Enquiry Organiser UKS2
Autumn 2 B Year 6

Music – Dynamics, Pitch and Tempo [Fingal's Cave]

Knowledge
I know...

- Classical music is music that has been composed by musicians who are trained in the art of composing.
- The term 'classical music' can also refer to music composed in the classical period 1750 to 1825.
- The focus piece for this topic is Fingal's Cave by Mendelssohn (1830) which is a classical piece depicting the sea and waves swirling around Fingal's Cave which is in the Inner Hebrides.
- The seven main building blocks of music are: Duration, Pitch, Dynamics, Timbre, Structure, Texture and Tempo.

Skills
I can...

- Engage in discussion about the sounds of an orchestral piece.
- Have a selection of varied vocabulary in response to what they hear.
- Change dynamics and pitch, differentiating between the two.
- Take the role of conductor or follow a conductor.
- Change texture within their group improvisation and talk about its effect.
- Create a graphic score to represent sounds.
- Follow the conductor to show changes in pitch, dynamics and texture.

Links back to
I remember...[LKS2]

- . 'Transposing' a melody means changing its key, making it higher or lower pitched.
- Changing the dynamics of a musical phrase or motif can change the texture of a piece of music.

Vocabulary:

Depict – To represent something using music.
Composition – A piece of music that has been created.
Conductor – A person who directs the performance of an orchestra or choir, using hand signals.
Graphic score – A way of writing down music on the page without using traditional stave notation, using symbols and images to represent the music.
Improvise – Making up music as it is played or performed.
Notate – To write symbols to represent music.
Ensemble – A group of people who perform instrumental or vocal music**.**

Images:

Progress is **knowing more** (knowledge), **remembering more** (links back to), **being able to do more** (skills)

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DT- Electrical systems [Steady hand game]

Knowledge I know...

- The more complex your wire shape, the harder your steady hand game will be, especially if the bends are close together .
- I can use continuous line drawings (like Picasso's single line animals) for inspiration.
- I know and can use the following circuit symbols: wire, switch open, switch closed, battery, buzzer and bulb.

Skills I can...

- Explain simply what is meant by 'form' (the shape of a product) and 'function' (how a product works).
- State what they like or dislike about an existing children's toy and why.
- Learn about skills developed through play and apply this knowledge in a survey of one or more children's toys.
- Identify the components of a steady hand game.
- Design a steady hand game of their own according to their design criteria, using four different perspective drawings.
- Create a secure base for their game, with neat edges, that relates to their design.
- Make and test a functioning circuit and assemble it within a case.
- To model through prototypes with confidence.

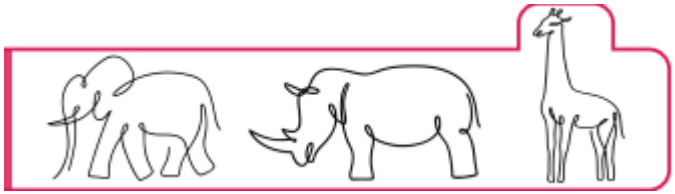
Links back to I remember...[LKS2]

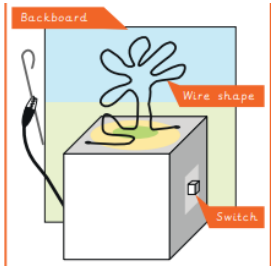
- To confidently understand the components of a simple circuit, inc insulators, how a battery works and function of a switch.
- To know that a paper net is a flat 2D shape that can become a 3D shape once assembled.

Vocabulary:

Backboard – A background designed for the steady hand game.
Battery – A cell or connected group of cells which store electrical energy.
Bulb – A component which makes a loud noise as electricity passes through.
Buzzer – A component which makes a loud noise as electricity passes through.
Circuit – A collection of components which make an electrical system.
Conductor – A material that allows electricity to flow through it. E.g. metal
Copper – A metal material that is one of the best conductors of heat and electricity. It is often used to make wires and pipes.
Function – How an object or product operates or works.
Insulator – A material that does not allow electricity to flow through it.
LED – A light emitting diode which lights up as electricity passes through.
Magnetic field - The area around a magnet where there is a magnetic force.
Net – A 2D flat shape, that can become a 3D shape once assembled.
Pliers – A metal tool used for holding, twisting or cutting wire.
Prototype – A simple model that lets you test out your idea, how it will look and work.
Series circuit – A closed circuit where the current only follows one path.
Side view drawing – An engineering diagram which shows the dimensions (width, depth, length) of the side (left or right) of a product.
Switch – A component which opens and closes to turn the circuit on or off.
Test – To find out whether something works as it should.
Top view drawing – An engineering diagram which shows the dimensions (width, depth, length) of the top of a product.

Images:





Progress is **knowing more** (knowledge), **remembering more** (links back to), **being able to do more** (skills)

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History – Ancient Maya

Knowledge I know...

- Where the ancient Maya people lived, naming some major features and cities in them.
- Maya are a Stone Age society – how similar and how different are they to Stone Age Britain?
- The ancient Maya were a clever, deeply religious people who valued intelligence and learning
- Some of the main Maya gods and what they represented.
- They performed rituals to their gods including blood-letting
- Mayans believed that after they died, their souls would travel through a series of caves and tunnels to Xibalba
- How to read and write some Maya numbers
- What syllabograms and logograms are.
- How to create glyph blocks
- How to make calculations using the Maya numerical system
- That corn and chocolate were important foods and can identify some reasons for this.
- About different ritual elements of the ancient Maya religion
- About some of the different features of Maya cities and can appreciate what it would have been like to live there,
- What an archaeologist does
- The difficulty in making conclusions about the past using only material remains

Skills I can...

- Explain reasons why particular aspects of a historical event, development, society or person were of particular significance
- Understand how history is constructed and evaluate local history's significance.
- Explain reasons why particular aspects of a historical event, development, society or person were of particular significance
- begin to comment independently on the different types of causes and effects for most of the events covered, including longer-and shorter-term aspects
- Use a broad range of historical terms and dates accurately in relation to the periods studied.
- Provide overviews of the most significant features of different themes, individuals, societies and events covered.
- Begin to independently explain the sequence of key events, objects, themes, societies, and people in topics covered using dates, period labels and historical terms accurately (e.g. ancient, modern, BC, AD, century and decade).

Links back to I remember...[LKS2]

- *Rivers of Time* [LKS2] Cycle A: Ancient Egypt
- *Power, People & Places* [LKS2] Cycle B: Ancient Greece
- *Journeys of Nations* [UKS2] Cycle A: Islamic Civilization [Baghdad]
- Maya are a Stone Age society – how similar and how different are they to Stone Age Britain?
- Were the Maya any better, or any worse, than other societies they have studied, at maximising their resources to benefit all their citizens?
- how complicated and diverse Maya society was. There were rich and poor folk, weak and strong people, powerful and those without power, just like most other societies.

Vocabulary:

base 10, base 20 – counting method used by the Maya.
bloodletting, - giving blood to the gods
cacao – seeds from a small tropical American evergreen tree, from which cocoa, cocoa butter, and chocolate are made
camera lucida – an instrument for enabling the eye to see simultaneously both an object or scene and a surface on which it has to be drawn.
Chichen Itza – a large pre-Colombian city built by the Maya people
Civilisation – A state of human social and cultural development and organization that is considered.
codex – an ancient manuscript text in book form
codices- folding books written by the pre-Columbian Maya
Copan – an archaeological site of the Maya civilization in the Copan department of Western Honduras
Evidence - the available body of facts or information indicating whether a belief or proposition is true or valid
Hieroglyphs – a stylized picture of an object representing a word, syllable, or sound, as found in ancient Egyptian and certain other writing systems.
Lithography – the process of printing from a flat surface treated so as to repel the ink except where it is required for printing.
Mesoamerica – Historical region and cultural area that extends from the southern part of North America to the Pacific coast of Central America.
Maize – Central American cereal plant that yields large grains (corn or sweetcorn) set in row on a cob.
Palenque – Ancient Mayan archaeological site in Chiapas, Mexico.
Ritual - a religious or solemn ceremony consisting of a series of actions
Sacrifice – an act of slaughtering an animal or person or surrendering a possession as an offering to a deity.
secondary source – a book, article, or other source that provides information about an object of study but does not constitute direct, first-hand evidence.
Syllabogram – equivalent of a letter in an alphabet but represents a larger unit of sound (a syllable)
logogram
Upperworld – a higher or more respectable realm compared to the 'underworld'
Vigesimal number system – a positional numeral system that uses twenty as its base, unlike the decimal system's base-10
Worship – the feeling or expression of reverence and adoration for a deity.
Xibalba – means 'place of fright' and is the name for the underworld in K'che' Maya mythology.
primary source – a document, first-hand account, or other source that constitutes direct evidence of an object of study

Images:





Progress is **knowing more** (knowledge), **remembering more** (links back to), **being able to do more** (skills)

Enquiry Organiser UKS2
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Geography – North and South America

Knowledge I know...

- Gulf of Mexico and the Caribbean Sea on a world map.
- Understand the political map of the Americas
- What lines of latitude are.
- Physical geography of the Americas include Great lakes, Rocky mountains, River Amazon and the Andes Mountains.
- The range of landscapes there can be in the Americas
- Populations by continent
- Combined population of North and South America is around 1,000 million.
- Rome was the first city in the world to reach a population of 1 million in the first century CE.
- For nearly one hundred years, London was the largest city in the world, with a population of over 5 million.
- Locations of cities in the world with populations of over 1 million.
- Locations of cities in the Americas with a population of over 1 million
- Examples of cities in clusters, lines, evenly spread or unevenly spread.
- In 1950, New York's population reached 10 million. A city with over 10 million inhabitants is called a megacity.
- Push and pull factors why people migrate to megacities.
- Push factors from rural area are lack of job opportunities, lack of facilities, less public transport, mechanisation
- Pull factors to urban area are more job opportunities, more facilities and better public transport
- Lima is a megacity in South America and I can describe the location (by mountains in Peru)
- How the population of Lima has grown and reached 10 million in 2016
- Rural to urban migration
- Megacities in the Americas face challenges such as high demand for housing
- Sao Paulo and Rio De Janeiro are megacities in Brazil
- Location of Sao Paulo and Rio de Janeiro
- How climate differs in the north and south of the tropic of Capricorn
- Similarities and differences within Rio
- Sao Paulo is the most populous city in Brazil and the Americas
- Sao Paulo has grown outwards to take in other settlements, this is called a Conurbation
- Brazil has a long history of immigration from Europe, East Asia and South America
- Rural to urban migration is a cause for Sao Paulo's growth
- Jobs in industry, shops and construction were pull factor to Sao Paulo
- Main roads in Brazil lead to Sao Paulo, so it is easy to travel there were pull factor to Sao Paulo
- More schools and better healthcare were pull factors to Sao Paulo
- Push factors from rural Brazil included droughts, farm mechanisation reducing jobs, and poor living conditions.
- Rapid growth in São Paulo led many migrants to build favelas, as they couldn't afford houses or land.
- Other effects of rapid growth are traffic jams and water pollution.
- Favelas are not planned of approved by the government.
- The favelas have grown so large and populous that it is hard to stop them.
- Over 15% of Sao Paulo's inhabitants live in favelas
- Rio's favelas are overlooked by Christ the Redeemer
- Favelas are built on unwanted land—near railways, roads, rivers, rubbish tips, marshes, or steep slopes.
- What is it like to live in a favela
- Favelas face issues: narrow streets, no rubbish collection, ltd police presence, gang violence, lack of sewers, electricity, schools, and hospitals.
- People in the favelas are sometimes stereotyped and face racism
- People in the favelas have talents and examples of this
- Location of North America, South America, Atlantic Ocean, Pacific Ocean,

Skills I can...

- Describe the locations of cities with populations over a million in the Americas.
- Compare the megacities of Sao Paulo and Rio De Janeiro using words and phrases such as: While, however, Both cities, also, Compared to….
- Use four figure grid references to find the location of something
- Explain rural to urban migration in Brazil
- Label a rough sketch of favelas in Rio De Janeiro
- Observe and collect information and data from fieldwork, photos and aerial images, diagrams, globes, atlases, map, GIS and a range of age-appropriate charts and graphs with greater sophistication.

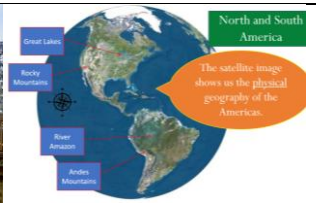
Links back to I remember..[LKS2]

- 8 compass points
- Four figure grid references
- Rural and urban areas
- Use a compass to locate places on a map.
- Urban areas are towns and cities with a high population.
- Rural areas are outside towns and cities and rely on agriculture and have fewer people living there.
- Use aerial photographs and plans to identify several features eg. Rivers, lakes, mountains and hills .
- Identify the position of the equator, and the northern and southern hemisphere.
- Make observations using a range of sources to compare e.g. climate
- The seven continents in the world are: North America, South America, Antarctica, Europe, Asia, Africa and Oceania/Australasia

Vocabulary:

Landscape – all visible features of an area of land, often considered in terms of their aesthetic appeal.
Climate – the weather conditions prevailing in an area in general or over a long period.
Population – all the inhabitants of a particular place
Vegetation – plants considered collectively, especially those found in a particular area or habitat
Settlement – an official agreement intended to resolve a dispute or conflict
Latitude – the angular distance of a place north or south of the earth's equator
Tropic of Capricorn – an imaginary line of latitude located at approximately 23.5 degrees south of the Equator
Megacity – a megacity is a large metropolitan area with a population of over 10 million people.
Conurbation – an extended urban area, typically consisting of several towns merging with the suburbs of a central city
Populous- having a large population
Favelas – a Brazilian shack or shanty town; a slum
Stereotype – a widely held but fixed and oversimplified image or idea of a particular type of person or thing.

Images:



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Science - Evolution and Inheritance

Knowledge I know...

- Inheritance in Science refers to the gene that passed on from biological parents to offspring.
- Inherited characteristics include abilities such as taste and smell.
- Understand humans can look similar and may share certain characteristics.
- Majority of living things are the result of sexual reproduction, so they have two parents. You inherit the characteristics from both parents but the way they combine makes the offspring unique.
- Inherited characteristics can combine in different ways, which is the reason why siblings inherit the same characteristics but are not identical to each other.
- Other characteristics come from the life choices we make.
- Understand there is one dog species (the grey wolf common ancestor) but there are many dog breeds.
- Parents give their offspring their genes.
- Cells are the building blocks of all living things.
- All living things are made of up cells.
- Amoebas have one cells.
- Humans have trillions of cells.
- The nucleus of a cell contains chromosomes, which are made up of DNA.
- DNA carries the characteristics that we inherit and it is located in two places in the cell (the nucleus and the mitochondria)
- DNA can replicate and make copies of itself.
- When cells divide, each cell needs to have an exact copy of the DNA in the odd cell.
- Genes are short sections of DNA that contain specific information – this is often called the genetic code.
- All the genes in the whole cell are called the genome.
- Archaeopteryx, Tyrannosaurus and a chicken are examples of Therapods, of which birds are the only living descendents.
- Scientists believe Therapods have evolved over 200 million years in order to survive harsh climates, food shortages, escape from predators, mass extinction, competition for mates and food to become modern day birds.
- Fossil evidence has shown how animals evolved over many years.
- Know that some animals have adapted to perform certain tasks.
- Charles Darwin produced a 'Theory of Evolution'
- He collected fossils and drawings.
- He took 20 years to write 'On the Origin of Specie'
- He introduced the concept of natural selection.
- Darwin travelled to the Galapagos Islands and saw that each species of Mockingbird had a different shape beak, that matched the way it collected food.

Skills I can...

- Identify my inherited characteristics
- Sort characteristics into inherited or environmental factors.
- List offspring and their inherited characteristics from parents.
- Create an adapted moth using an environment from around school.
- Create a 'moth story' using my knowledge of evolution and adaptation.
- Investigate Darwin's findings about the Galapagos islands.
- Create a fact file including the key moments of Charles Darwin's discoveries.

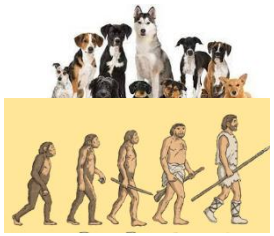
Links back to I remember...

- Organisms can be grouped in a variety of ways
- A classification key is a tool that is used to group living things and help us identify them
- Describe the characteristics of living things.
- Describe how animals adapt to their environments.
- Compare the features of mammals, reptiles, bird, amphibians and fish.
- Some species are endangered and why they are endangered.

Vocabulary:

Offspring – an animal's young.
Characteristic – Typical of a particular person, place or thing.
Vary/variation – The differences between individuals of the same species, caused by genetic and environmental factors.
Inherit/inheritance – Genes that are passed on from biological parents.
Environmental variation – these are differences between individuals that are not inherited but caused
DNA – A self-replicating material that is present in nearly all living organisms as the main constituent of chromosomes. It is the carrier of genetic information.
Genetic code – Genes are short sections of DNA that contain specific information.
Genome – All the genes in the whole cell**.**
Ancestor – a person, typically one more remote than a grandparent, from whom one is descended.
Beaks – a bird's horny projecting jaws; a bill.
Adaptation – the adjustment of organisms to their environment to improve their chances at survival in that environment.

Images:



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