**Design and Technology**

National Curriculum Ref. –

*Design - use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups*

***Make -*** *select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately*

*select from and use a wider range of materials and components, according to their functional properties and aesthetic qualities*

***Evaluate -*** *evaluate their ideas and products against their own design criteria and consider the views of others to improve their work*

We will:

* Learn about the weather conditions of a mountain environment and the needs of a mountaineer
* Design a piece of equipment for a mountaineer e.g. a pair of gloves, a hat, a tool belt
* Make a paper template of our design
* Select, cut and join fabric to make a robust product suitable for a mountaineer
* Evaluate our design against a success criteria

**Art and Design**

National Curriculum Ref. –  *to improve their mastery of art and design techniques, including drawing, painting andsculpture with a range of materials [for example, pencil, charcoal, paint, clay]*

We will use acrylics to paint mountain ranges in order to illustrate our work completed in English.

**Magnificent Mountains!**

Year 5 and 6 Topic Web – Spring 1 - 2022

**Geography**

National Curriculum Ref. *Pupils should be taught to:*

*-extend their knowledge and understanding beyond the local area to include the United Kingdom and Europe, North and South America. This will include the location and characteristics of a range of the world’s most significant human and physical features.*

*-develop their use of geographical knowledge, understanding and skills to enhance their locational and place knowledge.*

*-describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle*

*-use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied*

In this Unit, we find out about the major mountains of the world and the UK. We find out the different ways in which mountains have been formed, and how different features of mountain ranges have been shaped over time. We will have the opportunity to consider what the weather is like in a mountainous environment and to evaluate the impact that tourism has on a mountainous region.

**English**

Diagram, map

Description automatically generated

**Biography – Everest: The Remarkable Story of Edmund Hillary and Tenzing Norgay – by Alexandra Stewart and Joe Todd-Stanton**

In addition, linked to our Design and Technology work, we will advertise our product using persuasive writing.

We will:

* plan and write a diary from the point of view of a Sherpa
* read and write non-form poetry using the short film ‘The Ridge’ as inspiration
* write an information text about the hazards of mounaineering

**Computing**

National Curriculum Ref. *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*

We will use spreadsheets to collate and model geographical data such as mountain heights and temperatures.



**Science - Electricity**

National Curriculum Ref. *Pupils should be taught to:*

* *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*

We will be:

* Building on our work in year 4, pupils should construct simple series circuits, to help them to answer questions about what happens when they try different components, for example, switches, bulbs, buzzers and motors. They should learn how to represent a simple circuit in a diagram using recognised symbols.
* Note: pupils are expected to learn only about series circuits, not parallel circuits. Pupils should be taught to take the necessary precautions for working safely with electricity.
* Pupils might work scientifically by: systematically identifying the effect of changing one component at a time in a circuit; designing and making a set of traffic lights, a burglar alarm or some other useful circuit.

|  |
| --- |
| **Maths**  **Year 5:**  **Fractions, decimals and percentages**  Read decimals up to 2 d.p., understand decimals as tenths, hundredths and thousandths, round decimals, order and compare decimals  Understand percentages and their relationship to fractions and decimals, recognise equivalent fractions, decimals and percentages  Add and subtract decimals and find compliments to 1 e.g. 0.34 + ? = 1, Multiply and divide decimals by 10, 100 and 1,000.  **Year 6**  **Fractions, decimals and percentages**  Read and understand decimals up to 3d.p. and recognise their link to tenths, hundredths and thousandths. Convert to fractions and vice versa  Understand percentages and their relationship to fractions and decimals, find equivalents and order a mixture of fractions, decimals and percentages  Find percentages of an amount and calculate a percentage as a missing value e.g. ?% of 3250 = 325  Add and subtract decimals, Multiply and divide decimals by integers e.g. 0.35 x 62. Use calculations to solve problems. |

|  |  |
| --- | --- |
| **Subject and National Curriculum Reference** | **Key Knowledge** |
| **Religious Education – Gospel – What would Jesus do? (Understanding Christianity)** | BY THE END OF THIS UNIT, PUPILS ARE EXPECTED TO BE ABLE TO:   * Identify features of Gospel texts (for example, teachings, parable, narrative). Taking account of the context, suggest meanings of Gospel texts studied, and compare their ideas with ways in which Christians interpret biblical texts, showing awareness of different interpretations. * Make clear connections between Gospel texts, Jesus’ ‘good news’, and how Christians live in the Christian community and in their individual lives. Relate biblical ideas, teachings or beliefs (for example, about peace, forgiveness, healing) to the issues, problems and opportunities of their own lives and the life of their own community in the world today, offering insights of their own. |
| **French – La Nourriture – National curriculum reference:**   * listen attentively to spoken language and show understanding by joining in and responding * engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help\* * speak in sentences, using familiar vocabulary, phrases and basic language structures * develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases\* * read carefully and show understanding of words, phrases and simple writing * broaden their vocabulary and develop their ability to understand new words that are introduced into familiar written material, including through using a dictionary * understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms and the conjugation of high-frequency verbs; key features and patterns of the language; how to apply these, for instance, to build sentences; and how these differ from or are similar to English | * Ask politely for food items * Describe how to make a sandwich using ‘vous’ and the imperative * Express opinions about food * Talk about healthy and unhealthy food |
| **PSHE – Diversity and Communities**  (Statutory requirements for Relationships Education)  *Families and people who care for me* (FP) that others’ families, either in school or in the wider world, sometimes look different from their family, but that they should respect those differences and know that other children’s families are also characterised by love and care for them.  *Respectful Relationships* (RR)• that in school and in wider society they can expect to be treated with respect by others, and that in turn they should show due respect to others, including those in positions of authority  • practical steps they can take in a range of different contexts to improve or support respectful relationships  • the importance of respecting others, even when they are very different from them (for example, physically, in character, personality or backgrounds), or make different choices or have different preferences or beliefs  • what a stereotype is, and how stereotypes can be unfair, negative or destructive. *Health Education:Mental Wellbeing* (MW)the benefits of physical exercise, time outdoors, community participation, voluntary and service-based activity on mental wellbeing and happiness | This unit enables children to develop an age appropriate understanding of inclusion and equality, taking account of race, ethnicity, religion, culture and language, different abilities, gender, sexual orientation and age, within the school and the local community.   * be able to recognise aspects of their identity and understand how other people can influence their perception of themselves * be able to describe the ethnic make-up of their community and different groups that live in Britain * recognise the negative effects of stereotyping and prejudice * know about how they and others, including volunteers, contribute to the community * understand about the role of the media and its possible influences * understand some ways of caring for the environment and the contribution they can make. |
| **P.E. Dance / Basketball**   * Pupils should continue to apply and develop a broader range of skills, learning how to use them in different ways and to link them to make actions and sequences of movement. * They should enjoy communicating, collaborating and competing with each other. They should develop an understanding of how to improve in different physical activities and sports and learn how to evaluate and recognise their own success. * play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounders and tennis], and apply basic principles suitable for attacking and defending * perform dances using a range of movement patterns | **Dance**   * Develop controlled movements in isolation and as part of a sequence * Work independently and as a pair to plan and execute a series of moves * Interpret music and plan a dance to accompany it * Watch the dances of others and give feedback   **Basketball**   * Develop skills in throwing, catching, defending and shooting * Learn the rules for the game of basketball * Play games of basketball, working as a team and demonstrating good sportsmanship. |
| **Music – Rhythm**   * play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression * improvise and compose music for a range of purposes using the interrelated dimensions of music * listen with attention to detail and recall sounds with increasing aural memory * use and understand staff and other musical notations * appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians * develop an understanding of the history of music. | * In this unit, children will hear music from a variety of genres that use different time signatures. These pieces, combined with a range of notation activities, will help the children to gain confidence identifying rhythms both visually and aurally. Elements such as musical arrangement, structure and texture will be explored and the unit will culminate with the children performing pieces they have composed using these techniques in small groups, to an audience. Their performances will be assessed, discussed and critiqued against the success criteria. |

**Magnificent Mountains! - Homework Tasks**

**Please choose a minimum of two of the following tasks** which are linked to our topic. You are welcome to do more than two if you wish. **This work is due to be handed in on Monday 7th February**. You can hand the homework in as follows: by emailing it to [class3@thrussington.leics.sch.uk](mailto:class3@thrussington.leics.sch.uk) or by physically bringing it in. Towards the end of the topic, we will celebrate our learning and parents will be invited to see what we have been doing at school and at home.

Write a recount of a mountain expedition

Has somebody you know climbed a mountain? You could interview them and then write about their mountain climb. For example, I know that some of you in the class have experience of climbing Mount Snowdon in Wales.

You can include photographs, maps and drawings and you should find out why they wanted to climb the mountain, whether they prepared in any way, what the biggest challenge was and how they felt if they were successful. (If you have climbed a mountain, you could do this work about yourself in the style of an autobiography.)

Make a mountain!

Can you build your own replica of a real mountain to scale. For this challenge, you will have to use your mathematical skills to decide on the best scale for your mountain e.g. 1cm = 10m. You can then use whatever materials you wish to create your mountain. You could also add labels of any features using geographical language. If it is a mountain that many people choose to climb, you could mark on known footpaths.

A person standing on a mountain

Description automatically generated with medium confidence

Create an information leaflet or film an advert

Mountains and mountain ranges are popular tourist destinations. Choose a mountain or mountain range and create an information leaflet or a short film to advertise going on holiday there.

You should explain where it is in the world, explain why people would want to go there in particular, what language is spoken, what the accommodation is like, activities that you can do there and the climate.

Musical mountains!

You will be surprised at how many songs have the word ‘mountain’ in them. Why do you think that might be?

Listen to some examples then have a go at composing your own song which mentions mountains. If you wish, you can perform your song but I will leave that up to you!

Google Earth

Choose a mountain or mountain range that you would like to explore in more detail. Use Google Earth to have a closer look at it from different angles. You can choose how to present your findings.

