

Year 5 Autumn Term - Survival Unit

Objectives to be taught as a separate unit : RE and Art (Light and The Magi- clay figures), Computing (How networks work, tracing and connecting the internet, web searches, E Safety (link with PSHE here), Scratch-Counting Machine) , PE (Dance, Swimming and Gymnastics) and French (Dates and times and Sports)

SCIENCE - Forces - link to earthquakes

- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.
- Identify the effect of drag forces, such as air resistance, water resistance and friction that act between moving surfaces.
- Describe, in terms of drag forces, why moving objects that are not driven tend to slow down.
- Understand that force and motion can be transferred through mechanical devices such as gears, pulleys, levers and springs.
- Understand that some mechanisms including levers, pulleys and gears, allow a smaller force to have a greater effect.

GEOGRAPHY - Natural Disasters: Earthquakes and Volcanoes

- Describe and understand key aspects of: **physical geography**, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes and the water cycle.
- Describe and understand key aspects of: **human geography**, including: settlements, land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals, and water supplies.
- Identify and describe the geographical significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, and time zones (including day and night).
- Understand some of the reasons for geographical similarities and differences between countries.
- Describe how locations around the world are changing and explain some of the reasons for change.
- Describe geographical diversity across the world.
- Describe how countries and geographical regions are interconnected and interdependent.

DT- Design and Make a shelter (Hook at the start of the unit and stimulus for P4C discussion)

- Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).
- Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper).
- Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding).
- Design with the user in mind, motivated by the service a product will offer (rather than simply for profit).
- Make products through stages of prototypes, making continual refinements.
- Ensure products have a high quality finish, using art skills where appropriate.
- Use prototypes, cross-sectional diagrams and computer aided designs to represent designs.
- Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices.
- Create innovative designs that improve upon existing products.
- Evaluate the design of products so as to suggest improvements to the user experience.

SCIENCE - Properties and changes of materials – link to burning and cooling for volcanoes

- Compare and group together everyday materials based on evidence from comparative and fair tests, including their hardness, solubility, conductivity (electrical and thermal), and response to magnets.
- Understand how some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution.
- Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.
- Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.
- Demonstrate that dissolving, mixing and changes of state are reversible changes.
- Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning, oxidation and the action of acid on bicarbonate of soda.

BRAVERY SURVIVAL

P4C DISCUSSIONS

- Use desert island survival game as a stimulus
- Show someone who has survived an earthquake next to someone who has survived a test. Is it the same? Do you have to suffer in order to survive something?
- <https://www.thephilosophyman.com/wp-content/uploads/2012/11/Thinkers-Stories-Teacher-Notes.pdf> Page 11 – put this in a more child-friendly way.
- Is someone automatically brave if they've survived something?
- Does resilience always pay off?
- Do you need friends and family in order to survive?

PSHE – Families and friendships

- what makes a healthy friendship and how they make people feel included
- strategies to help someone feel included
- about peer influence and how it can make people feel or behave
- the impact of the need for peer approval in different situations, including online
- strategies to manage peer influence and the need for peer approval e.g. exit strategies, assertive communication
- that it is common for friendships to experience challenge
- strategies to positively resolve disputes and reconcile differences in friendships
- that friendships can change over time and the benefits of having new and different types of friends
- how to recognise if a friendship is making them feel unsafe, worried, or uncomfortable when and how to seek support in relation to friendships

Safe Relationships

- to identify what physical touch is acceptable, unacceptable, wanted or unwanted in different situations
- how to ask for, give and not give permission for physical contact
- how it feels in a person's mind and body when they are uncomfortable
- that it is never someone's fault if they have experienced unacceptable contact
- how to respond to unwanted or unacceptable physical contact
- that no one should ask them to keep a secret that makes them feel uncomfortable or try to persuade them to keep a secret they are worried about
- whom to tell if they are concerned about unwanted physical contact

OUTDOOR LEARNING including trailblazer activities

- Earthquake zone activities (like they do at Stubbington Study Centre)

ENGLISH LINKS

- Explanation text- survival guide – on an island, surviving in school over the weekend in your shelter
- The Highway Man
- Kensuke's Kingdom narrative (P4C enquiry around survival)
- Winter stories (resilience and challenge)