



1st Summer Year 4 - Mountains

By the end of this unit children will know...

- Which mountain ranges make up the 7 summits.
- How mountains are formed.
- Where the world's major mountain ranges are located using maps and atlases.
- The key human and physical characteristics of a mountain range.
- The climates of mountain ranges and how they are similar or different.



Intent	Implementation	Impact	Celebrate
<p>To develop geographical knowledge of the world's major mountain ranges.</p> <p>To understand where the world's major mountain ranges are located.</p> <p>To understand the key physical and human characteristics of a mountain range.</p>	<p>To look at each of the world's major mountain ranges separately.</p> <p>To locate mountain ranges, use maps and atlases.</p> <p>To research how mountains were made and the climate of a mountain range.</p>	<p>Have a clear understanding of the world's major mountain ranges and how they are different to our environment.</p>	<p>Write individual non-chronological reports showcasing research based on one of the world's major mountain ranges.</p> <p>Weekly updates on class page on school website and social media.</p>

Core Subjects: Links to theme
English
<p>Non chronological report Learn the key features and structure of a non-chronological report. Children will write a non-chronological report based on a mountain range.</p>
Mathematics
<p>Decimals Read and represent numbers with 2 decimal places. Count in hundredths. Divide by 10 and 100. Compare numbers with up to 2 decimal places. Order decimal numbers. Round decimal numbers to the nearest whole number. Convert pounds and pence.</p> <p>Fractions Add and subtract fractions with the same denominator. Identify equivalent fractions. Recognise the decimal equivalents of $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$.</p>
Science
<p>To compare and group materials together according to whether they are solids or liquids. To identify and explore the properties of gases. To observe that materials change state when they are heated or cooled. To research the temperature in degrees Celsius ($^{\circ}\text{C}$) at which materials change state. To understand the process of evaporation. To understand the process of condensation. To identify the part played by evaporation and condensation in the water cycle.</p>
Computing
<p>I can explain that digital images can be changed. I can change the composition of an image. I can describe how images can be changed for different uses. I can make good choices when selecting tools. I can recognise that not all images are real. I can evaluate how changes can improve an image.</p>

Mountains: Year 4: Knowledge Content	
Personal Development	Foundation Subjects
Spiritual	History & Geography
<p>What is it like to be a Hindu in Britain?</p>	<p>Geography To identify the key features of a mountain range and how they are made. To identify the world's major mountain ranges. To use maps and atlases to locate the world's major mountain ranges. To recognise the climate of a mountain environment. To research one of the world's major mountain ranges.</p>
Moral	Art & Design and Design Technology
<p>Show respect in how you treat others. Understanding how to help yourself and others when upset or hurt.</p>	<p>Art & Design 'Guiseppe Arcimboldo' Investigate and discuss the artist's work. Self-portraits using fruit and vegetables.</p> <p>Design Technology understand and apply the principles of a healthy and varied diet ♣ prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques ♣ understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p>
Social	Music and Languages
<p>Working collaboratively as a group ensuring everyone is involved.</p>	<p>German Inside the house, rooms and furniture.</p> <p>Music Continue with recorders Rock Steady music lessons</p>
Cultural	Physical Education
<p>Understanding how mountain range environments are similar or different to our own environment.</p>	<p>Chance to Shine Cricket sessions Rounders To practice throwing and catching skills. To learn defending and fielding techniques. To understand and apply the rules in a rounders game.</p>

Core Subjects:

English

Non-chronological report
Clear introduction and conclusion.
Links between sentences help to navigate reader from one idea to another.
Paragraphs organized correctly to main ideas.
Sub-headings to organize key ideas.

Mathematics

Round decimals with one decimal place to the nearest whole number.
Compare numbers with the same number of decimal places up to two decimal places.
Add & Subtract fractions with the same denominator.
Recognise and show, using diagrams, families of common equivalent fractions.
Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.

Science

Sc4/3.1a compare and group materials together, according to whether they are solids, liquids or gases.
Sc4/3.1b observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C).
Sc4/3.1c identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

Computing

Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.
Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
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.

Mountains: Year 4: Links to National Curriculum Framework Skills

Foundation Subjects

History & Geography

Geography

Ask and answer geographical questions about the physical and human characteristics of a location.
Explain own views about locations, giving reasons.
Use maps, atlases, globes and digital mapping to locate countries and describe features.
Use fieldwork to observe and record the human and physical features in the local area.
Use a range of resources to identify the key physical and human features of a location.
Name and locate countries and cities of the UK and Europe, including geographical regions and their human and physical characteristics.
Describe geographical similarities and differences between countries.
Describe key aspects of physical and human geography.

Art & Design and Design Technology

Art & Design

Guiseppe Arkimbldo
Replicate some of the techniques used by notable artists and designers.
Create original pieces that are influenced by studies of others.
Describe the differences and similarities between the designs and materials used by different sculptors.

Design Technology

understand and apply the principles of a healthy and varied diet ♣ prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques ♣ understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Music and Languages

Languages

German words and phrases for rooms around the home and furniture

Music

Continue with recorders
Rock Steady music lessons

Physical Education

Chance to Shine Cricket sessions

Rounders

Use different techniques to hit a ball.
Pass a ball with speed and accuracy using appropriate techniques in a game situation.
Use fielding skills as a team to prevent the opposition from scoring.

Core Subjects:
English
Assessed write: Non-chronological report on one of the world’s major mountain ranges. Children will read and discuss ‘Charlotte’s Web’.
Mathematics
Decimals / Money I can read and represent number with up to 2 decimal places. I can count up and down in hundredths. I can divide 2-digit number by 10 and 100. I can order number with the same number of decimal places. I can round number with 1 decimal place to the nearest whole number. I can convert between pounds and pence.
Fractions I can add and subtract fractions with the same denominator within and beyond one whole. I can calculate unit and non-unit fractions of amounts when the answer is a whole number. I can identify equivalent fractions. I can recognise and use the decimal equivalents of $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$.
Science
I can compare and classify materials according to whether they are solids or liquids. I can carry out an investigation to see if air weighs anything and report on my findings. I can draw diagrams to show how the particles in solids, liquids and gases behave differently. I can experiment with pneumatics and make observations about what I’m doing. I can research the melting points of a variety of materials. I can plan and carry out an experiment to see the different melting points of chocolate and evaluate the fairness of my experiment. I can give different everyday processes which involve melting and freezing. I can draw diagrams and use written examples to show the processes of evaporation and condensation. I can label a diagram of the water cycle to show what is happening.
Computing
Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. 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.

Mountains: Year 4: Core Skills/Assessment Opportunities
Foundation Subjects
History & Geography
Geography I can ask and answers questions about the key physical and human characteristics of a mountain range. I can identify and locate the world’s major mountain ranges using a range of geographical methods. I can recognise the similarities and differences of different mountain range climates. I can research key information about one of the world’s major mountain ranges.
Art & Design and Design Technology
Art & Design I can investigate and discuss the work of Arcimboldo. I can create a self-portrait influenced by Arcimboldo’s techniques.
Design Technology understand and apply the principles of a healthy and varied diet ♣ prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques ♣ understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.
Music and Languages
Languages I can use German words and phrases for rooms in the house and furniture
Music Continue with recorders Rock Steady music lessons
Physical Education
I can catch a ball using the correct technique. I can throw under arm and over arm. I can bat using the correct technique. I can use long and short barriers correctly. I can understand how to field correctly. I can understand the rules of rounders. I can play a game of rounders.

English

Text Type	Text Structure	Sentence	Useful Vocabulary	Word Classes	Punctuation
<p>Non chronological report</p>	<p>Clear introduction and conclusion.</p> <p>Links between sentences help to navigate the reader from one idea to the next.</p> <p>Paragraphs organized correctly into key ideas.</p> <p>Sub-headings are used to organize information. E.g. Qualities, body parts, behaviour.</p>	<p>Variation in sentence structures e.g. While the eggs hatch female penguins ...</p> <p>Use embedded/relative clauses e.g. Penguins, which are very agile,</p> <p>Include adverbs to show how often e.g. additionally, frequently, rarely.</p> <p>Sentences build from a general idea to more specific.</p> <p>Use technical vocabulary to show the reader the writer's expertise.</p>	<p>This report will</p> <p>The following Information</p> <p>Usually</p> <p>Normally</p> <p>Even though</p> <p>Despite the fact</p> <p>As a rule</p>	<p>Noun Nouns and pronouns used for clarity and cohesion. Noun phrases expanded by the addition of modifying adjectives, nouns and prepositional phrases.</p> <p>Verbs Standard English forms for verbs.</p> <p>Adjectives Choose appropriate adjectives</p> <p>Connectives/conjunctions Use a wide range of connectives.</p> <p>Tense Correct use of past and present tense.</p> <p>Adverbs Know what an adverbial phrase is.</p> <p>Fronted adverbials</p>	<p>Comma after fronted adverbials.</p>

Mathematics

Number	Calculation	Fractions	Shape & Measure	Data
	Continue with times tables	<p>Round decimals with one decimal place to the nearest whole number.</p> <p>Compare numbers with the same number of decimal places up to two decimal places.</p> <p>Add & Subtract fractions with the same denominator.</p> <p>Recognise and show, using diagrams, families of common equivalent fractions.</p> <p>Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.</p>		