



Year 5 Summer 1

Knowledge Organiser



Science

Our science topic for the next term is all about Earth and space.

Key Knowledge

The Sun is a star. It is at the centre of our solar system.

There are 8 planets (Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune – it is not essential for children to know all the names of the planets). These travel around the Sun in fixed orbits.

Earth takes 365¼ days to complete its orbit around the Sun. The Earth rotates (spins) on its axis every 24 hours. As Earth rotates half faces the Sun (day) and half is facing away from the Sun (night). As the Earth rotates, the Sun appears to move across the sky.

The Moon orbits the Earth. It takes about 28 days to complete its orbit.

The Sun, Earth and Moon are approximately spherical.

Key Vocabulary

Earth
Sun
Moon
Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune
Spherical
solar system
Rotates
Star
Orbit
Planets

Geography

In geography we will be locating the world's countries, using maps to focus North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.

Key Knowledge

North America and South America are continents.

The divide between North and South America is the border between Panama and Columbia.

There is a variety of climates, vegetation and landscapes within both North and South America due to the size of the continents.

Key Vocabulary

climate zones
biomes
vegetation belts
rivers
mountains

Computing

We will be learning to select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Key Knowledge

CAD is used to design 3D objects in a 2D environment. Some examples are; Architectural plans for buildings; designing layouts for interiors; designing objects such as packaging and designing mechanical components; designing shoes and clothing.

2D is something that has only two dimensions; height and width. 3D something that has three dimensions; height, width and depth.

Key Vocabulary

Design brief
Net
Pattern fill
2D
3D
CAD
3D printing

Art

This half term, we will be focusing on painting.

Key Skills

I can mix different shades of paint to match any colour.

I can use colour to create different moods and tones.

I can add black to make a colour darker and I can add white to make a colour darker.

I can create a painting from a drawing.

Key Vocabulary

Primary

Secondary

Shade

Tone

Subtle

Bold

D.T.

We will be designing a making a pop-up book.

Key Knowledge

Mechanisms control movement.

Mechanisms can be used to change one kind of motion into another.

Sliders, pivots and folds create paper-based mechanisms.

- A design brief is a description of what I am going to design and make.

Key Vocabulary

design

input

motion

mechanism

criteria

research

reinforce

model

Music — loops and remixing

Key Knowledge

Dance music is usually produced using electronic percussion sounds, and recordings of the music are played by DJs in clubs or at festivals.

A loop is a repeated rhythm or melody, and is another word for ostinato.

A remix is music that has been changed, usually so it is suitable for dancing to.

Loops can be used to create a whole piece of music when different aspects of music work together.

Fragments of music can be chosen and played along to the backbeat.

Key Vocabulary

Accuracy backbeat

body percussion

fragment layers

loop

looped rhythm

melody melody line

notation ostinato

remix rhythm

Other relevant information for this half term

English—This half term, our writing will mainly focus around Space.

Spelling—Children need to continue to practice the spellings they receive in their homework. We will be learning the spelling rules for these words each week.

Reading— Children need to read at home and have their reading diaries signed 5 times a week. Any children who do not consistently read at home, will read in Catch Up Club on a Friday.

Maths—We will be starting to look at our third and final Power Maths book and working our way through this.

PE—PE will mainly be outside, weather permitting. PE will be on a Friday, however this can change from week to week. Children's PE kits should be in school every day and this includes joggers/leggings for colder days.

Homework— Homework will be sent home on a Friday to be returned the following Wednesday. Children who do not complete their homework will need to attend Catch Up Club.

History—We will be finding out about the Mayans.