

Year 5/6
Spring Term 1
Extreme Earth

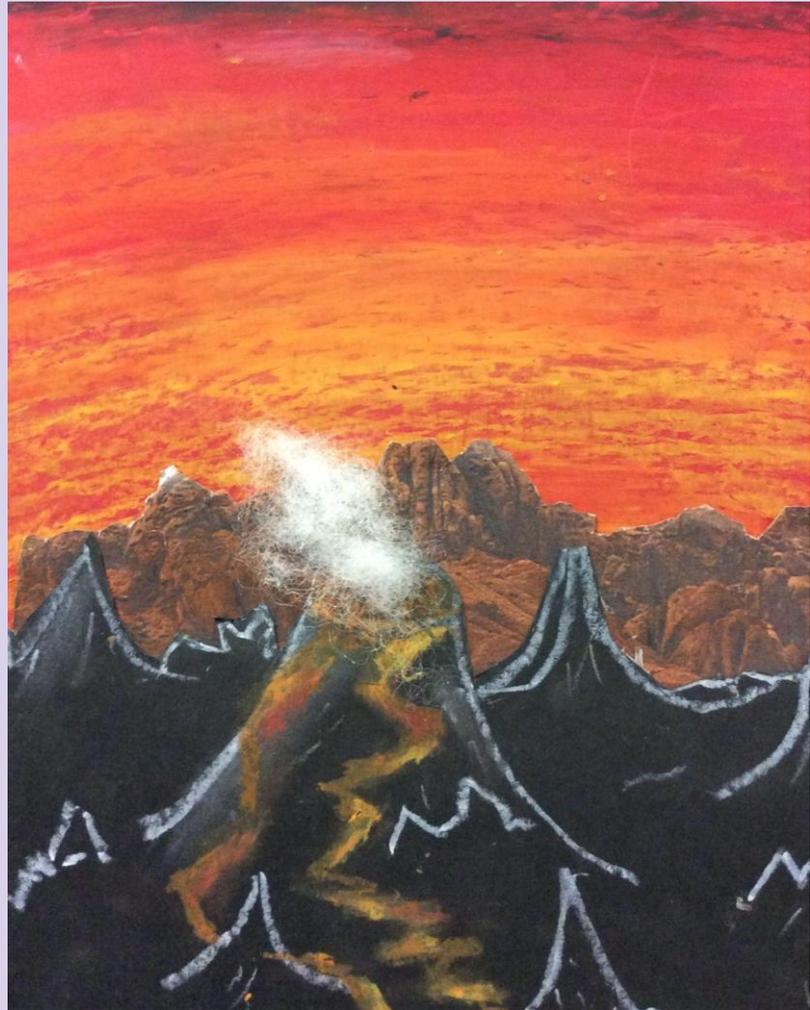
Natural Disasters and
Physical Geography

Geography

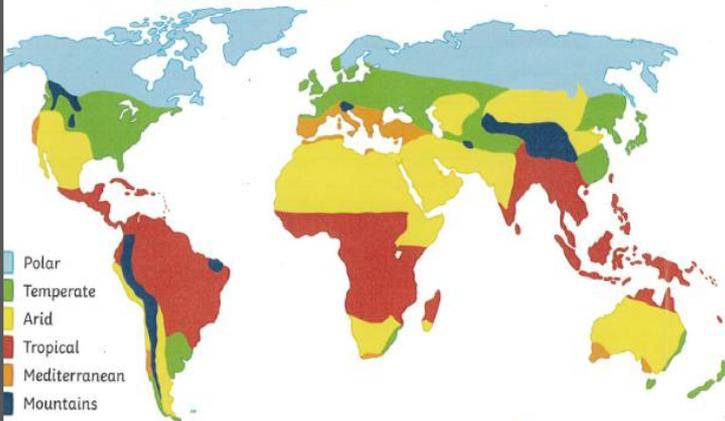
As part of our Stunning Start day we focused on many different physical features of the earth. We created topic maps to begin with to show what we already knew about 'Extreme Earth'.

Throughout the day, we had a lot of fun creating earthquake-resistant buildings, learning about how to prepare for an earthquake as well as creating beautiful pieces of artwork depicting a volcanic eruption.

All of the activities made us really excited about our topic, and prompted lots of questions that we wanted to explore this half term!

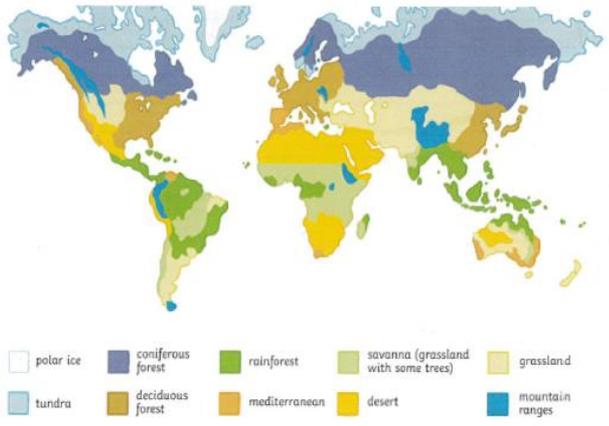


Climate Zones



I can explain the differences between the world's biomes and climate zones.

Biomes



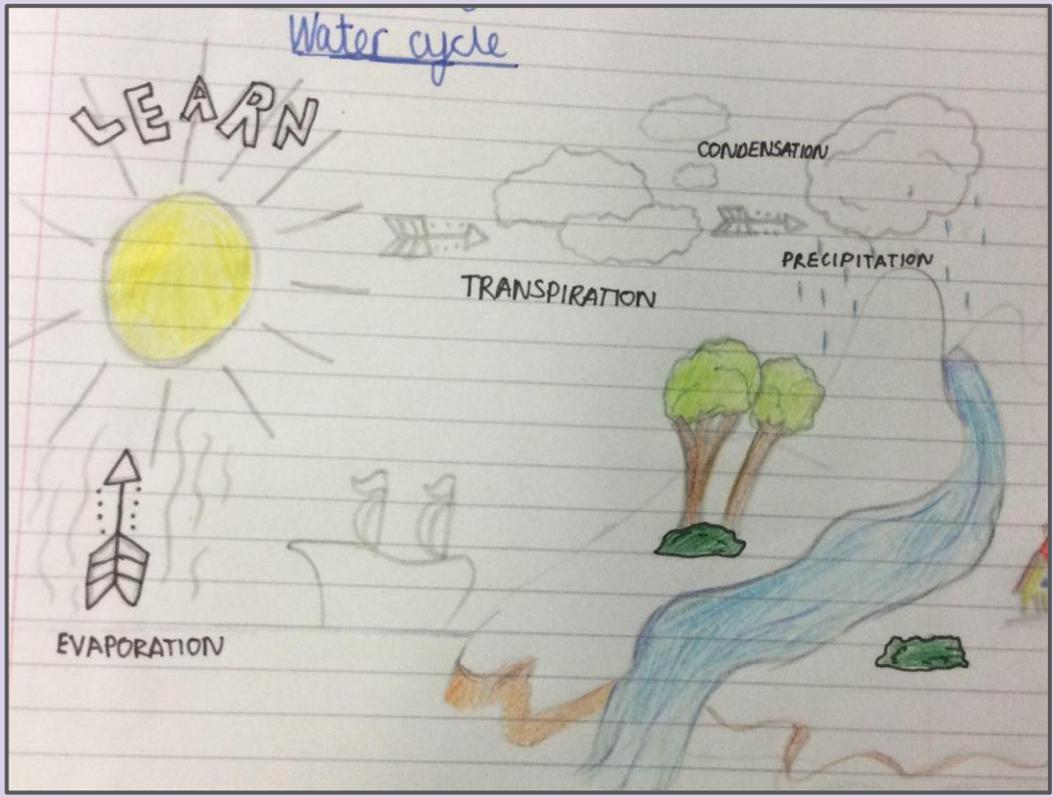
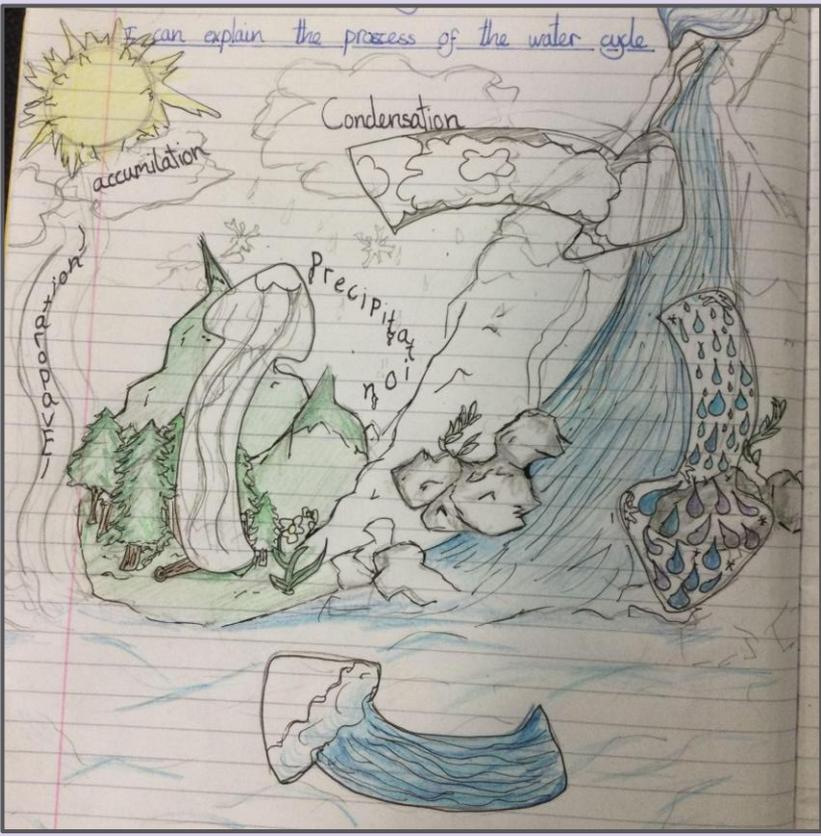
Climate Zones = Similar weather patterns and land's shape

Then, in our next lesson, we used atlases to find and compare different biomes and climate zones across the world. We worked hard to locate places on a world map and use an atlas with confidence.

Country	Continent	Climate Zone	Biome
Iceland	Europe	Polar	Tundra
Cyprus	Europe	Mediterranean	Deciduous forest
England	Europe	Temperate	Deciduous forest
Japan	Asia	Temperate	Deciduous forest
Canada	North America	Polar	Tundra
Egypt	Africa	Arid	Desert
France	Europe	Temperate	Deciduous forest
Philippines	Asia	Tropical	Rainforest
Brazil	South America	Tropical	Rainforest
Mongolia	Asia	Arid	Grasslands

Biomes = Similar climate zones, vegetation and sometimes animals.

I learnt that Saudi Arabia was previously a rainforest and has converted into a desert climate zone. I assume that this is due to the effect of deforestation and climate change.

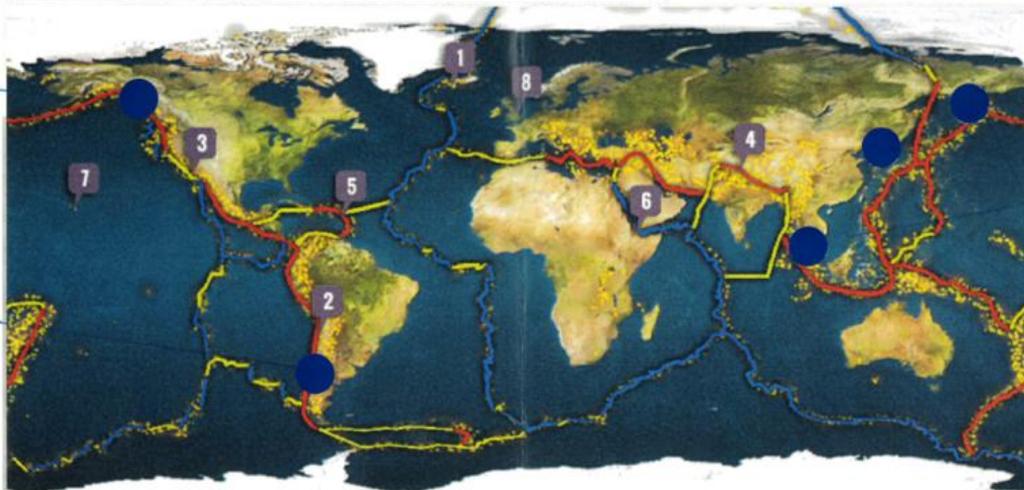


Our next geography task was to look into the water cycle. We used the key vocabulary whilst drawing and annotating our own water cycles, as well as setting up a 'water cycle in a bag' experiment in our classrooms that we were able to monitor and observe over the next few weeks.

LI: I can analyse data, drawing conclusions to identify the risk of earthquakes.

M9.2
1964 March 28
Prince William
Alaska

M9.5
1960 May 22, Chile



M8.9 2011 March 11
Near the

M9 Kamohatka
1952 November 4

M9.1 off west
coast of Northern Sumatra
2004 December 26 ✓

SHOW OR HIDE THE FOLLOWING FEATURES ON THE MAP USING THE CHECKBOXES BELOW

VOLCANO
DISTRIBUTION

EARTHQUAKE
DISTRIBUTION

TECTONIC
PLATES

PLATE BOUNDARY TYPES

- Divergent (constructive or pulling apart)
- Conservative (sideways or transform)
- Convergent (destructive or collision)

Direction of plate movement

Should we prepare for earthquakes?

After analysing the earthquake data, I think that only certain areas of the world need to prepare for earthquakes. As the map shows that the major earthquakes happen on convergent plate boundaries, so I think that only people around those boundaries should prepare. However, ^{it} people living around those areas it would be a good ~~idea~~ idea to be prepared for them as they can be life-threatening.

Here, we analysed USGS (United States Geological Survey) data to find where the largest earthquakes in recorded history have occurred. We drew conclusions and realised that we're pretty safe from serious earthquakes in the UK. What do you think - should we prepare for earthquakes?

We enjoyed exploring the physical process of a volcanic eruption. We considered the human impact of these events, looking at both the positives and negatives. We weighed up our arguments to decide whether we thought volcanoes were ultimately harmful or helpful.

VOLCANOES

The Negative

Some volcanoes are terribly dangerous. Many can destroy villages and wildlife! The lava flows down like a boiling river, and burns places like paper.

Ash is bad for humans. When it gets into our lungs, it could be deadly!



Toxic gases can cause acid rain. This is a problem as acid can burn. And the flakes can fly anywhere! They can burn houses down with 10,000 flakes, and they burn skin!

A benefit about volcanoes is that when they dry up, they can be good for crops. *It is good for crops because when a volcano is erupting, it is best not to get too close. As when the volcano is active, lava can flow dangerously.

Another good thing about old volcanoes is that they can be so old and ancient, that people mine in them! (Not when the volcano is erupting)



When you see a volcano, it's very interesting. Sometimes you can't even recognise a volcano! They are just mountains, really. Except the ground beneath them explodes with fire and it transforms into a volcano! Scientists capture this information, which is a good thing.

Writing - Y5



Fennx

One of the largest creatures in the snowy mountains of Russia, the Fennx is a difficulty to handle. This chapter will help you take care of this majestic creature.

A Fennx' skin is completely poisonous emerald to ward of predators. Its weird placed eyes help it hypnotize its prey. For its love of snow, it has got a beak to dig down to this beasts home. Incredibly this beast can fly on completely ice wings.

Diet

The Fennx has a very difficult diet which creates struggle for their trainer. Their diet includes rubies and other gems. These incredible creatures love diamonds from the caves of Russia. You must follow its diet or it is known to strike and leave you to die! Accept when a volcano explodes anywhere in the world its dinner changes to troll ears. So be sure to have a secret store of troll ears.

Habitat

If you want make your Fennx joyful, you need to make sure they are living in a perfect habitat. This creatures home will be more difficult than you think. In colder periods, this beast must have snow and caves to survive.

As part of our 'Extreme Earth' topic, we have produced some wonderful writing including a narrative based on the picture book 'Flood' by Alvaro F. Villa.

We have also been reading Harry Potter and have made of own handbooks which explain how to look after your magical creatures.

Writing - Y6

As part of our 'Extreme Earth' topic, we have produced some wonderful writing including a descriptive narrative using the story 'Escape From Pompeii' as our focus. The children wrote 2 wonderful pieces: one when Pompeii was a peaceful city and the other after the Vesuvius eruption amidst all the chaos.

Perfect Pompeii

It was a typical morning for the twins, Mario and Luigi. They left their house and walked into the cobbled streets of Pompeii. The two of them entered their friend Bobetta's street and found her ready, waiting for them. Together, they set foot into one of the busiest marketplaces in Pompeii.

As the three of them entered the marketplace, the aroma of freshly baked bread surrounded them. Mario couldn't help himself and went to buy some as it was only a quarter of a denarius. He walked over to where Luigi and Bobetta were stood, near the street performers. They were performing a traditional Roman carol. The sky was clear and the sun was shining as birds flew by. In the distance, Mount Vesuvius stood quietly in the shadow, unnoticed by most people. It was covered in green vines, looking more like a gentle hill than a danger.

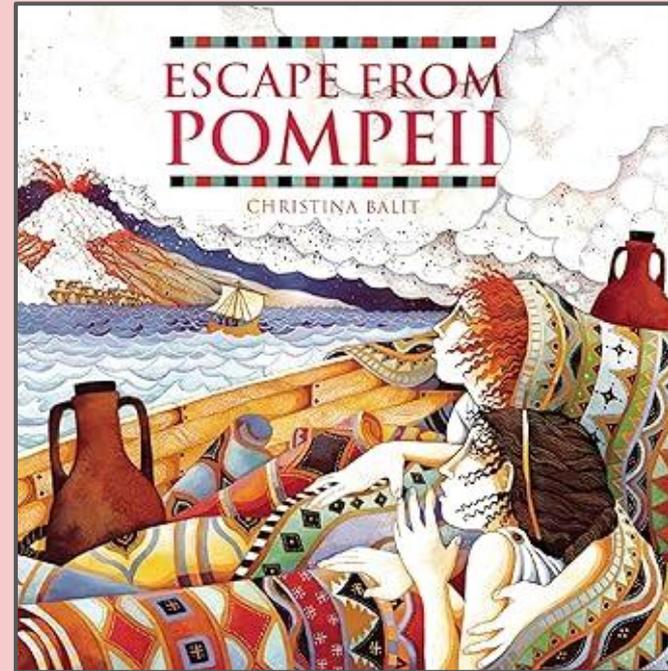
Pompeii In Peril

Suddenly, the ground trembled vigorously. Everyone sprinted. Mario looked around, a confused look on his face. Birds shot into the air, screeching loudly. Abruptly, an ear splitting boom echoed across Pompeii. At first, everyone fell silent and paused but not for long. People burst out screaming and ran in all directions like scattered ants. The twins and Bobetta sprinted and went to hide in Bobetta's house. Pompeii was pure chaos.

"Thank goodness you're safe!" cried Bobetta's mother, tears rolling down her cheeks, "Hurry up and get inside all of you!"

Unexpectedly, Pompeii broke into ominous darkness. The deadly obnoxious gas made the people fall as their lungs filled with toxic smoke. The citizens of the popular city realised the volcano was the cause of the catastrophe. Everyone was struggling to breathe as the ash clouds grew bigger. Slowly, the screams grew quieter until Pompeii fell silent.

Now Pompeii is one of the world's most famous archaeological sites, attracting millions of tourists every year.



Maths - Y5

In maths Y5 this term we have been exploring fractions. This has included finding equivalent fractions as well as ordering, comparing, adding, subtracting, multiplying fractions.

We have continued to practise converting between mixed numbers and improper fractions and now feel much more confident in this skill.

23.1.24 I can add fractions

Work out the calculations.

a) $\frac{4}{7} + \frac{2}{7}$
 b) $\frac{4}{7} + \frac{3}{7}$
 c) $\frac{4}{7} + \frac{4}{7}$
 d) $\frac{7}{9} + \frac{2}{9} + \frac{8}{9}$
 e) $\frac{7}{15} + \frac{2}{15} + \frac{8}{15}$
 f) $\frac{11}{9} + \frac{11}{9} + \frac{22}{9} = 7\frac{4}{9}$
 g) $\frac{14}{7} + \frac{7}{7} + \frac{4}{7} = 3$

Work out the additions.

a) $\frac{4}{5} + \frac{7}{20}$
 b) $\frac{5}{4} + \frac{7}{20}$
 d) $\frac{3}{3} + \frac{5}{12}$
 e) $\frac{3}{3} + \frac{11}{15}$

a) $6\frac{1}{7}$
 b) $1\frac{1}{7}$
 c) $1\frac{1}{7}$
 d) $1\frac{8}{9}$
 e) $1\frac{2}{15}$

A. $1\frac{3}{20}$
 B. $1\frac{20}{20}$
 C. $1\frac{20}{20}$
 D. $1\frac{3}{4}$
 E. $1\frac{1}{3}$

What could the missing numerators be?
 Give six different possibilities.

$\frac{\square}{8} + \frac{\square}{8} = \frac{13}{8}$

Here are two jugs.



One jug contains $\frac{3}{8}$ l of water.
 The other jug contains $\frac{4}{8}$ l of water.
 How many litres of water are there altogether?

$1 + \frac{12}{8} = 2\frac{2}{8} = 2\frac{1}{4}$
 $\frac{2}{8} + \frac{11}{8} = \frac{13}{8} = 1\frac{5}{8}$
 $\frac{3}{8} + \frac{4}{8} = \frac{7}{8}$
 $\frac{4}{8} + \frac{7}{8} = \frac{11}{8} = 1\frac{3}{8}$

Complete the addition pyramids.

a) $\frac{1}{7} + \frac{3}{14} = \frac{5}{14}$
 $\frac{5}{14} + \frac{5}{14} = \frac{10}{14} = \frac{5}{7}$

b) $\frac{1}{16} + \frac{1}{16} = \frac{2}{16} = \frac{1}{8}$
 $\frac{1}{8} + \frac{1}{8} = \frac{2}{8} = \frac{1}{4}$
 $\frac{1}{4} + \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$

c) What fraction is equivalent to both of the fractions at the top of the pyramids?

To add fractions, you must first make sure that the numerators of each fraction are the same.

F also, the numerator doesn't need to be the same, but the denominator does.

6.2.24 I can subtract mixed numbers.

Use your preferred method to work out the subtractions.

a) $4\frac{4}{5} - 2\frac{3}{10}$
 b) $3\frac{2}{6} - 1\frac{1}{4}$
 c) $16\frac{1}{2} - 5\frac{1}{4}$
 d) $10\frac{2}{6} - 5\frac{5}{12}$

What do you notice about your answer to part d)?

a) $2\frac{1}{2}$ ✓ b) $2\frac{3}{8}$ ✓ c) $11\frac{1}{4}$ ✓
 d) $5\frac{5}{12}$ ✓

The answer is the second number in D. That means that $5\frac{5}{12} = \frac{1}{2}$ of $10\frac{2}{6}$

a) $10\frac{5}{10}$
 b) $10\frac{5}{10}$
 c) $10\frac{5}{10}$
 d) $10\frac{5}{10}$

Work out the subtractions.

a) $4\frac{4}{5} - 2\frac{9}{10}$
 b) $3\frac{5}{8} - 1\frac{3}{4}$
 c) $5\frac{2}{7} - 2\frac{11}{14}$

a) $1\frac{9}{10}$ ✓ b) $1\frac{7}{8}$ ✓ c) $2\frac{7}{14}$ ✓

Dexter is subtracting fractions.



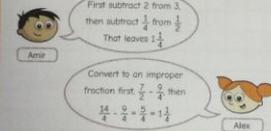
$5\frac{2}{3} - 3\frac{2}{6} = 2\frac{2}{6}$

Explain the mistake that Dexter has made.

I instead of doing $\frac{4}{6} - \frac{5}{6}$ he did $\frac{5}{6} - \frac{4}{6}$

$5\frac{2}{3} - 3\frac{2}{6} = 1\frac{4}{6} = 1\frac{2}{3}$

Anir and Alex are working out $3\frac{1}{2} - 2\frac{1}{4}$



Anir: First subtract 2 from 3, then subtract $\frac{1}{4}$ from $\frac{1}{2}$. That leaves $1\frac{1}{4}$.

Alex: Convert to an improper fraction first. $\frac{7}{2} - \frac{2}{4}$ then $\frac{14}{4} - \frac{2}{4} = \frac{12}{4} = 3$.

Whose method do you prefer?
 Explain your answer.

I prefer Anir's method because in my head it's quicker than Alex's method.

Here are some number cards.

$\frac{7}{12}$, $\frac{4}{3}$, $\frac{5}{24}$, $\frac{4}{6}$

a) Which two numbers have the smallest difference?
 b) Which two numbers have the greatest difference?

a) $4\frac{1}{2}$ and $4\frac{5}{6}$
 b) $2\frac{5}{6}$ and $4\frac{5}{6}$

A marathon is $26\frac{1}{2}$ miles.
 Jack has run $18\frac{1}{10}$ miles.
 Eva has run $19\frac{3}{5}$ miles.

a) How much further has Eva run than Jack?
 b) How much further does Eva need to run to complete the marathon?

a) $1\frac{1}{2}$ miles
 b) $6\frac{3}{5}$

Maths - Y6

Year 6 have been working their socks off this term with all of their final learning before they do their SATs. This has included exploring decimals, ratio and proportion and (the not-so-scary) algebra!

Solve equations

Solve the equations.

a) $5x + 1 = 31$ d) $9 = 2y + 8$

$x = 6$ ✓ $y = 0.5$ ✓

b) $3x - 3 = 9$ e) $10y - 2 = 46$

$x = 4$ ✓ $y = 4.8$ ✓

c) $4p - 11 = 3$ f) $4 + 3y = 28$

$p = 3.5$ ✓ $y = 8$ ✓

Nijah is solving the equation $x - 8 = 20$

$x - 8 = 20$
 $x = 20 - 8$
 $x = 12$

What mistake has Nijah made?

Nijah said that $x(20) - 8 = 20$ when $x = 4$. ✓

Which answer?

$3c - 4 = d$

When $c = 6$, what is the value of d ?

(a) $d = 32$
 (b) $d = 14$ Explain how you know.
 (c) $d = 5$

$0.3 + 5$ ✓

$4 \quad | \quad 14 \quad | \quad 0 \quad | \quad 0$

$12 - 8 = 20$

$3 \times 6 = 18 - 4 = 14$

$d = 14$ because $3x = 18 - 4 = 14$

Complete the part-whole models.

a) b)

Complete the number sentences.

a) $17.134 = 10 + 7 + 0.1 + 0.03 + 0.004$ ✓
 b) $94.077 = 90 + 4 + 0.07 + 0.007$ ✓
 c) $34.079 = 30 + 4 + 0.07 + 0.009$ ✓

Complete the number sentences.

$1.456 = 1 + 0.4 + 0.05 + 0.006$ ✓
 $1.456 = 1 + 0.3 + 0.15 + 0.006$ ✓
 $1.456 = 1 + 0.2 + 0.25 + 0.006$ ✓
 $1.456 = 1 + 0.45 + 0.006$ ✓

Write down the value of the 3 in the following numbers.

0.53 362.44 739.8 0.013 3,420.98

0.03 ✓ 300 ✓ 30 ✓ 0.003 ✓ 3000 ✓

I agree with tiny because the first one is 6 the second one is X2 and the third one is adding 8.

Here are the different options in a pizza shop.

Base	Topping
Thin	Cheese and tomato
Deep pan	Vegetarian feast
	Chicken
	Meat feast

Use both additive and multiplicative reasoning to explain why there are 8 possible combinations of base and topping.
 The restaurant introduces a new topping of tuna and sweetcorn.
 How many combinations are there now?
 How many combinations would there be with 4 base options and 17 topping options?
 Did you use additive or multiplicative relationships to work out each answer?

Each of these sequences can be completed using either addition or multiplication.

Do you agree with Tiny?
 Explain your answer.

Science

In science we have been comparing the life cycles of different living things such as plants as well as the many different classes of animals. Here are some examples of the life cycles we investigated:

MISCONCEPTION

Amphibians are **not** the same as reptiles

Amphibians have moist skin and no scales.

Reptiles have dry skin and scales.



1) Egg Development

Female birds have eggs that develop over time starting as a single cell and gradually forming a yolk, membrane and shell.

During this process, eggs may be fertilised via sexual reproduction. No matter whether an egg has been fertilised or not, it will still develop its shell and will be laid by the female bird.



2) Incubation

After carefully building a nest, eggs are laid by female birds in clusters ranging in number from just 1 (in larger birds such as condors) to as many as 17 (e.g. the grey parrot).

They are then incubated by one or both parents for a period of time until the embryos inside have developed into a chick which is ready to hatch.



How is this similar/different to how a new mammal is formed?

5) Adult

As birds develop and grow in strength and confidence, they will eventually leave their childhood nest and search for a mate of their own.

As an adult, they are able to reproduce and have chicks of their own.



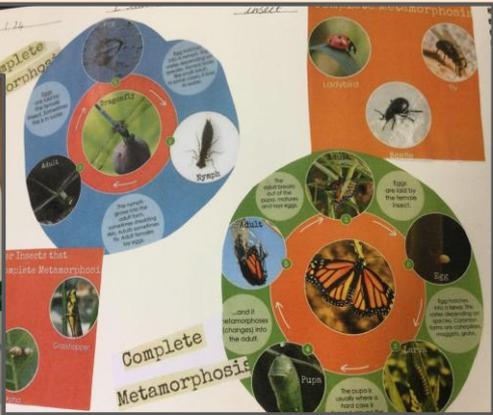
Lifecycle of a bird

4) Fledgling

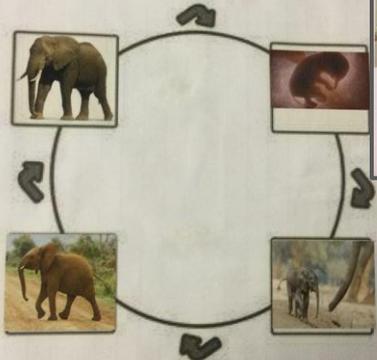
Chicks that have developed flying muscles are known as fledglings but will still be under the care of their parents.



Fledglings are fairly awkward flyers for short distances but will be able to hop about. The length of their wings will increase as they grow.

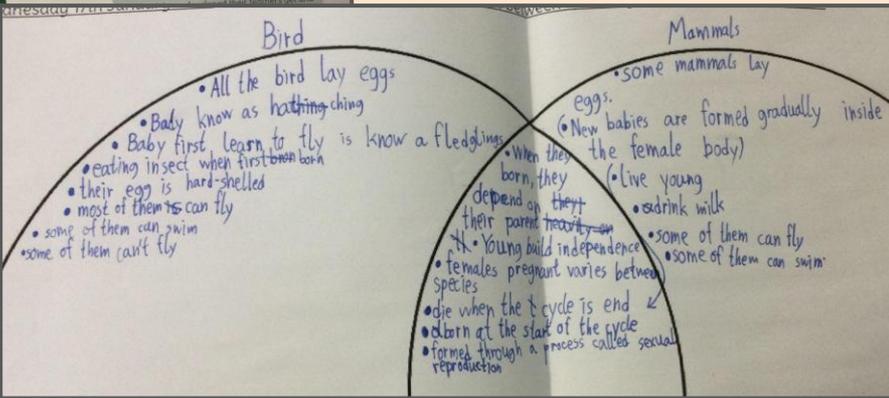


The adult elephant is able to restart the life process.



In its juvenile stage of growing it can be more independent.

The baby starts growing while being taught stuff.

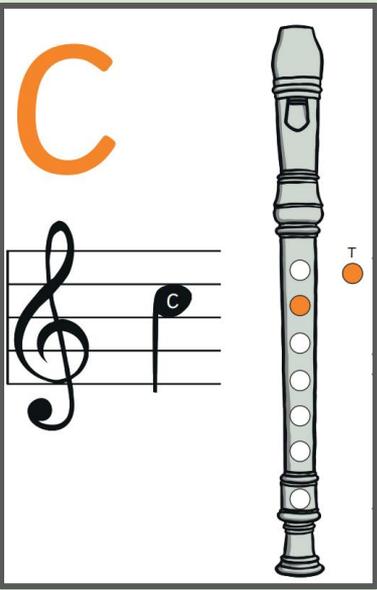


PE

This half term we learnt and practised the skills associated with Kurling. Over the weeks, we have improved our accuracy and even managed to 'kurl' whilst blindfolded. Snowy and Barn Owl classes finished the term with a bit of friendly inter-class competition.



Music



We have been we have been learning to play the recorder for the first time. We started by ensuring that we knew how to hold the instrument correctly, including the placement of fingers for different notes.

After learning to play four notes (C, B, A and G), we improvised our own melodies. This gave us the freedom to experiment with different sounds and to become more confident in performing in front of others.

Improvisation Challenge

Choose two rhythm patterns and improvise a tune using the notes **B, A, G** and **C**.

Remember!
Blow slowly and gently, and use your tongue to separate the notes.

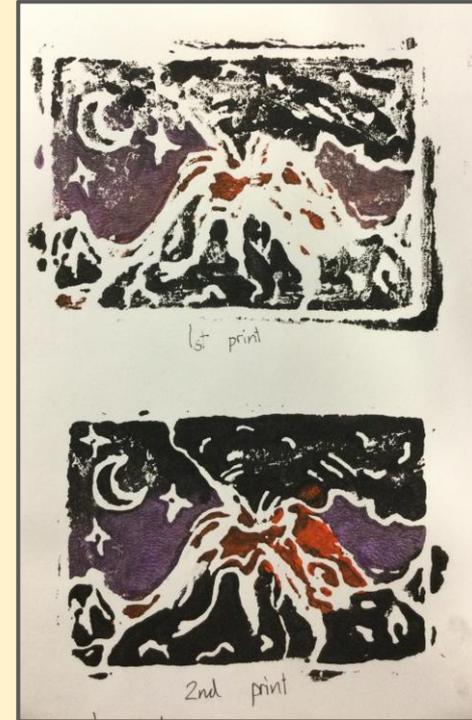
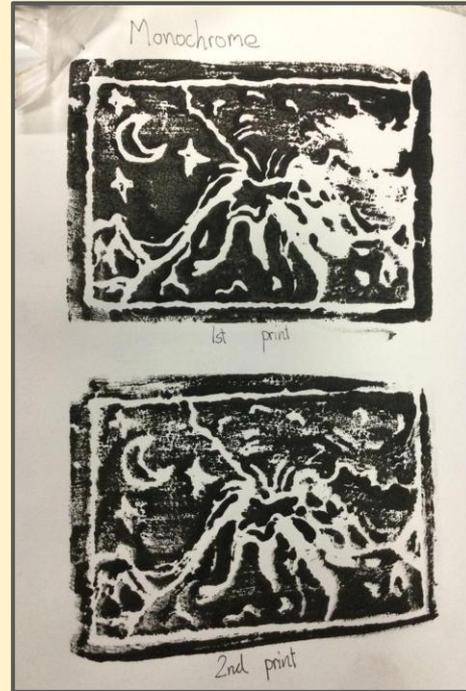
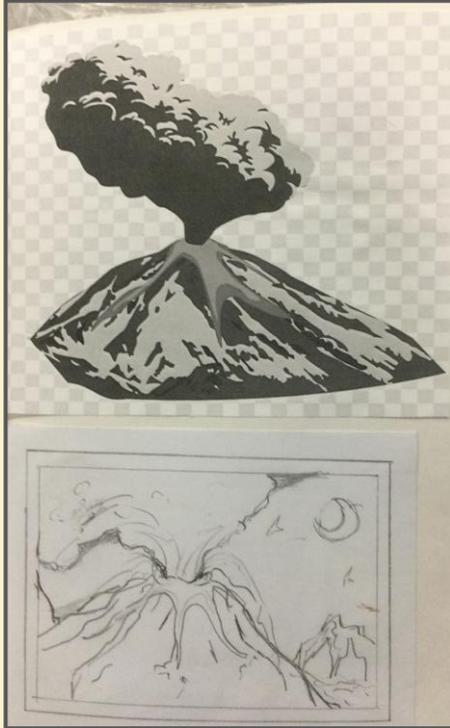
African Safari

Let's learn a tune which uses the notes **B, A, G** and **C**.

Demonstration Audio Track **Performance Audio Track**

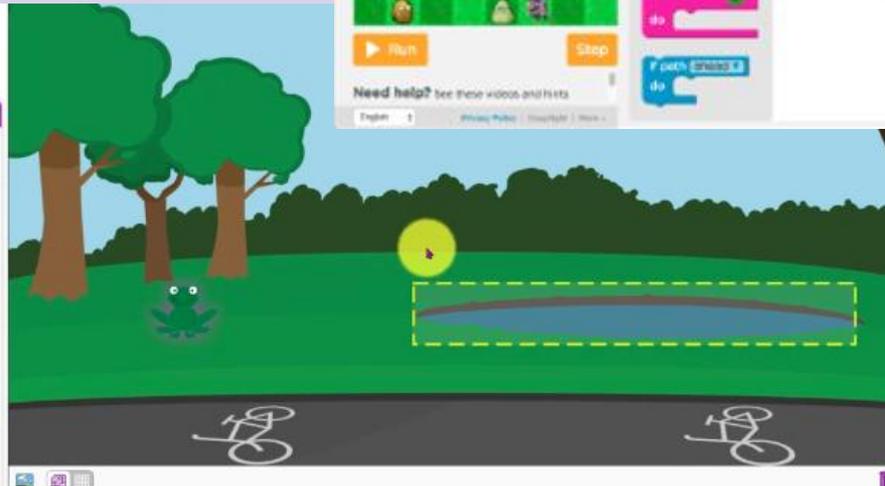
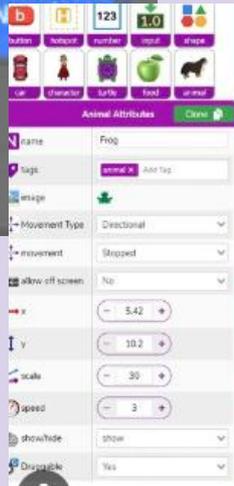
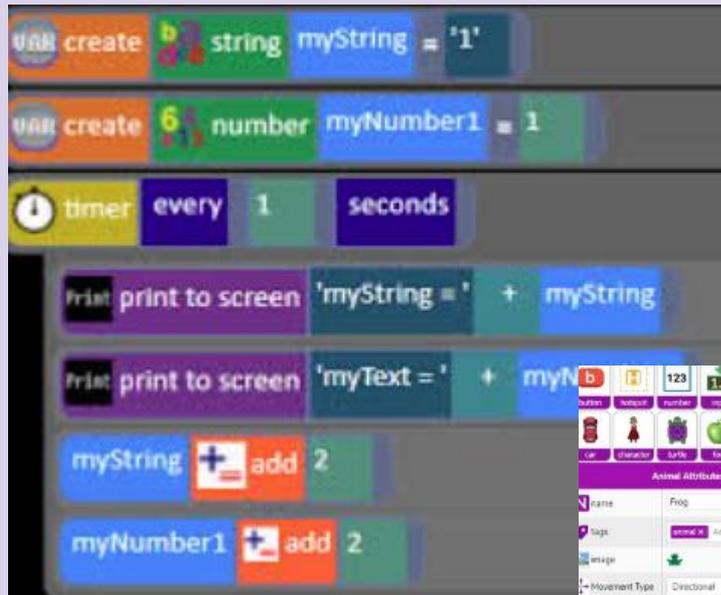
Art

We have been working hard to develop our printing skills this half term! We researched and designed monoblock printing plates inspired by our topic, 'Extreme Earth'. First, we printed in black and white and then we experimented with colour!



Computing

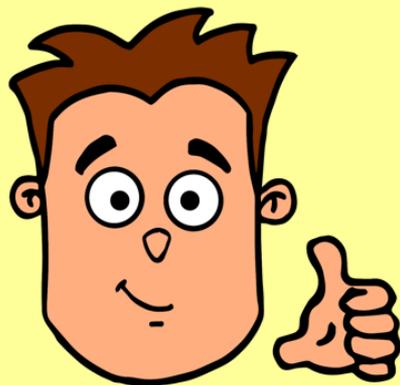
Coding has been our focus this half term in Y5/6. We have all had to show lots of perseverance and confidence as we have tackled tricky codes and completed many new challenges.



French

We have been getting in touch with the basics in French this year. We have developed our listening and speaking skills whilst learning how to introduce ourselves as well as learning classroom instructions.

Comment ça va?



Ça va bien!

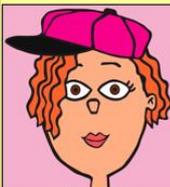
(I'm well!)

Guess who...

Tu t'appelles
_____?

Oui

Non



Claire



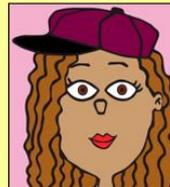
Emilie



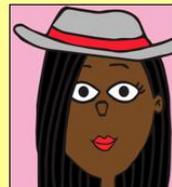
Agnès



Victoria



Elisa



Monique



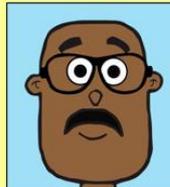
Rémy



Martin



Clément



Mathieu



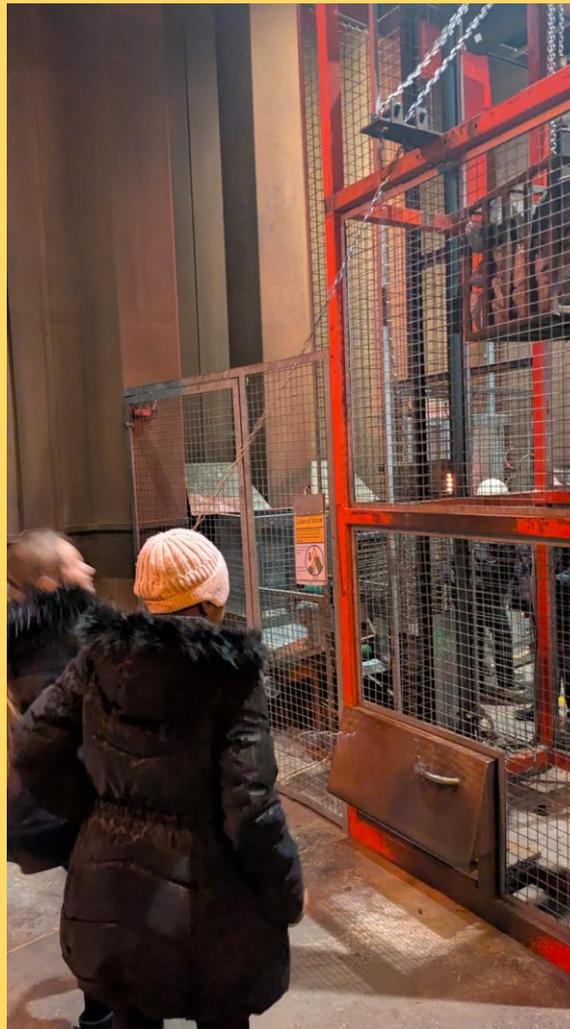
Joël



Pascal



Magna



We had a great day on our trip to Magna to end our topic.