

Year 5: Spring 2nd Half
Topic: Discoveries



Healthy Body
Healthy Mind, Healthy Planet

Geography

Intent To identify the distribution of natural resources (energy, food, minerals and water) with trade links. To understand the environmental impact.

Implementation

To identify some of Britain's natural resources and explain their uses.

To identify how the natural resources, coal and gas, are used to produce electricity.

To identify clean and renewable natural resources used to produce electricity, and to discuss the pros and cons of their use.

To discuss parts of the world where wood is produced, and consider some of the problems associated with this production.

To know where and how glass and concrete are produced in Britain using natural resources.

To know how the local resource, English China Clay, is mined and what this resource is used for.

Composite Outcome: Show what you know assessment.

Impact: Children recognise energy sources and their environmental impact.

Science

Intent- To understand the effects of gravity, air resistance, water resistance and buoyancy. To recognise how mechanisms allow a small force to have a great effect

Implementation

To research the scientist the Sir Isaac Newton (R).

To explore the effect that gravity has on objects and how gravity was discovered. (PS)

To investigate the effects of air resistance (Galileo Galilei) (PS)

To observe and understand the effects of up-thrust and buoyancy (O)

To identify a relationship between the shape of an object and water resistance (PS)

To investigate simple lever mechanisms and explain how they work (R)

Composite outcome: Show what they have

Impact: Children learn that gravity pulls objects to the centre of the Earth. That forces can slow down, stop or change the direction of a moving object and that buoyancy can act against gravity making an object a lighter force.

Computing

Intent To write and test programmes using a physical component (micro:bit)

Implementation

To understand what a micro:bit is and the different parts and functions.

To connect their micro:bit to their iPad (Bluetooth) and create a simple programme to change the icon and a name badge using 'Show' commands.

To use input commands to create a pet hamster.

To use variables to create a Rock, Paper, Scissors' game.

Design a programme to create a tilt alarm (Links to DT). Design a warning melody and icon to be displayed.

Composite Outcome:

Create a tilt alarm for DT project. Send a warning alarm using created melody and icon.

Impact: Children can programme a physical component (micro:bit) to create games, alarms and a pet hamster. Children can use 'show', input and variable commands.

DT

Intent to explore ways using monitoring and control to create an alarmed device

Implementation

To investigate a range of alarm systems that respond to changes in the environment.

To generate algorithms using micro:bits containing variables which respond to light and movement.

To recap measuring, cutting and joining skills to create a prototype of a net evaluating its strengths and areas for development.

To design an alarmed box using an annotated and step by step plans and equipment lists.

To successfully make a high quality alarmed box using micro:bit and designed nets.

To evaluate the quality of design and manufacture and whether it is fit for purpose by responding to the changes in the environment for the alarmed box.

Composite outcome: Follow planning to make a secure box containing a special item. Self and peer evaluate work comparing it to their designs.

Impact: Children design, make and evaluate a secure, structured box using physical computing to create an alarm device.

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PE

Intent- To develop their creative balance skills in developed sequences of movements. To apply a variety of skills and techniques to with accuracy and control

Implementation

Physical Education

Warm up : Every 3 weeks the children focus on 1 warm up and progress once the class has mastered the concept of each stage : Like Clockwork and Balance Dice Frenzy ;

Funs Skills : Our sequence of 6 depends on the control , confidence and competency of the individual's ability to perform the skill. Static Balance: Seated (FUNS 2) and Static Balance: floor work (FUNS 3) aiming for blue.

Sport—Striking and Fielding.

- to throw and catch under pressure
- to link skills when fielding and bowling
- To bat with control and accuracy
- to use a range of tactics for attacking and defending in the role of batter, fielder and bowler
- To collaborate as a team to choose, use and adapt rules of the game

Composite Outcome: Play a cricket match as a team, understanding the roles and skills they require.

Impact: Creative- To link actions and develop sequences of movements that express their ideas by changing tactics and rules to make games more challenging.

Striking and Fielding— To take part in a competitive game of cricket with a strong idea of tactics and competition

RE

Intent- To explore the enquiry question: 'What is it like for someone to follow God?'

Implementation

To investigate what we can learn about the story of Exodus in the Bible.

To discover where we think the Exodus story shows Moses' trust in God.

To consider how the Exodus story might help Christians when life gets tough.

To debate what we think about the importance of the ten commandments.

To explore how many Christians try to bring freedom and justice (themes from the Exodus story) into today's world.

To show an understanding of the story of Exodus, its themes and its importance for Christians today.

Composite Outcome: Assessment on the 5 key questions.

Impact Children have developed their understanding of the story of Exodus and explored how Christians follow God.

Music

Intent- To improvise and compose hip hop music using melody, rhythm and harmony

Implementation

To discuss 1990s hip hop and contrast with other decades/styles.

To develop expression focussing on clarity rhythm and story telling in rap delivery.

To confidently use a range of untuned instruments by layering by percussion loops (Garage Band)

To improvise with scales (pentatonic) using either vocal phrases or beats.

To use a range of more complex notation to dictate rhythmic patterns found in rap or beatboxing elements (dotted rhythms, ties).

Composite Outcome:

To perform original raps or group tracks to peers or parents.

Impact Children can compose and perform a hip hop style track using Garage Band.

PSHE

Intent To develop their understanding of British Values. To develop their understanding of how to respect others.

Implementation

To provide an opportunity to become involved with democratic processes within the school.

To consider how living under the rule of law can protect individuals and enhance their wellbeing and safety.

To understand what is meant by freedom of expression and to know when individual liberty should be exercised.

To explore immigration and its history in the UK.

To know what respect means and how to respect other's views and opinions

To know about different beliefs and how to respect them.

Impact: Children understand British democracy and how laws protect individuals. Children show respect to each other and their beliefs