

Geography: Mountains

10 points per book:

Read a book that is set in the mountains. Here are some example books but you will need to choose one that is the right level of challenge for you:

- Earthshattering Events by Robin Jacobs
- When the Mountains Roared by Jess Butterworth
- Freaky Peaks (Horrible Geography) by Anita Ganeri

2 points:

Have you or anyone in your family visited a mountain? Perhaps you could find pictures of the visit and find some information about the place.

5 points:

Draw, paint or make a model of a mountain landscape. Make sure your artwork shows the shape of the physical features.

5 points:

Which of these European regions is the odd one out: the Ural Mountains, the Caucasus Mountains and the Pyrenees? Explain why.

5 points:

True or false?

- The highest mountain in Europe is also the tallest.
- The longest mountain range in Europe also has the highest peak.
- Only one mountain range in Europe forms the border with Asia.

10 points:

Carry out a research project on a mountain of your choice. Make sure it is packed with information.

Extra ideas:

Visit some different places and observe the landscapes, comparing what you see in front of you with maps (the 'terrain' layer on Google Maps works well). Otley Chevin, Ilkley Moor and the Yorkshire Dales are all great for this.

How many points can you score?

Name: _____

Points: _____

Autumn Half Term 1 Year 4 Learning Challenges



Science: States of Matter

5 points:

Make oobleck by mixing corn starch and water. Discuss its properties and make a poster or film explanation to show the ways it seems to act as both a solid and a liquid. *Warning: this is messy and shouldn't be poured down the sink.*

5 points:

With an adult's help, investigate changes in state. Can you observe what happens when you heat or cool different foods? Present your findings in any way you choose. You could even design a meal which involves at least 3 changes of state. *Practise using this key vocabulary: solid, liquid, gas, boil, melt, condense & evaporate.*

5 points per activity:

Grow sugar crystals: <https://www.science-sparks.com/how-to-grow-sugar-crystals/>

Blow-up balloon:

<https://learning.sciencemuseumgroup.org.uk/resources/blow-up-balloon/>

Make a cloud in a bottle:

<https://www.jpl.nasa.gov/edu/learn/project/make-a-cloud-in-a-bottle/>

Art:

5 points:

Draw some simple objects (such as a rock or a spoon) with pencil, thinking about shading the lighter and darker parts.

2 points:

Look at some paintings by Paul Cezanne. Choose your favourite and label it to show where Cezanne has used different tints and shades.

10 points:

Re-create the piece of art called 'Mont Sainte-Victoire' by Paul Cézanne. You could use paint, coloured pencils, collage...the choice is yours! We look forward to seeing your own interpretation of this picture.