Enquiry Organiser LKS2 **Year 3**
Spring 1B

Art and Design – Painting

Knowledge I know...

- Georgia O'Keeffe was an artist.
- She began experimenting with painting close up views of flowers.
- She used oil paints in vibrant, bold colours.
- **A colour wheel is** a diagram used in the visual arts to represent the colours and their relationships to one another.
- Tertiary colours are the colours created when mixing a primary colour with a secondary colour.
- Different colours can have very different effects on our emotions.
  Complementary colours work in pairs and can be found directly opposite each other on the colour wheel, for example, purple and yellow.

Skills I can...

- Use complementary and harmonising colours [colour wheel].
- Use watercolours with confidence.
- Mix and match colour accurately.
- Use hard edged painting skills.
- Begin to make a range of marks using a paintbrush including single strokes, zig zags, umbrella handles, polos and a string of pearls.
- Begin to evaluate and analyse creative works of my peers.
- Begin to explore the work of a range of artists, describing the differences and similarities between different practices and disciplines, and make links to my own work.
- Begin to express my thoughts and feelings about a piece of art.

Links back to I remember... [Y2]

- Vincent Van Gogh was a Dutch artist who is not alive now. He painted "Sunflowers".
- He used water colours and oil paints and he used bright colours.
- Primary colours are red, yellow and blue.
- Secondary colours are made by missing primary colours.
- Tinting makes a paint lighter.
- Shading makes a colour darker.
- Vary tone through blending using coloured pencils.
- Mix a wider range of colours using pencil crayons.

Vocabulary:

Watercolour: a type of paint which is used with water to give transparent colour
Primary: colours used to create all other colours and cannot be made (red, yellow, blue)
Secondary: a colour created by mixing two primary colours e.g. orange and purple
Tertiary: are colours that are created by mixing equal parts of primary colour and secondary colour
Warm: are colours that envoke a feeling of warmth, such as red, orange and yellow
Cool: are hues that are often associated with water, grass and the sky
Complementary:work in pairs and contrast with each other, they can be found directly opposite each other on the colour wheel, for example, purple and yellow
Contrast: is the use of different elements to create visual interest and draw the viewer's eye to certain areas
Hue: a hue is the pure form of a colour that hasn't been changed in any way. It is not the tint, tone or shade of a colour
Tint: making a colour lighter by adding white
Shade: making a colour darker by adding black
Tone: the lightness or darkness of a colour

Images:

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

Enquiry Organiser LKS2 **Year 3**
Spring 1B

History – Rise and Fall of the Roman Empire

Knowledge I know...

- Many **Romans** believed the **myth** that Rome was **founded** in 753 **BCE**.
- The myth of Romulus and Remus and why it was important to the Romans.
- Before the Roman Empire was founded, Rome was first ruled by kings and then Rome became a republic and run by a senate
- How Roman society was made up of plebeians and patricians
- The Punic wars were a series of wars between Rome and Carthage
- The Romans conquers Macedonia and the Greek city-states.
- Where the Roman Empire was located.
- Augustus was the first Emperor of Rome
- The Roman army was made up of centuries and legions
- The uniform of a Roman solider
- The tasks of a Roman solider
- Romans used more advance technology in battle.
- Where Pompeii was and Mount Vesuvius
- How the eruption of Mount Vesuvius destroyed Pompeii
- What evidence was left from Pompeii

Skills I can...

- Sequence some events or objects on a simple timeline without support providing a few dates and/or period labels and terms.
- Understand that a timeline is divided into BC (Before Christ) and AD (Anno Domini)
- To see how gaps in evidence To influence interpretations. e.g prehistory with no written or recorded information.
- To provide a reason why two accounts of the same event might differ.
- To comment on a range of possible reasons for differences in a number of accounts
- Draw together information from an increasing range of sources.
- To ask and answer their own questions on sources.
- Use sources of information to make statements or judgements.
- Show awareness and understanding visually, orally and in writing.
- Use a wider range of vocabulary when showing awareness.
- To demonstrate knowledge of causes for events e.g the Punic Wars
- Recognise differences between ways of life in the past.
- Make valid statements about the main similarities, differences and changes occurring within topics.
- To describe and make valid statements about some similarities, differences and changes occurring within KS1 and LKS2 topics.
- To select what is most significant in a historical account (e.g. describe in some detail some of the most significant features of Pompeii).
- To begin to explain why.
- Understand how sources can be used to answer a range of historical questions.

Links back to I remember...[Y2]

- Knowledge of what it means to be a leader.
- Placing people, events and objects in chronological order
- Gathering information from simple sources to ask and answer questions.
- Comparing different historical sources and understand the past can be represented in different ways.
- Using the words 'past' and 'present' to talk about an event.
- Using words to describe the passing of time.
- That a timeline is divided into BC (Before Christ) and AD (Anno Domini)
- What democracy/republic is from Oliver Cromwell unit and Ancient Greeks
- What a Greek city-state is.

Vocabulary:

Myth - a traditional story, usually about heroes, heroines, gods and goddesses
Republic - a country where the leaders are chosen or elected by the people living in the country
Senate - a group of people who are voted for a make laws for people to live by.
Plebeians – The poorer Romans who were not allowed to vote or become senators. The majority of Roman society.
Patricians – The wealthiest Romans who were allowed to vote and become senators
Centurion – A commander in the Orman army**.**
Legion – 5,000-6,00 men
Empire – a large group of states and/or countries ruled over by one single monarch.
Pompeii – A city in ancient Roman which was buried in a volcanic eruption in AD 79.
Vesuvius – The volcano which erupted and buried Pompeii.

Images:

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

Enquiry Organiser LKS2 **Year 3**
Spring 1B

Computing – Programming (Sequence in Music – Scratch)

Knowledge I know...

- That commands in Scratch are represented as blocks.
- Each sprite is controlled by the commands I choose.
- Sequences are made by joining blocks of code together.
- Sequence of commands can have an order.
- Code can be copied from one sprite to another.
- Projects should be tested to see if they perform as expected.

Skills I can...

- Identify the objects in a Scratch project [sprites, backdrops].
- Explain that objects in Scratch have attributes [linked to].
- Choose a word which describes an on-screen action for my design.
- Create a program following a design.
- Start a program in different ways.
- Create a sequence of connected commands.
- Explain that the objects in my project will respond exactly to the code.
- Combine sound commands.
- Order notes into a sequence.
- Build a sequence of commands.
- Decide the actions for each sprite in a program.
- Make design choices for my artwork.
- Identify and name the objects I will need for a project.
- Relate a task description to a design.
- Implement my algorithm as code.

Links back to I remember... [KS1]

- An algorithm is a precise set of ordered steps [Y2].
- A program is a set of ordered commands that can be run by a computer to achieve a task [Y2].
- Debugging is finding and fixing a problem [Y2].
- A sequence needs a start and an outcome [Y2].
- Changing blocks in a program will change the outcome [Y2].
- Identifying the start of a sequence and run my program [Y2].
- Predicting the outcome of a sequence of commands [Y2].
- Changing the sequence of commands and change the outcome [Y2].
- Creating and changing a program with a given design [Y2].
- Creating a program of my own design [Y2].
- Selecting the correct tools [Y2].
- Saying what I would change about my program to improve it [Y2].

Vocabulary:

Algorithm: a precise set of ordered steps that can be followed by a human or a computer to achieve a task.
Block: Segment of instruction or code.
Bug: a problem that needs to be found and fixed.
Debugging: finding and fixing a problem with a program.
Event: the start of code or instruction. Event blocks trigger the instructional code to begin when pressed.
Program: a set of ordered commands that can be run by a computer to complete a task.
Code: The commands a computer can run.
Command: a single instruction that can be used in a program to control a computer.
Motion: a movement (of a sprite) e.g. move, go, glide.
Order: arrange in a methodical way.
Run: to action the commands in a program.
Task: goal.
Tool: a device used to carry out a particular job.
Sequence: the order in which commands are performed to achieve a task.
Sprite: the main characters of the project.
Value: the way to change a variable in a block.

Images:

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

Enquiry Organiser LKS2 **Year 3**
Spring 1B

Science – States of Matter

Knowledge I know...

- There are three states of matter: solid, liquid and gas.
- A solid keeps its shape and has a fixed volume. Some solids are made up of small grains which can be poured into a heap.
- A liquid has a fixed volume but changes in shape to fit the container. A liquid can be poured and keeps a level, horizontal surface.
- A gas fills all available space; it has no fixed shape or volume.
- A liquid has a fixed volume but changes in shape to fit the container. A liquid can be poured and keeps a level, horizontal surface.
- Some liquids flow less easily and are slow to pour.
- Melting is a change of state from solid to liquid. Freezing is a change of state from liquid to solid.
- The temperature a liquid freezes at is called its freezing point. The freezing point of water is $0^{o}C$.
- Different substances have different freezing points.
- Boiling and evaporation are both a change of state from liquid to gas.
- Boiling happens at a specific temperature and bubbles of the gas can be seen inside the liquid. Water boils when it is heated to $100^{o}C$.
- Evaporation happens at any temperature and only at the surface of the liquid. It happens more quickly if the temperature is higher, the liquid has a larger surface area or it is windy.
- The water cycle is an example of evaporation and condensation.
- Water at the surface of seas, lakes and rivers evaporates into water vapour, a gas.
- Water vapour rises and cools. It condenses back into liquid water droplets which form clouds.
- When the water droplets in a cloud get too heavy, they fall as rain, sleet or snow. This is known as precipitation.
- A gas fills all available space; it has no fixed shape or volume.
- Many gases are invisible.
- A gas has a mass, so its weight can be measured.
- A gas can be squashed or compressed into a smaller space.

Skills I can...

- asking relevant questions and using different types of scientific enquiries to answer them.
- setting up simple practical enquiries, comparative and fair tests.
- making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
- gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.
- recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.
- reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.
- identifying differences, similarities or changes related to simple scientific ideas and processes.

using straightforward scientific evidence to answer questions or to support their findings.

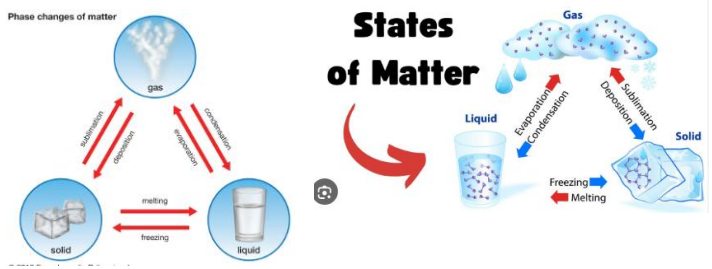
Links back to I remember... [KS1]

- Solids: Have a fixed shape and size (e.g., rock, wood, toys). Particles are tightly packed and vibrate in place.
- Liquids: Take the shape of their container but have a fixed amount (volume) (e.g., water, juice, milk). Particles are close but can slide past each other.
- Gases: Spread out to fill their whole container (e.g., air, steam). Particles are far apart and move quickly.
- Heating: A solid can melt into a liquid (ice to water). A liquid can heat up and turn into a gas (water to steam/water vapour).
- Cooling: A gas can cool to become a liquid (steam to water) (condensation). A liquid can cool to become a solid (water to ice) (freezing/solidification).

Vocabulary:

Solid: has a defined shape and volume.
Liquid: has an almost-fixed volume, but no set shape.
Gas: has neither a definite volume or definite shape.
Particles: an **extremely tiny piece of matter.**
Properties: what a material is like and how it behaves (soft, stretchy).
Variables: factors that can change.
Fair test: a way of finding out something by changing only one thing at a time.
Method: how an experiment is carried out.
Evaporate: when a liquid becomes a gas.
Water vapour: water in its gas state.
Condensation: a process by which a substance changes from a gas to a liquid.
Compressed: the squashing of particles.
Water Cycle: the **journey water takes as it moves from the land to the sky and back again.**
Precipitation: Water falling back to the earth in the form of rain/snow/hail.
Run off: water running over land back to lakes, rivers and the sea.

Images:



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Geography – Volcanoes [Eruption of Mount Vesuvius in AD79]

Knowledge I know...

- Volcanoes can form on land or at sea.
- The earth is made up for four layer – Crust, mantle, outer core and inner core.
- There are two common types of volcano: composite and shield
- Composite volcanoes have steep sides, they erupt violently but infrequently.
- Shield volcanoes are gentle sloped and have a large base. They erupt less frequently and less violently.
- Super volcanoes are volcanoes which erupt with a huge, destructive force. They are extremely rare.
- Maga is liquid rock below the earth, lava is liquid rock on the earth's surface.
- When volcanoes erupt, they emit dangerous gases, dust and pieces of rock.
- When lava cools it forms igneous rock.
- The crater is the mouth of the volcano
- The main vent is the main passage where magma travels to the earths surface.
- The magma chamber is the location underneath the main vent where magma is stored.
- Active volcanoes are volcanoes that have erupted recently and are likely to erupt again.
- Dormant volcanoes are currently inactive but might erupt again.
- Extinct volcanoes are unlikely ever to erupt again.
- One in twenty of the earth's population live close to an active volcano.
- Lava flows and dust clouds enrich the soil and make it more fertile
- The heat from volcanoes can be used to heat homes.
- Tourists visit volcanoes because they are exciting.
- People who live near volcanoes take special precautions
- Where Pompeii was and Mount Vesuvius
- How the eruption of Mount Vesuvius destroyed Pompeii

Skills I can...

- Understand geographical similarities and differences through the study of human and physical geography.
- Describe and understand the key aspects of human geography near volcanoes including land use patterns and types of settlement.
- Describe and understand the relevant key aspects of physical geography, including volcanoes.
- Use maps, atlases, globes to locate countries and continents and describe features.
- To ask and respond to geographical questions about their environment and the countries studied.
- To give their own views about locations and begin to explain why.
- To use geographical vocabulary to describe geographical features.
- To observe and collect information and data from fieldwork, photos and aerial images, diagrams, globes, atlases, maps and charts.
- To understand that geographers learn about the world by observing and collecting data and information.
- To analyse and communicate geographical information by constructing maps with keys, labelled diagrams, age-appropriate graphs and using appropriate geographical vocabulary.

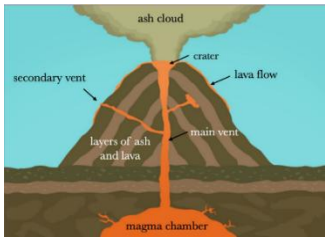
Links back to I remember...[KSI]

- Mountains and tectonic plates
- Countries in Europe
- Different used of land
- The difference between human and physical geography

Vocabulary:

Crust – The think layer of solid rock that makes up the outer layer of the Earth
Mantle – The layer under the crust, the rock is hot liquid.
Outer Core – Hot liquid rock near the centre of Earth
Inner core – very centre of the Earth. Made of hot solid rock.
Erupt - To erupt is to suddenly burst or break open and emit something.
Magma - Magma is molten or semi-molten rock underground
Lava - Lava is molten rock that has broken through Earth's surface.
Pompeii – A city in ancient Roman which was buried in a volcanic eruption in AD 79.
Vesuvius – The volcano which erupted and buried Pompeii.

Images:



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