

**Autumn Term 2019 – Volcanoes, Zones and Earthquakes**

**Geography**

As geographers we will:

- Collect and analyse statistics and other information in order to draw clear conclusions about locations.
- Identify and describe how the physical features affect the human activity within a location.
- Analyse and give views on the effectiveness of different geographical representations of a location (such as aerial images compared with maps and topological maps - as in London's Tube map).
- Name and locate some of the countries and cities of the world and their identifying human and physical characteristics, including hills, mountains, rivers, key topographical features and land-use patterns; and understand how some of these aspects have changed over time.
- 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).
- Describe how locations around the world are changing and explain some of the reasons for change.
- Describe geographical diversity across the world.
- Physical geography, including climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes and the water cycle.
- human geography, including: land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals, and water supplies.
- Use the eight points of a compass, four-figure grid references, symbols and a key (that uses standard Ordnance Survey symbols) to communicate knowledge of the United Kingdom and the world.
- Create maps of locations identifying patterns (such as land use, climate zones, population densities, height of land).

**Science**

As scientists we will:

- Plan enquiries, including recognising and controlling variables where necessary.
  - Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work.
  - Take measurements, using a range of scientific equipment, with increasing accuracy and precision.
- Forces
- 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.

**PE**

As sports people we will:

- HOCKEY
- Choose and combine techniques in game situations (running, throwing, catching, passing, jumping and kicking, etc.).
  - Work alone, or with team mates in order to gain points or possession.
  - Field, defend and attack tactically by anticipating the direction of play.
  - Choose the most appropriate tactics for a game.
  - Uphold the spirit of fair play and respect in all competitive situations.
  - Lead others when called upon and act as a good role model within a team.
- DANCE
- Compose creative and imaginative dance sequences.
  - Perform expressively and hold a precise and strong body posture.
  - Perform and create complex sequences.
  - Express an idea in original and imaginative ways.

**Art**

As artists we will:

- Develop and imaginatively extend ideas from starting points throughout the curriculum.
- Comment on artworks with a fluent grasp of visual language.
- Sketch (lightly) before painting to combine line and colour.
- Create a colour palette based upon colours observed in the natural or built world.
- Use the qualities of watercolour and acrylic paints to create visually interesting pieces.
- Combine colours, tones and tints to enhance the mood of a piece.
- Use brush techniques and the qualities of paint to create texture.
- Give details (including own sketches) about the style of some notable artists, artisans and designers.

**Spanish**

As linguists we will:

- Read and understand the main points in short written texts.
- Read short texts independently.
- Use a translation dictionary or glossary to look up new words.
- Write a few short sentences using familiar expressions.
- Express personal experiences and responses.
- Write short phrases from memory with spelling that is readily understandable.

<p>Earth and Space</p> <ul style="list-style-type: none"> <li>• Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.</li> <li>• Describe the movement of the Moon relative to the Earth.</li> <li>• Describe the Sun, Earth and Moon as approximately spherical bodies.</li> <li>• Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</li> </ul>		<p><b>Computing</b></p> <p>As coders we will:</p> <ul style="list-style-type: none"> <li>• Set IF conditions for movements. Specify types of rotation giving the number of degrees.</li> <li>• Change the position of objects between screen layers (send to back, bring to front).</li> <li>• Combine the use of pens with movement to create interesting effects.</li> <li>• Use lists to create a set of variables.</li> </ul>	
<p><b>Enrichment opportunities</b></p> <ul style="list-style-type: none"> <li>• Science trip to Magna</li> <li>• Parent/child day making 3D erupting volcanoes</li> <li>• Community campaign to save the world</li> </ul>			