

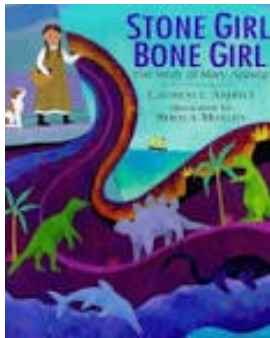
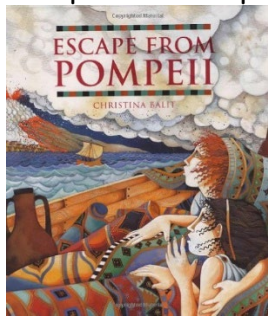
Unit Plan: How extreme is Earth? (10 weeks)

Rationale

Children start the unit look at creation stories as part of our R.E curriculum. They look at the different creation stories from the Christian, Hindu, Jewish and Islam Religions and compare how they are similar and different. They look at a range of religions to promote equality and inclusion. The children then learn about the Big Bang Theory as part of science. This is developed further in Year 5 when they explore space. Children then begin to explore geography, building on their previous unit about Britain, and look at tectonic plates and how volcanoes are formed. This then leads on to a DT project where they create their own volcanoes and present to year 2 how volcanoes are formed and what happens during an eruption before considering whether Leicester is a safe place to live and how school keep them safe. As part of the science curriculum children learn about different types of rocks and how to identify these. The children also look at Mary Anning as a key figure and her work discovering fossils. The unit then concludes with the children looking at Friction and magnets. Within English, pupils studying the eruption of Mount Vesuvius during the Roman times which is developed further in the next unit in Year 3: Romans.

Core Texts

Escape from Pompeii



Stone Girl Bone Girl

The Hueys in the New Jumper
The Truth About Old People

Key Figures

Mary Anning



Georges Lemaitre



Enrichment

- Volcano explosion activity
- Beacon Hill trip - Geography field trip

Written outcomes

- Explaining the process of fossilisation

Science unit

- Rocks
- Forces and Magnets
- Fossils

RE unit

- Creation and Green Issues

Oracy

- Retelling creation stories in groups.
- Presenting volcanoes to the year 2's

Cross curricular Links

- | | |
|-------------|-----------|
| • DT | • PSHE |
| • Art | • Science |
| • Geography | |
| • RE | |

Sequence of lessons: How extreme is Earth? (10 weeks)

Lesson	Learning Challenge	Outcome	Adaptive teaching/ CP	Flashbacks
1. RE Discrete Unit	Can I understand what creation means?	<p>Teacher prepares a piece of art and discusses the process of making it – how it felt ect.</p> <p>Pupils create their own piece of art. Discuss how it felt. Are they proud? Which bits are they disappointed with? Ask a child to secretly screw it up. Model how that feels. Pupils pass their work to someone else, and they screw it up.</p> <p>Challenge bubble: How would you feel if your art got destroyed? Why?</p>	<p>Give some ideas of things they could draw or make.</p> <p>Make a group piece and all have a go at screwing it up.</p> <p>Discuss and record how they feel.</p>	<p>What do you remember about the Stone Age?</p> <p>Picture discuss.</p>
2. RE discrete unit	Can I retell the Hindu story of creation?	<p>Chn in circle in hall.</p> <p>Have candles, incense/defuser, music, Indian sweets,</p> <p>Read the story. Pupils draw what they are imagining. Floor books.</p> <p>Get into group as use dance/ movement to retell a section of the story.</p>	Same	Match the religion to the place of worship and holy text.
3. RE discrete unit	Can I retell the Christian and Jewish story of creation?	<p>Read the creation story. Act it out the 7 days.</p> <p>Create a comic strip of the 7 days of creation.</p> <p>HA – Write in more detail.</p> <p>LA -draw picture and write caption.</p> <p>Challenge: How do you think Christians feel about the Earth?</p> <p>What would they say to the creator?</p>	<p>Order and discuss using picture cards.</p> <p>Scribe pupil voice.</p>	Who celebrates what – matching activity.

4. RE cont	<p>Can I understand how Muslims believe the world came to be? Can I compare the creation stories?</p>	<p>Read the story and discuss. Venn diagram. LA – 2 way Venn HA – 3 way Venn</p>	<p>Group Venn with hoops and pictures supported by adult. Photos.</p>	<p>How do Christians and Jews and Hindus believe the world came to be?</p>
5. RE cont	<p>Can I explain what science tells us about how the world came to be?</p> <p><i>Georges Lemaitre</i></p>	<p>Recap creation stories. Teach them about the Big Bang Theory and evolution. Refer back to the Christian/Jewish explanation and discuss how this can raise many 'how' questions e.g. 'How could there have been light on the first day, when the sun was made later?' Give the class time in pairs/groups to raise some of their own questions. Sort the questions into how and why? Which do they think is more important? Floor book – Do you think how the Earth is made or why the Earth is made is more important?</p>	<p>In their group, come up with questions about creation.</p>	<p>Venn diagram on board. Can they put the creation sentences in the correct place?</p>
6. RE cont	<p>Can I understand what "wow" and "ow" is in relation to earth? How do you think the creator feels?</p>	<p>On a double page half earth good half bad - Google Search Chn sort images into the good and bad. HA – add captions to explain what humans are doing to damage the Earth. La – add words. Challenge: What can you do to treat the world better?</p>	<p>Sort the pictures Scribe their thoughts and feelings.</p>	<p>What makes Britain Beautiful?</p>

7. Geography	Can I locate the U.K and identify other countries on a map?	<p>Starter: show images of different countries from a map. Can they recognise it from the shape? Provide chn with a world map. Then give them shapes of countries to find. E.g Other countries: Australia (a large island in the Pacific Ocean), Brazil (the biggest country in South America). A4 map (with countries labelled) in the middle and put their countries around the edge with a line to where they have found it. Label the country. Slide show of countries – do they know what they are?</p>	Big world map Can they locate the countries using the shapes. Keep colours the same if needed.	Can I identify and locate the world's 7 continents and 5 oceans?
8. Geography	Can I locate the position of the Earth's tectonic plates?	<p>Teach about them World map with tectonic plate lines. Children use tracing paper to copy the lines and then stick over the regular world map as a flap. True or false questions using the map: which country would be dangerous to live on? Where would be safe? Which would have the most Earthquakes? A tectonic plate runs through Mexico?</p>	Precut a map into the tplates. Childrne put it back together to show visually the plates. Stick into curriculum book. Answer the t/f questions.	Can they identify the country from the shape?
9. Geography	Can I understand how volcanoes are formed, what causes a volcanic eruption and what lasting effect does it have on local geography?	<p>Lessons: teaching the 4 parts. Do each part and get pupils to make that bit of the circle book. Circle book explaining parts of a volcano and what they do 4 parts: 1. make up of the Earth inner, outer, mantel, crust Make templates for them to complete.</p>	<p>Make out of playdough 1/2. Add printed labels. Part 3 – order how they are formed and discuss. Part 4: Discuss and scribe ideas in book.</p>	What are tectonic plates? Where are some of them?

		<p>2. Cross section of a volcano – with labels – magma, ash loud, chamber, crater, vent, lava chamber. Make template to complete.</p> <p>3. How a volcano is formed.</p> <p>4. Lasting effects</p>		
Trip	Beacon Hill	<p>Rocks, volcanos, Earthquakes</p> <p>Recap – castles and Bronze age.</p>		
10. D&T	Can I design a volcano?	<p>Give them a design brief and purpose – stick in books. Show year 2 children how volcanoes work. Show model of what it should look like (Sophie)</p> <p>20cm in height, hold liquid, look like a volcano.</p> <p>Explore materials and ways of constructing through modelling first. E.g demonstrate painting over masking tape but not Sellotape. Label their designs thinking about materials they will use for each . Make templates with pictures. E.g. What will you use for the vent? Why? Why wouldn't you use the others?</p>	<p>Same outcome in a group with an adult.</p> <p>Consider whether they want to live present or make a video.</p>	Materials and their properties?
11. D&T	<p>Can I construct a volcano? X 2</p> <p>Give children rolls to fulfil. E.g project manager, cloud,</p>	<p>In groups, build a volcano.</p> <p>Write a script for their demonstration to year 2.</p>	As above	Thinking back to bug hotels – WWW/EBI.
12. D&T	Can I demonstrate and evaluate my volcano?	<p>Present volcano demos to Year 2. Questionnaire for chn in year 2 to answer.</p> <p>Evaluate. Get feedback from year 2 children.</p>	As above	Volcano vocabulary label a volcano and explain how made.
13. Geography	Can I understand what causes Earthquakes and tsunamis and how it effects the local geography?	<p>DPS</p> <p>Scaffolds for with part filled in boxes. Printed pictures and diagrams that they can explain.</p>	Group DPS	Tectonic plates.

		<p>What is an Earthquake? What causes it? What damage do they do?</p>		
14. Geography	Can I compare Leicester to learnt danger zones around the world?	<p>Look at videos of each. tsunami, earthquakes, volcano, floods, fires, tornado. Which could happen here? Why/why not. LA - sort into Leicester / not Ma/HA – Write an explanation for each e.g A volcanic eruption could not happen in Leicester because.... Challenge: Is Leicester a safe place to live?</p>	Sort into Leicester / not and explain why verbally.	What natural disaster do they know?
15. PHSE	Can I talk about the effects of world disasters and how we can deal with loss and bereavement?	<p>Look at disasters that have big death counts. The Impossible. Discuss what it means to lose someone. Circle time. Floor book – Badger’s parting gift.</p>	In class	<p>What makes you, you? What is heritage?</p>
16. PHSE	Can I identify a range of hazards in school that may cause me harm? (e.g. fire risks)	<p>Books – make sure chn know how we keep them safe at school. Meet Elle and Dom to discuss how they keep the children safe. Fire, security, first aid, risk assessments. Risk assessments. Cooking. Wet floor signs. Lanyards. Gates. Dismiss at the end of the day. Worry monsters. Curriculum. A poster with school in the middle and pictures of the things that keep them safe. Chn explain how they keep them safe. HA – will have more items.</p>	Do the same as a group. Scribe if needed or give them one each to explain and make a group poster.	Spot the hazards at home.
17. Science	Can I understand why Mary Anning was an unsung hero of fossil discovery?	<p>Scientist Study What did people believe before? Mary’s discoveries. What happened after she died? Why is Mary an unsung hero?</p>	<p>Timeline line of key events. Put it in order. Include things that happened before and after her life and death.</p>	Who is Charles Mackintosh and what did he invent?

18. Science	Can I understand the process of fossilisation?	Explain process of fossilisation in science books Make salt dough fossils	Explain process of fossilisation in science books as a group.	Label the parts of a plant and their function.
19. Science	Can I group rocks according to their properties? Can I investigate the hardness of rocks?	Explore rocks. Definition of rocks. Discuss them smooth, hard, rough, soft, what's inside, colours, transparent or opaque. Group them based on their appearance. A3 Venn diagram on the table. Which rocks are the hardest test. Picture of the rock and name. Scratch it with their nail, sandpaper, rock. Which rocks were the hardest? Which were the softest?	Group work with a shared experiment outcome.	Materials and their properties from year 2. Bendy Plastic, wood, metal, rock, fabric. Hard Stretchy Soft
20. Science	What different rock types are there?	Spot the rock. e.g house slate roof. Brick walls- misconception. Marble work tops ect. Learn the 3 different types. Explorify		Put these into a food chain
21. Science	Can I investigate the effects of water on rocks?	Investigation. Explorify		Match an animal to their habitat. Odd one out.
22. Science discrete unit – Summer.	Can I investigate how objects on different surfaces?	Trays with different surfaces. Ice, gravel, asto turf, carpet, table, plastic tray, water. Rate it out of 1-5 of easy to move. HA – add caption why they gave it that score.	Group	living, dead, and things that have never been alive
23. Science discrete unit	Can I investigate how magnets attract and repel and group objects on this attraction?	Learn about how magnet work. Discuss that other forces are needed for pushing and pulling but magnets work from far away. Show video of magnets in action. Items with names of materials. E.g table – wood.	Group	Day and night explain why

		Sort into magnetic and not magnetic. Do they see a link? Plenary testing different metals.		
24. Science discrete unit	<u>Magnet investigation:</u> Begin to talk about criteria for grouping, sorting and classifying and use simple keys. Begin to compare and group according to behaviour or properties, based on testing. Gather, record, and begin to classify and present data in a variety of ways to help in answering questions	Do bigger magnets have a bigger attraction? Carry out a fair test.	Group.	Seasons