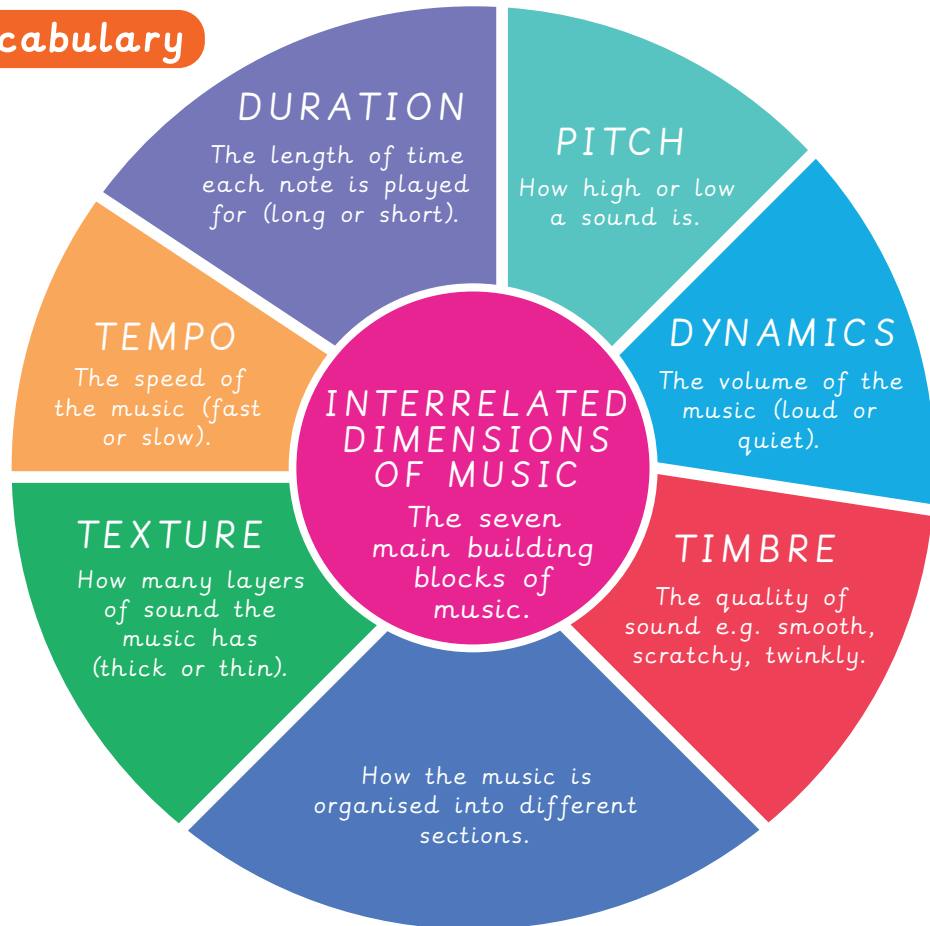


Clapping



Clicking fingers

Vocabulary



Appraising

Assessing and discussing a performance or piece of music.

Melody

Notes of different pitches played in a sequence to create a tune.

Rhythm

A pattern of long and short sounds (and silences) within a piece of music.

Contrast

An obvious difference.

Layers

The different instruments, rhythms or melodies that build the overall texture.

Transition

Music that links one section of a piece of music to another.

Knowledge Organiser



Year 4 - Valuing Difference

Key questions

Recognising and Celebrating Difference (Incl Religions and Cultural Difference)

How are people different, besides
how they look?

Does being different cause
problems? Why?

Can people being different be
positive? Why?

Understanding and Challenging Stereotypes

How do we label people?

Why do we label people?

What is a stereotype?

How does someone feel if they
have been labelled?

Does labelling someone change
them or affect them?

Why is it important to challenge
stereotyping?

Key vocabulary

challenge labelled confidence
stereotype negotiate
unique positive compromise
label prejudice differences
invade similarities respect

I can ...

I can say a lot of ways that people
are different, including religious or
cultural differences.

I can explain why it's important to
challenge stereotypes that might be
applied to me or others.