

Year group: 6

Term: Autumn (2<sup>nd</sup> Half)

Topic: The Gadget Show

Alongside: Looking After Our World

Kernow Cluster Topic Overview Sheet

## Objectives



### Opportunities for outdoor learning:

- Visit Camborne town centre to look at the type of adverts in public spaces and their location and effectiveness.
- Visit to other town churches to look at symbolism shown in the sacraments.

### Key vocabulary:

gadget, device, electricity, circuit, symbol, invention, technology, review, advertisement, strengths, weaknesses, product, design, logo, specification, advertisement, persuasive.



### Opportunities for trips / visitors:

- Visit to a local company which uses a range of technology in manufacturing.
- Visitor to talk about how they use technology as part of their job eg. architect.
- 'Kindness Week' – Carol singing etc in local nursing homes.

### PSHE objectives:

- Awareness of risk taking behaviours- illegal drugs and alcohol.
- Anti-bullying.
- Stereotyping in advertising.

### Digital literacy:

- Explore how it feels to be cyberbullied.
- Discuss how cyberbullying is similar to or different than in-person bullying.
- Learn strategies for handling cyberbullying when it arises.
- Explore how the media can play a powerful role in shaping our ideas about gender roles (stereotyping).

### Whole class texts:

- *The Taylor Turbochaser* – David Baddiel
- *The Person Controller* – David Baddiel
- Range of product reviews.

### History objectives:

N/A

### PE objectives:

- Use dribbling as an effective tool in a football game situation.
- Use formation to attack and defend in football.
- Keep possession of the ball while using the whole space available.
- Use good decision making to attack the opposition.

### Maths objectives:

- Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.
- Compare and order fractions, including fractions  $> 1$ . Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.
- Multiply simple pairs of proper fractions, writing the answer in its simplest form. Divide proper fractions by whole.
- Identify common factors, common multiples and prime numbers.
- Solve problems involving the calculation of percentages.

### English objectives:

- Use formal language to write balanced arguments for product reviews and formal letters of complaint (toys and toasters).
- Use a range of persuasive devices to create adverts.
- Evaluate and edit writing to improve effectiveness.

### Geography objectives:

N/A

### Music objectives:

- Listen with attention to detail and recall sounds with increasing aural memory.
- Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression.

### Science objectives:

- Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.
- Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.
- Use recognised symbols when representing a simple circuit in a diagram.

### Languages objectives:

- Develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases.
- Appreciate stories, songs, poems and rhymes in the language.
- Describe people, places, things and actions orally and in writing.

### Art objectives:

N/A

### Computing objectives:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

### RE objectives:

- Identify the symbols used in the seven sacraments.
- Explore in detail all the different aspects of baptism including symbolism and promises.
- Explore the similarities between the Sacraments of Baptism and Confirmation.
- Understand that Advent is a season of preparation for the Second Coming of Christ and a season of preparation for celebrating his Birth at Christmas.

### Design Technology objectives:

- Explore technological developments over the last century.
- Understand and use electrical systems in their products.
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams.
- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Select from and use a wider range of materials according to their functional properties and aesthetic qualities. Evaluate their ideas and products against their own design criteria and consider the views of others. to improve their work.

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**Skills**



- Links to previous topics:**
- Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. (Y4)
  - Recognise some common conductors and insulators, and associate metals with being good conductors. (Y4)
  - Compare and group together a variety of everyday materials on the basis of their simple physical properties. (Y2)

- Links to future topics: Y7**
- Computing – Design and produce a game concept for a chosen games platform.
  - D.T. – Use computer design packages to create eye-catching packaging.
  - PE – Hockey. Developing skills to improve performance.
  - RE – Key beliefs about God in Christianity.
  - Music – Performing as part of an ensemble.

- PSHE:**
- Make judgements and decisions and can list some ways of resisting negative peer pressure around issues affecting their health and well-being.
  - List the commonly available substances and drugs that are legal and illegal, and can describe some of the effects and risks of these.
- British values:**
- Liberty. Community. Respect.

- Maths skills:**
- Use the four operations, including formal written methods, applied to integers and decimals.
  - Order fractions and mixed numbers.
  - Convert mixed and improper fractions with different denominators to decimals and percentages.
  - Multiply simple pairs of proper fractions, writing the answer in its simplest form.
  - Calculate percentages of a number.

- History skills:**
- Place a range of technological inventions, beyond own experiences, in time order.

- PE skills:**
- Explain and evaluate the different techniques used for passing, controlling, dribbling and shooting the ball in hockey and football.
  - Make and apply a range of decisions quickly and appropriately in games.
  - Play in a number of attacking and defending positions effectively.
  - Apply rules consistently and fairly.

**Geography skills:**

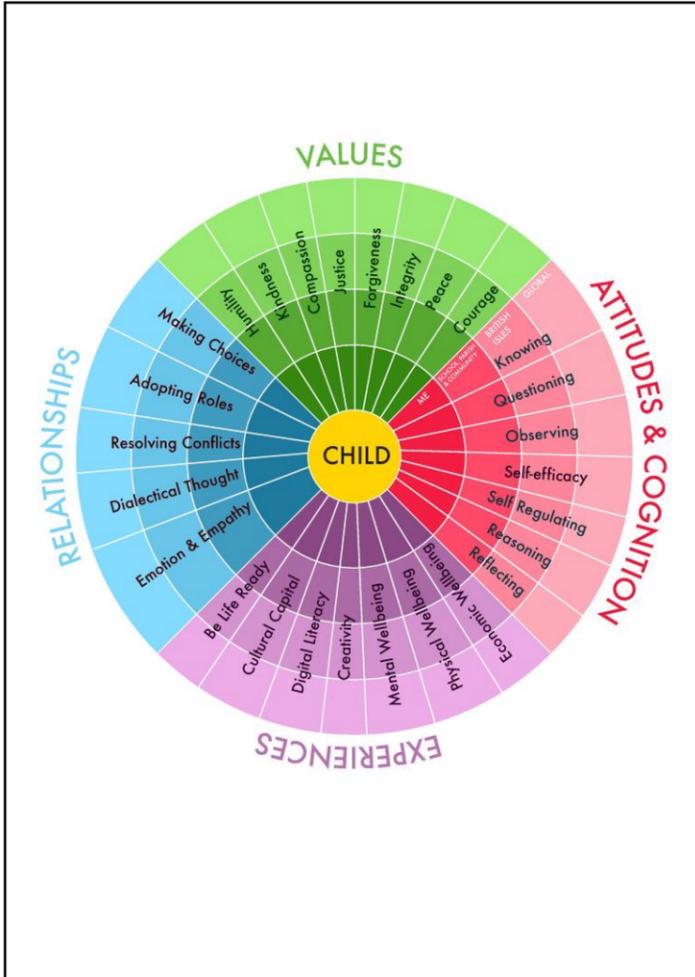
N/A

- Music skills:**
- Maintain a complex part in a large ensemble or choral group with multiple parts.
  - Create and perform musical pieces in more than one key.
  - Sing with awareness of dynamics, phrasing and pitch control.

**Art skills:**

N/A

- Computing skills:**
- Use external triggers and infinite loops to control sprites.
  - Create and edit variables.
  - Use conditional statements.
  - The game finishes when a player wins or loses and they must know they have won or lost.
  - Evaluate the effectiveness of the game and debug as required.
  - Use strategies to check the reliability of information (cross check with another source such as books).



- Science skills:**
- Use recognised symbols when representing a simple circuit diagram.
  - Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.
  - Recognise that a switch opens and closes a circuit and the impact on a bulb within a series circuit.
  - Explain and use the term resistance correctly.

- RE skills:**
- Ask and suggest answers to, questions of purpose and truth, values and commitments, in relation to an individual's life and the life of others.
  - Make links between sources, practices, beliefs, ideas, feelings and experiences.
  - Use an increasingly wide religious vocabulary to explain the impact of beliefs on individuals and communities.

- Opportunities for home learning / cultural capital:**
- Research how technology impacted on mining in Cornwall.
  - Participating in Camborne Music Festival.
  - Attendance at Remembrance Day service.

- Set homework:**
- Research and create a timeline of technological developments.
  - Watch and write a review of two video adverts.
  - Collect examples of product logos and slogans and reflect on their effectiveness.

- English skills:**
- Consider and evaluate effectively different viewpoints, attending to and building on the viewpoints of others.
  - Make critical comparisons across texts.
  - Develop depth of information and events within paragraphs and sections.
  - Consider how writing reflects the audiences and purposes for which it is intended.
  - Summarise and organise material and supporting ideas and arguments with any necessary factual detail.

- Languages skills:**
- Make use of important social conventions such as formal modes of address.
  - Talk with others and express in simple terms opinion and point of view.
  - Write a range of sentences.

- Design Technology skills:**
- Clarify and justify plans, designs and ideas by drawing upon and using a range of relevant sources of information to create a real/imaginary wheelchair.
  - Select a range of appropriate tools to cut, shape and join materials and components with accuracy and precision to make a top hat.
  - Understand developments in D&T, its impact on individuals, society and the environment. Investigate new and emerging technologies.
  - Explore and describe how switches can be used in a range of circuits to control components.