

Spring 2 Year 5 – Volatile Planet

Herne Junior School
2020-2021

Description/Theme Intent:

The theme will start with the children investigating what volcanoes are and their key features. They will then delve into the layers of the Earth to explore how the movement of tectonic plates causes fault lines and areas of volcanic activity across the globe. They will learn about 'Pangea' and continental drift through physically piecing together the continents. Through the exploration of maps and satellite images, the children will learn about the Pacific Ring of Fire and 'danger zones' across the planet. They will complete the topic by researching and debating the positive and negative effects of volcanic activity on the surrounding environment.

Curriculum Hook:

The year group will watch a glow in the dark volcanic eruption experiment (using a model volcano) in the hall and then an inspirational video about volcanoes to hook them into the topic.

Quality Text / Whole Class Reader:

Swimming against the Storm – Jess Butterworth

Links to being a British and Global Citizen:

Respect for the Environment: as global citizens, this unit will show the children the need to respect the environment as well as giving them an empathy with people who live around these natural areas by looking at their impact.

Respect: The children will also build respect for others through the 'Challenging Stereotypes' PDL unit.

Links to SMSC, RRR and HARMONY:

Independence, motivation and collaboration at Avon Tyrrell. Also resilience and support for each other during a time which for some, can be very challenging.

Respect: The children will also build respect for others through the 'Challenging Stereotypes' PDL.

Life Long Learning Skills):

- Children will develop their problem solving skills and resilience at Avon Tyrrell.
- The children will develop their problem solving skills through the Computing challenges.

Outcome/Impact:

Children will create a concept cartoon about the different positive and negative impacts of volcanic eruptions on the environment. They will have a class debate on the pro and cons of living near a volcano, before deciding whether to advise an alien species whether the planet Earth is safe to visit.

As readers, writers and performers, we will:

- Create performance poetry based on volcanoes. We will think about how to create rhythm and flow and about the vocabulary that we use.
- Think about the sequence of events that lead to volcanic eruption and how to expand our explanations clearly.
- New for 2021 – We will write detailed informal instructions on how to turn from an average volcano into a super volcano!

As mathematicians, we will:

- Study fractions, including: equivalent fractions; converting from mixed to improper (and visa-versa); sequence; compare; order; add; subtract; fractions of amounts; fractions as operators; and multiply unit fractions.
- Continue our studies in number (focusing in on decimals and percentages), including; decimals up to 2DP; decimals as fractions; understanding 1000ths; understand 10th as decimals; ordering; and comparing.

As geographers, we will:

- Learn about the structure of our planet in terms of plate tectonics and the layers of the Earth.
- Learn about earthquakes and volcanoes and how they are linked through plate tectonics.
- Learn about the sequence of a volcanic eruption and the positive and negative aspects of living nearby.
- Compare other natural disasters such as tornadoes and hurricanes
- Develop skills of map and atlas work through research and enquiry.

As scientists we will: (study particles and changing materials)

The children will all become 'chemists' throughout this unit of study, developing their understanding of changing materials and particles. They will participate in scientific experiments to understand the following areas in more depth, with an increasing awareness of the importance of a fair test and changing variables.

- Identify substances that dissolve to form solutions and describe how to recover them.
- Separate solids using different methods.
- Recognise that new materials are formed when something is burnt and that this is an irreversible change. Compare and group together everyday materials on the basis of their properties.
- Identify reversible and irreversible changes.
- Compare and group together everyday materials on the basis of their properties.

Celebrating our community

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