

**SCIENCE**  
**Whole School Home Learning**  
**Posters 2020**  
**Our Diverse Planet**



# Foundation



Ladybirds

A ladybird

at 5

5,000

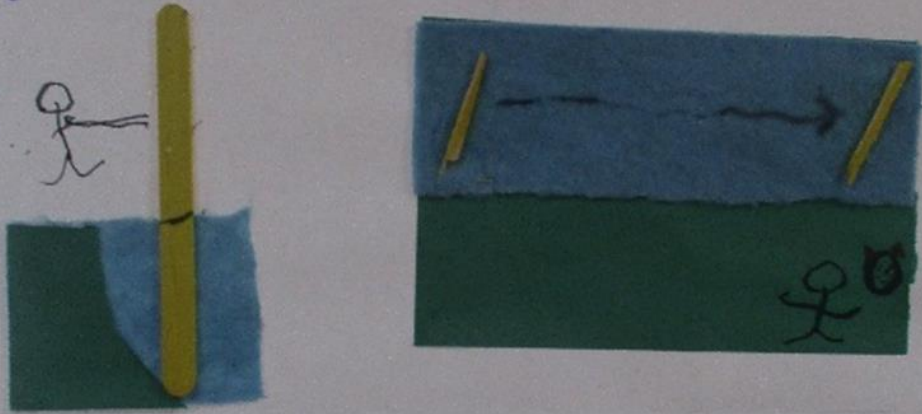
aphids



# Hypothesis

more water goes down the river after it rains

## Test



## results

before rain	shallow slow	after rain	deep fast
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## conclusion

we were right



Which creatures are living in my garden?

I found...

a snail

a worm

They both have no legs!

I tried all of the readings

a seed

17/03/2020

OUR DIVERSE PLANET

List of creatures:

ants  
worms  
snail  
spiders  
slugs  
woodlice  
earwig  
ladybird

Table of results:

Leaf	Worm
ant	Worm
spiders	slugs
woodlice	slugs
earwig	slugs
ladybird	slugs

Does it float or sink?

Float

Sink

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# CHANGES OVER TIME

AMBER STANI

changes observed when leaves / plants in Sun / Shade.  
1. Picking leaves observing why they are growing / not growing.

## Prediction

Things colour observation



Shaded  
Predict - Brown leaves.  
Observe - no growth.



Sun  
Predict - green leaves.  
Observe - green leaves grow!



Sun  
Shade

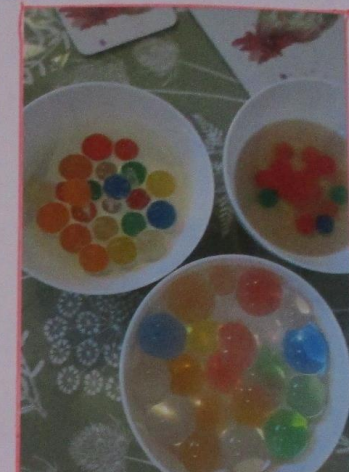
CONCLUSION

SUN = GREEN PLANTS

less sun / shade = no photosynthesis

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## CONNIE'S experiment



Vinegar

Ingredients  
- Water  
- Vinegar  
- Milk

Milk

thought vinegar would grow the biggest.

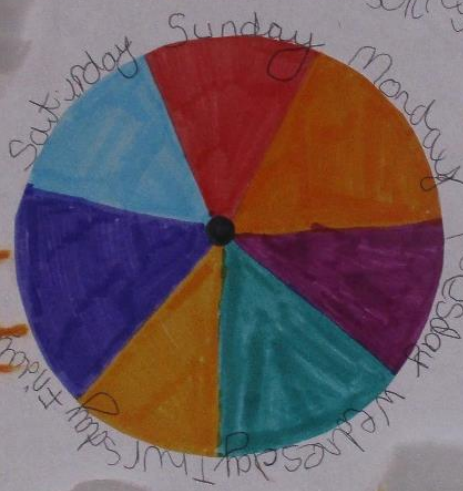
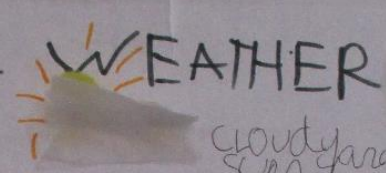
where grow the biggest

water

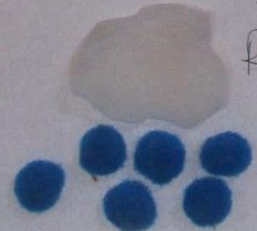


cloudy

# THE WEATHER



Sunny



Rainy



St Ormy



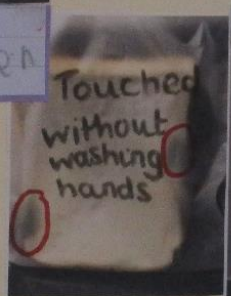
Rainbow

# Mould



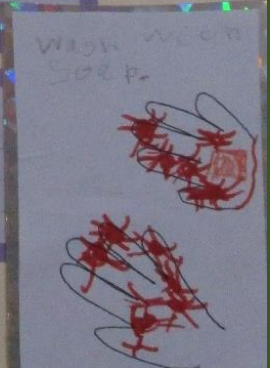
I thought the bread fresh out of the packet would go mouldy first.

one week later



The one I touched with dirty hands went mouldy first and had the most mould.

It went mouldy first because of the germs on my hands.



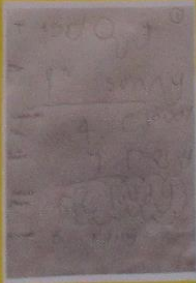
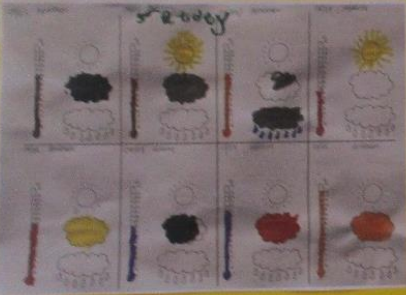
Belle Whitrod Foundation



# Our Diverse Planet



We started  
every day  
observed  
weather  
note on  
it was  
warmer in  
the  
afternoon  
than the  
mornings



# magnum libbato



SDHIB Science Protect SDHIB

day 1  
Feels hard Taste bitter

day 2  
Feels soft Taste sweet

day 3  
Feels a little hard slightly sweet

day 4  
Taste very sweet Feels soft

day 10  
Taste very sweet Feels very squishy

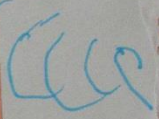
I observed a bean and for 10 days  
I recorded what I found

# Year One

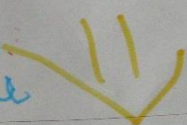


see the sound

by Govt 90%



sound waves



Bang

Flag  
Jump

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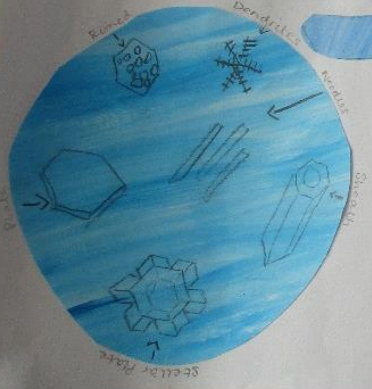


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Largest snowflake:  
15 inches across  
Bunche Brook



Different types of snowflake



How is snow made?  
When the clouds are REALLY cold, the water vapours freeze and form ice crystals. They join together to make snowflakes!

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• cress seeds  
• kitchen wool  
• Egg shell  
• Sun light  
• water

Cress is  
Source  
of Vitamins:  
K, C, A, B2 +  
B9

CRESS

• water every day

• put in sunlight

• Harvest

# WHY DO CLOUDS MOVE?



By: Ffion

## WHAT DID WE DO?

- From Mummy & Daddy's bed, we looked through the window in the ceiling at the clouds moving
- We timed the speed of the clouds and logged the different speeds on different days
- We searched on Google to find out the different types of clouds and why they moved

## HOW FAST DO THEY GO

- We timed how fast it would take to get from one side of the window to the other:
  - Day 1: 32 seconds
  - Day 2: 1:14
- We looked on Google to find out:
  - A: Between 30-40 MPH



## DIFFERENT TYPES



## Clouds come in different shapes

- Rabbit
- Dragon
- crocodile
- Tree
- robot head
- duck - dog
- Dinosaur

## WHY DO THEY MOVE

- Ffion's Guess: To make it light
- Answer: The wind blows them

# Minibeast's in the Garden



FLY

Does it have wings?

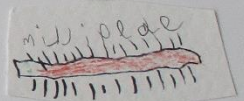


8 Legs

SPIDER

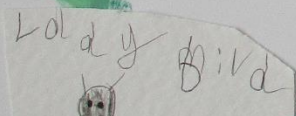
Does it have more than 8 legs?

More than 8 Legs



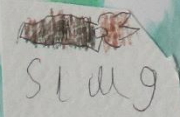
0 Legs

Does the minibeast have legs?



Lady Bird

6 Legs



SLUG



Snail



Ant



Worm

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Zachary Dries

# Guinea Pigs

by Phoebe Yeats

# WIGGLES



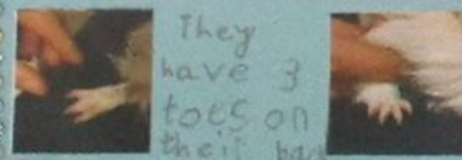
What do Guinea pigs do?

my guinea pigs lay in the sun. Georgia's Guinea pig likes to eat grass. They also hide in tunnels.

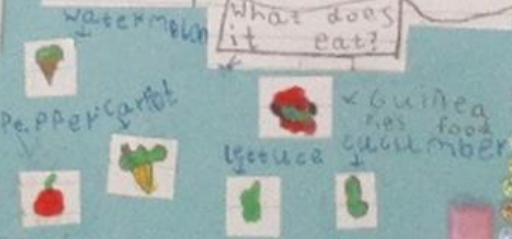
Guinea pigs are herbivores. They have live feet. They do not lay. They feed

Guinea pigs are herbivores.

What does it eat?



They have 3 toes on their back feet and 4 on the front.



# BINKY



# NACHO

Guinea pig



# Watching my Cress Grow

## Cress Plant Diary

I then added the seeds and water for it to grow.



I saw my cress sprout



I put the cotton wool in a pot. I then added water.



I will keep an eye on my cress and add some water every day.



my cress has fully grown. It is now ready to eat.



### Fruit Plant Growth Sequencing

Name: Armaan Chaudhary



Fill the plant pot with soil.



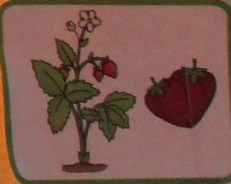
Plant the seeds into the soil.



Using a watering can, water the seeds.



The seeds begin to sprout and grow.




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# Year Two



Edward Bransfield was a British naval officer and explorer. He was born in 1795 in the town of Ballyvaughan, Ireland. He joined the Royal Navy in 1812 and served for 20 years. He was an able seaman and a good officer. He was appointed to the rank of Lieutenant in 1818 and to the rank of Captain in 1824. He was promoted to the rank of Major in 1831.

**ROUTE TAKEN BY BRANSFIELD**






On January 27th 1820 Bransfield sighted high mountains covered with snow. Such was the discovery of ANTARCTICA. Having charted a segment of the Trinity Peninsula he discovered various bays and islands and claimed the British share of the continent of Antarctica.

He returned to Chile and gave the report to Captain Currie who acknowledged the discovery to the Admiralty. The original chart was made by Bransfield in the Hydrographic Department in London. Bransfield died as a lieutenant in 1852.

Edward Bransfield's discovery is a big step in the history of the world. It is a big step in the history of the world. It is a big step in the history of the world.

WILLIAM BRIGGS  
(NAME OF EDWARD BRANSFIELD'S BOAT FOR HIS EXPEDITION)


Handwritten notes and drawings on a piece of paper. The word "ANIMALS" is written in large, colorful letters. There are small drawings of a house and a tree.

Handwritten notes on a green piece of paper. A large red ladybug cutout is placed on top of the paper. The text is partially obscured by the ladybug.

Handwritten notes on a yellow and orange piece of paper. There are several circular cutouts of images, including a volcano and a lava flow. The text is partially obscured by the cutouts.

How hot can a volcano get?  
Lava from a volcano may reach a path. If you used a glass in the temper...



Route Taken by Bramblefield

The project board includes a map of the United Kingdom with a red dotted line tracing a route. To the right is a black and white photograph of a man in a military uniform. Handwritten text at the top of the board reads: "Bramblefield was the first to be built in the area in 1850. It was built for the army and was used as a barracks for the 1st Battalion of the 1st Life Guards. The barracks were built in 1850 and were used until 1960. The barracks were built on the site of an old farm and were built on the site of an old farm." Below the map, there are three small test tubes in a blue holder containing colored liquids (blue, green, and red).

### How we get our seasons

By Ekart Sathian

The diagram shows four seasons with corresponding illustrations of trees and weather:

- Spring:** A tree with green leaves and a blue sky.
- Summer:** A tree with green leaves and a blue sky.
- Autumn:** A tree with yellow and orange leaves and a blue sky.
- Winter:** A tree with bare branches and a blue sky.

### 5 Animals Grows

The project board shows five animals with their respective habitats:

- Bear:** Labeled "Mammals" and "Forest".
- Rabbit:** Labeled "Mammals" and "Field".
- Crab:** Labeled "Arachnids" and "Water".
- Spider:** Labeled "Arachnids" and "Under a rock".
- Frog:** Labeled "Amphibians" and "Water".

### Save the Easter Egg!

A small project board with a drawing of an Easter egg.



**Ladybird**

**Eggs**  
The eggs usually hatch after a week of being laid.

**Larvae**  
The newly hatched larvae are small and look like worms. They eat plants and insects. They go through three stages of growth.

**Life Cycle**

**Fact**  
Ladybirds are a type of beetle.  
The scientific name of the seven spot ladybird is *Coccinella septempunctata*.

**Adult beetle**  
When the adult emerges from the pupa, they are pale. It takes a few hours for the ladybird wings to harden and the red and black markings to appear. Adults usually hibernates over winter and mate in spring.

**Pupa**  
The pupa remains like attached for 7-15 days. Inside the pupa, the ladybird larva is including itself into an adult beetle.

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## How we get four seasons

By Ekjat Sekhon

17/03/2020





## ④ FROG METAMORPHOSIS

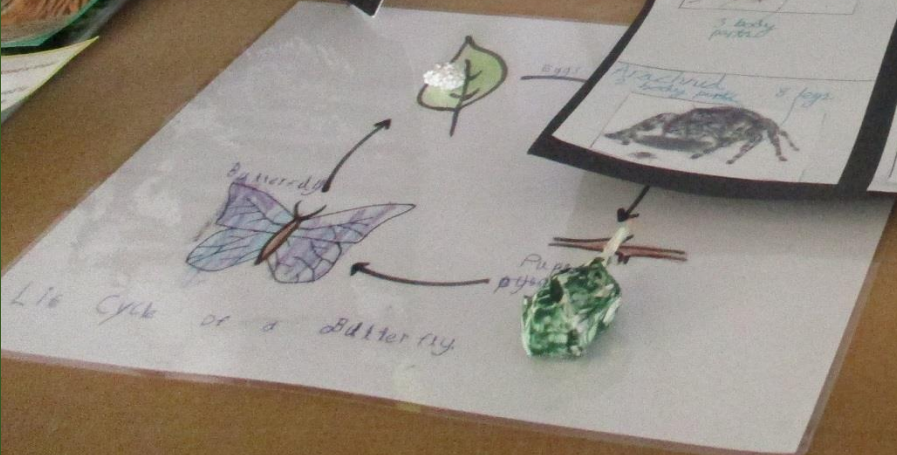
### THE LIFE CYCLE OF A FROG

**① FROG SPAWN**  
A female frog lays lots of eggs at one time in a pond. This floats on top of the water like a big jelly mass. This is known as frog spawn.

**② Tadpoles**  
After 3 weeks the eggs hatch into tadpoles. They are legless and can only swim underwater.

**③ FROGLETS**  
After 5 weeks they start to spend more time on land. They start to look more like frogs.

By 14 weeks a tiny frog jumps from the water. Its gills have changed into lungs so it can breathe on land.



### Creatures I can see from my garden

ladybug

snail

worm

### Weather

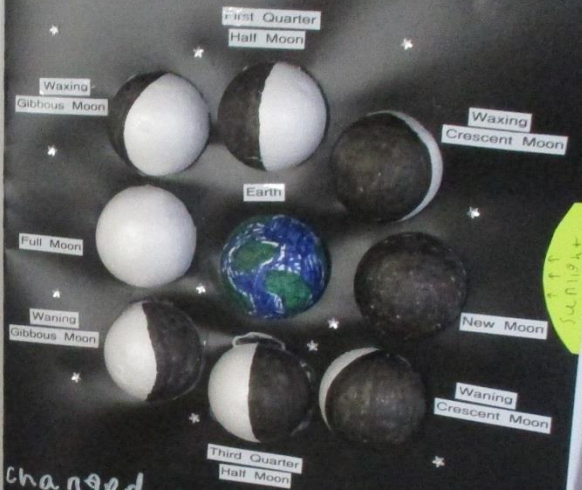
The drawing shows a frog on a cloud with rain. Below is a bar chart with the title 'Average Rainfall' and a scale from 0 to 100.



phases by Esther Bill year 2.

My research - There are 8 types of moon phases.

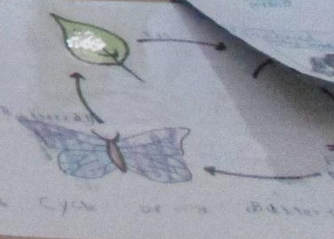
This is a moon phase model:



changed over the days as it's around the earth. the amount of sunlight



4 weeks



### How cross



**Wood Products Are Not Biodegradable**

Wood products are made from trees, which are a renewable resource. However, wood products are not biodegradable because they are treated with chemicals to prevent decay and insect damage. This means they will not break down naturally in the environment.



**Deforestation**

Deforestation is the permanent removal of trees from an area. This is often done to clear land for agriculture, logging, or urban development. Deforestation leads to a loss of biodiversity and contributes to climate change.

**Deforestation solutions**

Everyone can do their part to curb deforestation. We can buy certified wood products, so wherever possible, have our consumption of products that we plant a tree when possible.



# Year 3



### How I made my Volcano erupt

- 60 ml of water
- A teaspoon of bicarbonate of soda
- 60ml of vinegar
- A few drops of red food colouring
- A few drops of washing-up liquid
- A small square of tissue paper
- A long thin stick

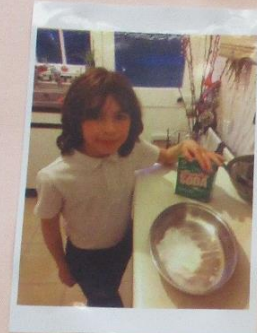


I used bicarbonate of soda and vinegar to make the FIZZ!

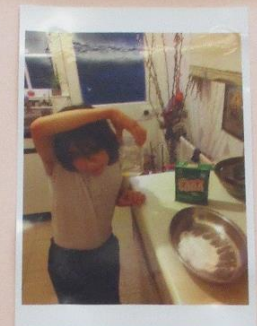
# FIZZ

# EXPERIMENT

By Finn A.S Year 3



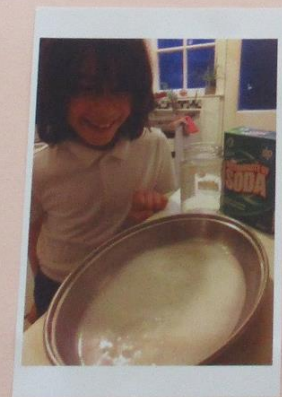
1 Put 3 tbsps of bicarbonate of soda into a pan



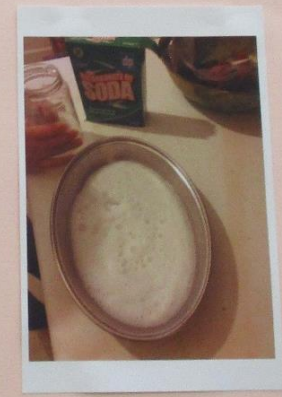
2 Put 100ml of vinegar into a jar



3 pour the vinegar into the pan with the soda



4 Can you see the Fizz?



5 conclusion: Bicarbonate of soda and vinegar mixed together creates a FIZZ!

# FIZZ!





# ALL ABOUT MY EXPERIMENT

## WHAT I DID

I added Bon Bons, Mint Mentos and Fruit Mentos, Parma Violets, Fizzers and Love hearts. I added these to first coca cola, then sprite and finally Diet coke. We wanted to find out what happens to the sweets when we add them to different drinks after 30 seconds and 1 minute.

## INGREDIENTS

- The ingredients were...
- Sweets
    - Mint Mentos
    - Fruit Mentos
    - Bon Bons
    - Fizzers
    - Parma violets
    - Love hearts
  - Drinks
    - Sprite
    - Diet coke
    - coca cola



Love heart

## MY RESULTS



Grace Towns  
Yr 3



	BON BON	FIZZER	PARMA VIOLET	LOVE HEART	FRUIT MENTO	MINT MENTO
SPRITE	• Fizzed • Got smaller • Went white	• Fizzed • Got smaller	• Fizzed a lot!	• Fizzed a little • Got smaller	• Fizzed the most • changed colour to light pink	• Fizzed a lot • Got smaller • Faded
DIET COKE	• Fizzed a lot • Lost colour	• No Fizz • Just sank • Same colour	• No Fizz • Floated • Same colour	• NOTHING	• Fizzed • lost all colour	• Fizzed with lots of bubbles • Faded
COKE	• huge bubble • Lost colour • got smaller	• Little Fizz • sank	• No Fizz • float	• Fizzed	• lots of Fizz	• Fizzed a lot

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Which liquid will clean pennies the best?

Eddie's Prediction  
I predict coke will clean the best.

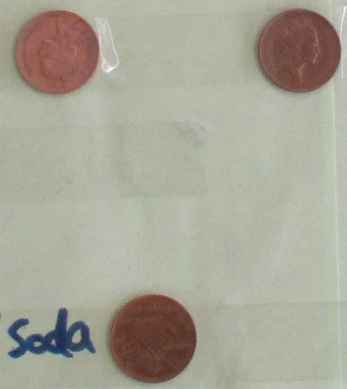
I predict lemon + salt will clean the worst because there is no fizz.

## Results

- 1 Lemon & Salt
- 2 Coke
- 3 Vinegar + Bicarbonate of Soda

# Penny Cleaning

Pennies get tarnished not just dirty. This is oxygen mixing with the copper and interacting to form copper oxide. Looks like this



Pennies are made of copper.

- Coke
- Vinegar & Bicarbonate of Soda
- Lemon + salt
- Glass jars
- old pennies

## Eddie's Conclusion

The lemon + salt worked best because the acid weakened the bond between the copper and oxygen atoms. The salt speeds this up.

The coke cleared quite good because it contains acid too. We discovered acid is needed to remove the copper oxide and the bubbles added by salt and coke speed it up.

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# How fruits change over time



Objective Day 1

Time

24 hours later

Lemon salt - The lemon has dissolved size since we first done it.

Lemon baking powder - It has dissolved since we first put them in.

Lemon and vinegar - It has taken out all of the lemon juice out.

Lemon sugar - The sugar has dissolved.

Strawberry salt - It's made fluff round the strawberry.

Strawberry baking powder - It has dissolved size since we first done it.

Strawberry vinegar - The vinegar has taken all the colour of the strawberry.

Strawberry Sugar - The sugar has made it shrink.



Day 2

Observations

4 days later

Lemon salt - The skin has gone translucent.

Lemon baking powder - The liquid has turned yellow like wee!

Lemon and vinegar - The smell has got stronger and the colour of the lemon has changed.

Lemon sugar - The lemon has gone off because it has mould on it.

Strawberry salt - The strawberry has gone mouldy in the past few days.

Strawberry baking powder - The strawberries colour and seeds have gone really, really dark.

Strawberry vinegar - The strawberries colour has gone really translucent. The vinegar has turned red.

Strawberry Sugar - The strawberry has gone off and turned green and mouldy.



Day 4

8 days later

Strawberry salt - The salt has risen up onto the strawberry.

Strawberry baking powder - The strawberry has gone off.

Strawberry vinegar - The strawberry is white at the top and red at the bottom. The colour has got drained from the strawberry.

Strawberry sugar - The strawberry has gone really fluffy.

Lemon salt - The salt has disappeared. The lemon hasn't changed.

Lemon baking powder - The lemon has gone wrinkly.

Lemon vinegar - The lemon is breaking apart.

Lemon sugar - The lemon has gone green.

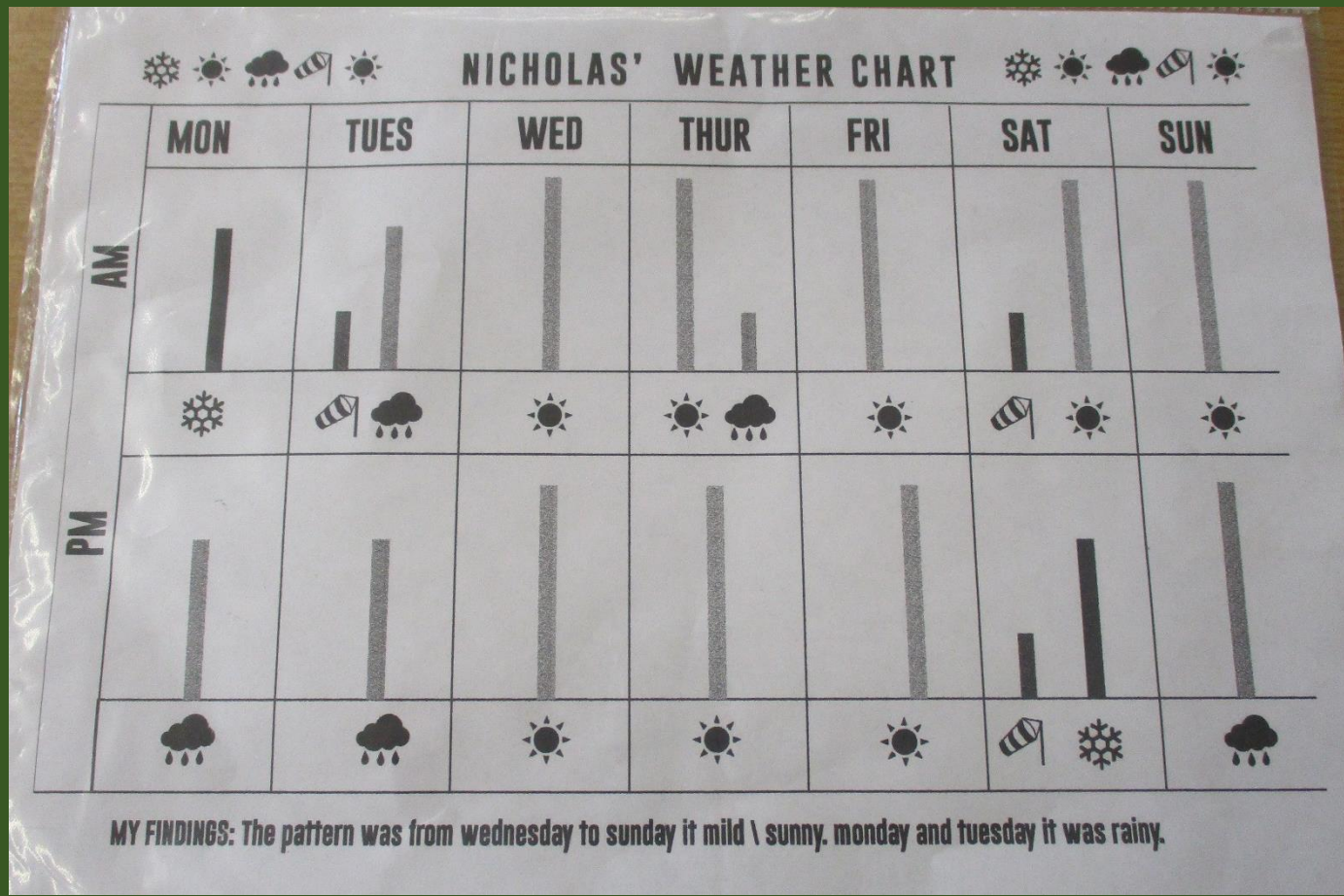


Day 8

Evidence

Objective : To see how different fruits change when exposed to different mixtures. We started our experiment by getting 4 pieces of lemon and 4 pieces of strawberry. We mixed each one with 4 different ingredients and observed the reactions:

- Salt
- Vinegar
- Baking powder
- Cane Sugar/Water





**Birds**

Robin

WOW

**Mammals**

Mouse

SOX

cat

creates in garden by Mark

**Insects**

slug

bumble bee

caterpillar

# ALL ABOUT MY EXPERIMENT

**WHAT I DID**

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**INGREDIENTS**

The ingredients were...

- Sweets
- Mint mentos
- Fruit Mentos
- Bon Bons
- Fizzers
- Parma violets
- Love hearts
- Drinks
- Sprite
- Diet coke
- Coca cola



Grace Towns Yr 3



	BON BON	FIZZER	PARMA VIOLET	LOVE HEART	FRUIT MENTO	MINT MENTO
SPRITE	• Fizzed a lot • got smaller • went white	• Fizzed a lot • got smaller	• Fizzed a lot	• Fizzed a lot • changed colour to pink	• Fizzed a lot • got smaller	• Fizzed a lot • got smaller
DIET COKE	• Fizzed a lot • lost colour	• No Fizz • Just sank • same colour	• No Fizz • floated • same colour	• NOTE: Fizzed a lot • lost colour	• Fizzed a lot • got smaller • faded	• Fizzed a lot • got smaller • faded
COKE	• huge bubble • lost colour • got smaller	• Little Fizz • sank	• No Fizz • float	• Fizzed a lot • lost colour	• Fizzed a lot • got smaller • faded	• Fizzed a lot • got smaller • faded

**WHAT FOOD DO THE SQUIRRELS PREFER IN OUR GARDEN?**

TEST 1

TEST 2

TEST 3 - THE FINAL

Winner: seeds

Winner: almonds

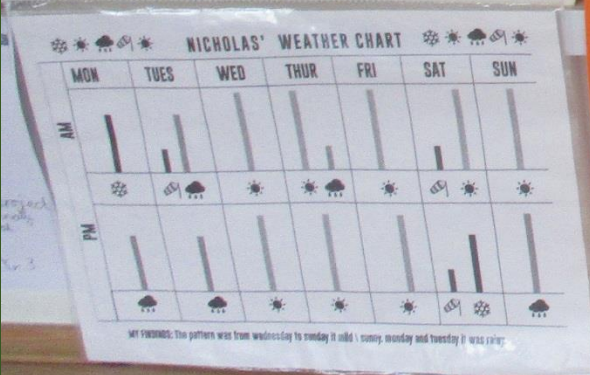
Winner: almonds

**RESULT**

In our experiment, we found out that squirrels like almonds. I thought they loved seeds.

**CONCLUSION**

Squirrels normally get up the hazelnuts and almonds so when they have them they think of it as a reward. Why they ate all the almonds in one test.



# Animals

## Vertebrates

## Invertebrates

### Cold-blooded

### Warm-blooded

### With legs

### Without legs

Fish

Amphibians

Mammals

Birds

5-legs

More than 6-legs



17/03/2020

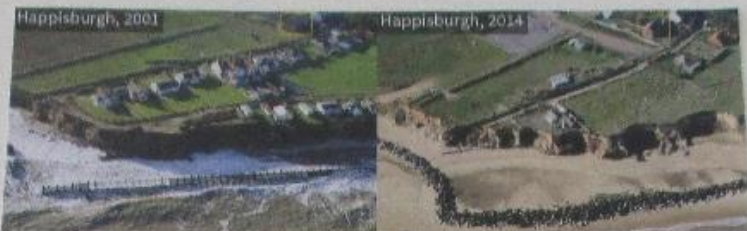
The weather

The



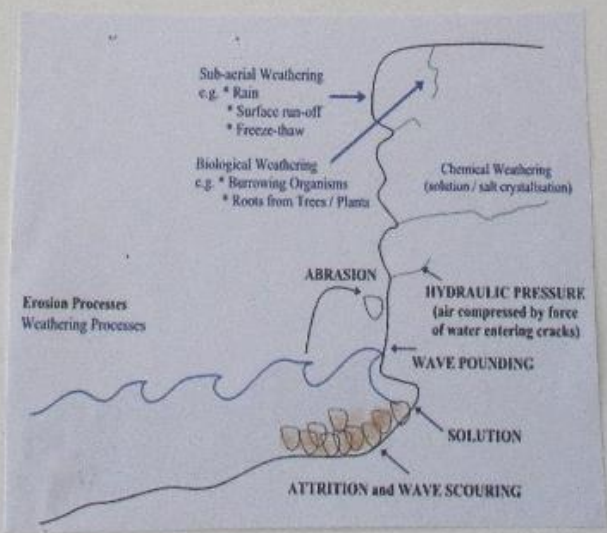
ALSA

# COASTAL EROSION



The reasons for coastal Erosion are:

1. HYDRAULIC ACTION - created by forces of water
2. ABRASION - created by hurled rocks at the coastline
3. ATTRITION - rocks crash and break each other
4. AIR COMPRESSION - where air gets trapped inside the rock
5. SOLUTION - acid in the water dissolves the rock



Noah Hunter

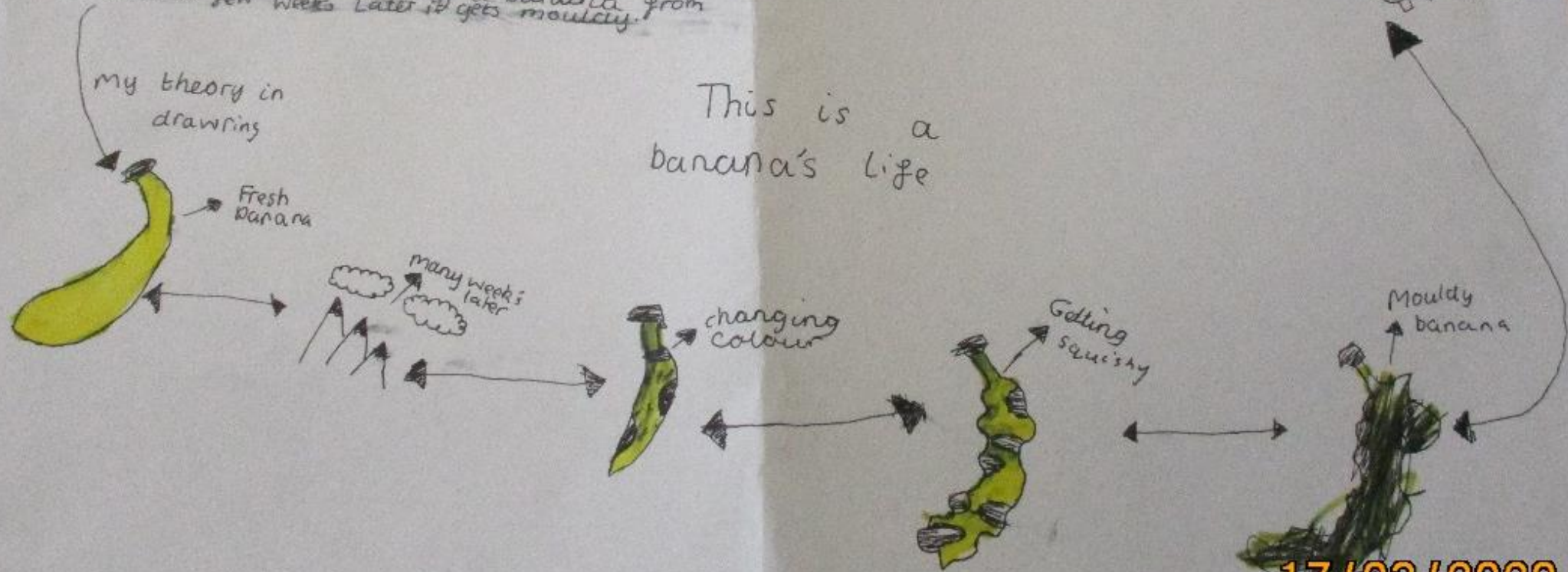
# Making Mould!!

## Information

As you notice some food's get mouldy. When food gets mouldy they get all mushy and soft. With some food like banana's they change colour. Sometimes if you were a scientist you would discover and learn about mould. Most scientists would do experiments on mould. Scientists have found out that white and green mould is called penicillium. Did you know that mould can grow! Also did you know that mould is a type of Fungus!! Mould also loves to grow in the summer.

## Theory

One of my theory's is that I buy a banana from the shops and a few weeks later it gets mouldy.



By Mustafa Anwar  
Yr3

This is a  
banana's life

17/03/2020

# 5 Groups of Animals

Warm-blooded



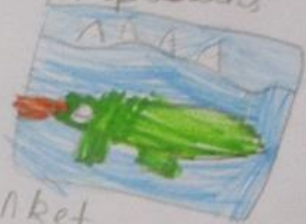
blanket

Mammals



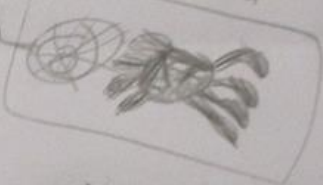
meat

Amphibians



catch and

Web



Arthropods



crustal

17/03/20

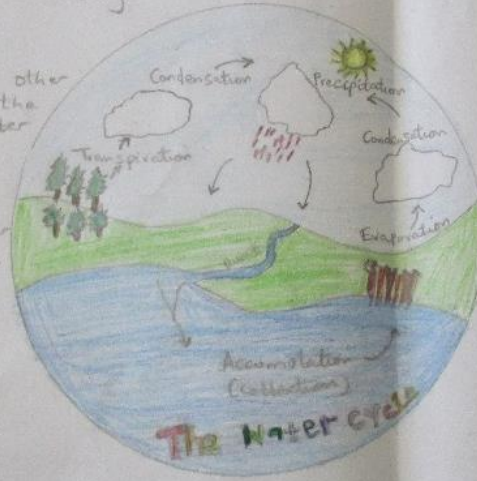
# The Water cycle

FRUITS, VEGETABLES, AND FLOWERS  
rain makes plants grow, giving us  
food to eat. Most plants also  
produce flowers for our enjoyment.

BEAUTY AND ENJOYMENT  
Rivers, Lakes and Waterfalls  
beautify the earth and bring  
us enjoyment.

OTHER BENEFITS  
The water cycle has other  
benefits. For instance, the  
evaporation of sea water  
produces salt.

DAILY USE  
We drink water and  
use it to make other  
drinks such as lemonade,  
coffee and tea. We  
also use water for  
cooking, cleaning and  
bathing.



Water in liquid form exists on earth because our planet is located at the perfect distance from the sun. If it were just a little closer, all the water would boil off, leaving a hot, lifeless rock. If the earth were just a little farther from the sun, all the water would freeze, turning the earth into a giant ball of ice. Because the earth is placed at the ideal location, the earth's water cycle can sustain life. The sun heats water in the ocean and on the earth's surface and evaporates the water to form clouds. Each year, the sun evaporates nearly 2000 cubic miles of water. This water stays in the atmosphere for about ten days before falling as rain or snow. The water eventually makes its way back to the ocean or other bodies of water, and the cycle is repeated.

# WHAT FOOD DO THE SQUIRRELS PREFER IN OUR GARDEN?

BY CERYS  
PUGH (Y3)

## TEST 1



bread vs seeds

Winner: seeds



## TEST 2



carrot vs almonds

Winner: almonds



## TEST 3 - THE FINAL



seeds vs almonds

Winner: almonds



## RESULT

In our experiment, we found out that squirrels love almonds, which was surprising because I thought they loved seeds.



## CONCLUSION

Squirrels can't normally find nuts like hazelnuts and almonds so when they have them they think of it as a treat. That's why they ate all of the almonds in our test.

17/03/2020

# Observing over time

## salt and water

### Day 1



I have put salt, water and string in a bowl on my radiator so the water evaporates.



Day 2 Some water evaporated

### Day 3

Today all of the water is gone and the salt has turned into amazing crystals.



I enjoyed this project because I finally got to see real crystals.

by: Jared in Yr 3

## School Science project

Is a candle's big does that mean it burn brighter and does the size the size affect the smell?

I chose 6 candles from the size biggest to smallest and with my daddy we lit each in turn and we measured the brightness with a light meter and then we blew the candles out and we rated the smell out of 10.

some of the candles had more than one wick we made it fair by only lighting one wick. We also conducted the experiment in a very dark room.

candle 1: (Largest)

Make: Hotel collection #3

Smell: pomegranate #12

light level (lux) = 26

smell rating: 4/10

candle 2: (Largest)

Make: unknown #1

Smell: peony

light level (lux) = 28

smell rating: 6/10

candle 3: (medium)

Make: unknown

Smell: unknown

light level (lux) = 16

smell rating = 4/10

#4

conclusion: I worked out that if the candle is bigger it does not affect the brightness. As to the smell the size makes no difference that the size makes no difference if it goes down to 15 you like

candle 4: (Third smallest)

Make: Miller Harris

Smell: terre de bois (it means wood and earth)

light level (lux) = 3

smell rating = 7/10

#5

candle 5: Second smallest

Make: Essence of Harris

Smell: sandal wood and wild nettle

light level (lux) = 2

Smell rating = 9/10

#6

candle 6: (Smallest)

Make: The white company

light level (lux) = 17

smell rating = 2/10

#3

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# What is happening to our Rainforests? Research



Every year an area of rainforest the size of New Jersey is cut down and destroyed. The plants and animals that used to live in these forests either die or must find a new forest to call their home. Why are rainforests being destroyed?

**Humans are the main cause of rainforest destruction.**

Deforestation is the permanent removal of trees to make room for something besides forest. This can include clearing the land for agriculture or grazing, or using the timber for fuel, construction or manufacturing.



## How Forests Are Cut Down

### Slash and Burn

In some countries, especially in tropical areas and in Southeast Asia, farmers cut down large trees and then set fire to areas of a forest to kill off all the animals and plants living there. The ash from the fire helps to fertilize the land, and crops can be grown for a few years before the land becomes useless. The farmers then leave the area and move to a new place. This traditional method of deforestation is called slash and burn.

Forest plants and animals may return to the land, but it takes many years. Some places never recover.

### Logging

Large areas of forest are cut down by a process called logging. Machines or humans fell hundreds, or sometimes thousands, of trees and remove them for use as lumber.



## Reasons for Deforestation

Trees are cut down so their wood can be burned or used to make things, such as buildings, furniture, or paper.

Large areas of trees are removed so that the land can be used to grow crops or to provide places where farm animals can graze.

In tropical areas large areas of forest are cleared in order to plant such crops as coffee, rubber trees, or palm trees. These crops are grown on large farms called plantations. The people who grow them make a great deal of money selling the coffee beans, sap from the rubber trees, and oil from the palm trees.

Palm oil is used widely in processed food, cosmetics, and soap. Palm oil is the cheapest type of vegetable oil. Unfortunately, the forests that are being destroyed for palm oil production are home to many endangered species, including orangutans, pygmy elephants, Sumatran tigers, and Javan and Sumatran rhinos.

Deforestation also takes place when people want to clear an area to build new settlements.

## Deforestation solutions

If people adopted sustainable farming practices or employed new farming technologies and crops, the need for more land might be diminished. Forests can also be restored, through replanting trees in cleared areas or simply allowing the forest ecosystem to regenerate over time.

## Everyone can do their part to curb deforestation.

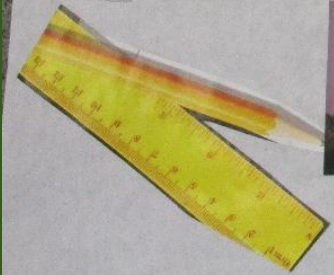
We can buy certified wood products, go paperless whenever possible, limit our consumption of products that use palm oil and plant a tree when possible.



17/03/2020

Observed the weather over seven days.  
I recorded the temperature, rainfall, wind levels and cloud cover. These are my results.

	Temp	Rain	wind	cloud cover
saturday	6°	0mm	medium	Full
Sunday	4°	8mm	heavy	Full
monday	5°	12mm	heavy	Patchy
Tuesday	11°	0mm	medium	Patchy
wednesday	11°	0mm	Light	Full
thursday	9°	2mm	Light	Patchy
Friday	10°	1mm	medium	Full



17/03/2020

### Insects



6 legs



3 body parts

Arachnid  
2 body parts 8 legs



### Water birds



## Creatures I can see from my garden

### Birds Jess Hyde V2



feathers



tail feathers



beak

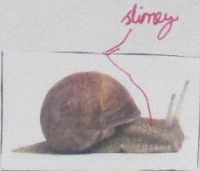


claws



breast

### Crustacean



slimy



no legs

hard shell

17/03/2020

# Volcanoes

**What shape is a volcano?**  
Volcanoes can be a variety of shapes. These geographical wonders come in various shapes and sizes, but there are two main types - composite volcanoes, which are cone-shaped with steep slopes, and shield volcanoes, which are wide with gentle slopes.

**What is a volcano?**  
A volcano is an opening in the Earth's surface. Usually found in a mountain, the opening allows gas, hot magma and ash to escape from beneath the Earth's crust.

**Where are volcanoes found?**  
Volcanoes are often found at meeting points of "tectonic plates". These plates are pieces of the Earth's surface that fit together just like a jigsaw puzzle.



**Can people live near a volcano?**  
Approximately 350 million people live within "danger range" of an active volcano. That means that around one in 20 people live in an area at risk of volcanic activity.

**How hot can a volcano get?**  
Lava from a volcano can reach 1,250°C! Lava is so hot it can burn everything in its path. If you used a glass thermometer to take the temperature it would melt!

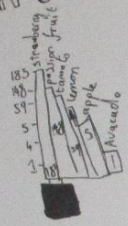


17/03/2020

# Year 4



# Which Fruit Has The MOST Seeds?

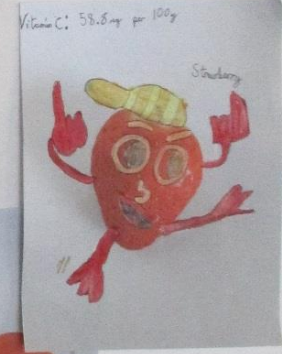
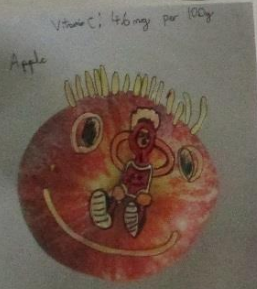


First I had to take out the seeds one by one.

Then I counted each seed of the fruit.

Finally I put the numbers in tables.

*[Faint, illegible handwritten notes]*



# SEED GERMINATION

By Max Harris



### What I need

- Paper towel
- Water
- Sunflower, Pea and Broad bean seeds
- pots

### Which seed grows the FASTEST?

#### Day 1

- **Sunflower seed:** A root started to appear.
- **Pea seed:** Nothing changed.
- **Broad bean seed:** The shell has started to crack.



Day 1 - Sunflower



Day 1 - Pea



Day 1 - Broad bean



Day 7 - Sunflower



Day 7 - Pea



Day 7 - Broad bean

#### Day 7

- **Sunflower seed:** Roots have formed and a shoot with a green leaf has appeared.
- **Pea seed:** root hairs and a thick shoot is coming up to the surface.
- **Broad bean seed:** A thick shoot is coming out of the side of its shell.

#### Day 14

- **Sunflower seed:** There are now 2 leaves on the shoot but the shoot hasn't reached the top of the pot.
- **Pea seed:** The shoot has now got 6 leaves and more green shoots sticking up! It has grown 8cms above the pot!
- **Broad bean seed:** There are 2 leaves on the shoot and it is 2cms above the pot. There are lots of roots coming down and one is poking out of the bottom of the pot!



Day 14 - Sunflower



Day 14 - Pea



Day 14 - Broad bean

### Conclusion

I thought that the sunflower seed was going to grow the fastest because a root started to form on Day 1. But by Day 14 the pea shoot started growing really quickly and became the tallest! However one factor might be that the paper towels may have been blocking the smallest seed from growing.

# BREAD MOULD EXPERIMENT

## Introduction!

My experiment will show how clean a surface is and what bacteria is secretly lurking on them!

With a lot of focus on hygiene, I am hoping that your eyes will be opened and just because it looks clean, doesn't mean it is 😊

### Equipment:

Loaf of white bread, plastic bags, labels, marker

### Method:

- 1) Write surface names on labels
- 2) Rub slightly damp bread on the chosen surface
- 3) Place bread slice into plastic bag and seal
- 4) Take one bread piece and seal (test sample)
- 5) Leave in a warm place
- 6) Check daily for growth

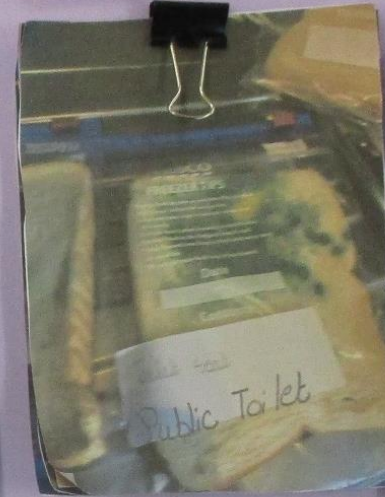
### SURFACES:

- Public toilet
- Lounge TV remote
- Set of keys
- Outside door knob
- Home stair banister
- Kitchen taps
- Mum's phone
- Jai's XBOX controller
- Unwashed hands
- Hands washed with soap
- Hands washed by hand sanitiser
- Test bread sample

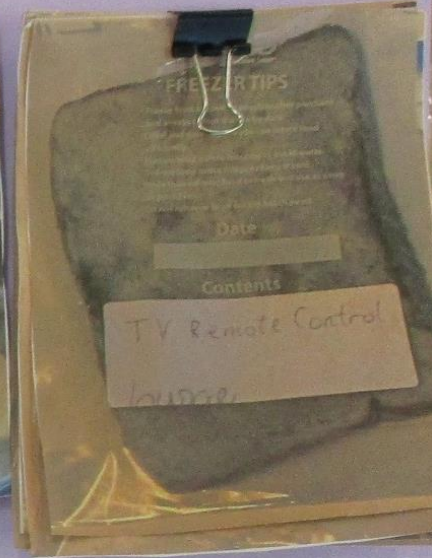
## WEEK 1



## WEEK 2



## WEEK 3



### Findings:

#### Week 1:

There were no obvious signs of bacteria on any of the slices of bread, except a very small patch of growth on the public toilet sample

#### Week 2:

The public toilet sample had grown and multiplied to around half the size of the bread, a very dark green colour

The outside door knob had a faded green bacterium over one third of the breads area

My mums phone had a pale-yellow splotch surrounding a single, 1cm wide green/grey growth

Finally, the lounge remote had slight discolouring all over

All other samples remain as they were

#### Week three:

All the above continue to grow and multiply

The bannister grew a small, dark green spot and the XBOX controller grew a tiny spec

**MOST INTERESTINGLY** unwashed hands stayed spotless as did hands washed with soap.

I used my mum's hands and she always uses soap not antibacterial gel.

**SHOCK FACT** - The sample with hands washed with hand sanitiser had as much growth as the outside door knob.

The sample bread and kitchen taps remained perfect

### LESSONS LEARNT

Simple soap cleans best! Hand sanitiser is not as effective as soap when it comes to fighting germs

Don't forget to clean everyday items such remote controls, keys and mobiles phones! They have some hidden germs the naked eye cannot see

Public toilets are a disgrace! Please wash your hands extra when using these!

### TRY IT AT HOME!

If you want to see what is going on your surfaces, follow the instruction above and

**BE READY FOR SOME SURPRISES!!**

**STAY CLEAN, STAY SAFE** 😊

Big Sa Y 4

# The Moon

Our moon has a gravitation pull on the Earth that creates a bulge. This bulge moves around as the Earth rotates, causing the low and high tides of the oceans

The Moon was likely formed after a Mars-sized body collided with Earth

Day: About 27 Earth days

Minimum temperature: -387 degrees Fahrenheit  
Maximum temperature: 253 degrees Fahrenheit

Distance from the Earth: About 239,000 miles



The term "the dark side of the Moon" relates to the fact that even though both sides of the moon get the similar sunlight, the moon is tidally-locked so that only one of its side face the Earth

That means 30 Earth-sized planets could fit in between Earth and the Moon.

The moon has 1/6<sup>th</sup> of the gravity that we have on Earth

The moon is actually drifting away at around 3.8 cm per year. Scientists believe that in 50 billion years it may be far enough from the Earth that it will take the moon 47 days instead of the current 27.3 days to orbit the Earth.

At the time of its formation, the Moon sat much closer to the Earth - a mere 14,000 miles away, compared with the 239,000 miles between the Earth and the Moon today.

Without the Moon, the Earth could slow down enough to become unstable, but this would take billions of years and it may never happen at all.

On early Earth, when the Moon was newly formed, days were five hours long, but with the Moon's braking effect operating on the Earth for the last 4.5ba years, days have slowed down to the 24 hours that we are familiar with now, and they will continue to slow down in the future.

If the Earth became unstable, then parts of the world could experience much greater temperature swings than we are used to through any given year, with freezing Arctic temperatures in winter followed by blazing hot temperatures in summer.

As humans we have the ability to adapt to our local surroundings to meet our needs. If humans are still around when and if it happens it is quite likely we would survive these massive changes with air conditioning in the summer and a lot of heating in winter.

Unfortunately most animals are not so adaptable and if these changes happened rapidly due to an unstable planetary wobble, then most animals would not be able to evolve quickly enough to hibernate or migrate out of harm's way.

Earth's only natural satellite is simply called "the Moon" because people didn't know other moons existed until Galileo Galilei discovered four moons orbiting Jupiter in 1610

BY DYLAN



# SPEED OF GROWTH RESEARCH?

to courgette poppies cress

Seeds



Day 1

Day 2



Day 5



Day 6



Day 8



Day 11



courgette poppies cress

# Comparing Cats

Zoe

- She is always second to eat her food
- And Zoe waits for Dexter to finish
- She eats dry and jelly

food

Dexter

- He always gets the food first (Top Dog)
- Dexter waits and "meow's" for food
- He prefers the jelly

- Is not fussed about cat nip
- She likes to use feather toys
- Zoe doesn't move when playing
- Just sit on bottom moving arms

entertainment

- When near cat nip he goes bonkers
- He likes any toy as long as it's fun
- Has so much fun with toys (very playful)
- Dexter runs up and down the walls

Zoe

- Sometimes sleeps on chair and sofa
- Likes stuff against her back likes to feel safe
- Rests on a bed and her habit is sitting on paper

sleep

Dexter

- Sleeps on Mummy's bed or any bed
- Likes to hide a lot near curtains
- Rests on window sill because comfy

Zoe

- Rolls over to her tummy to show she loves you
- Because she doesn't really like showing people
- And rubs you

love

Dexter

- Rubs against you're leg
- And licks anyone's hand or nibble
- He also brings dead rats in to show love



by Harriet  
year 4



These are the days of my crystal. This crystal grew as the water evaporated.

# CRYSTALS



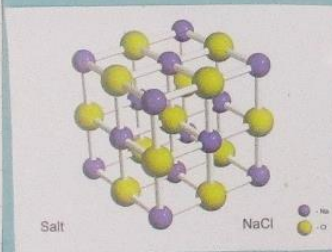
This is my finished crystal.

I used observation over time.

## What is a crystal?

A crystal is a solid structure formed by atoms or molecules line up in a regular (not irregular) 3D shape. (Cool Science Fact: The actual word crystal comes from a Greek word *Krystos* meaning "ice, cold") It was originally thought that crystals were a type of ice that was so cold it would never melt.

When a bunch of unit cells are near each other, the atoms arrange themselves into patterns. The smallest building block of crystals is called a unit cell.



## How do crystals form?

In nature, crystals form when liquid rock called magma cools. Many precious crystals such as diamonds, rubies and emeralds form this way. Crystals also form when water evaporates from a mixture (this how I grew my crystal.) Salt crystals normally form this way

## How do crystals grow?

1. Place newspapers or card board down where you will be growing your crystal. Make sure you thoroughly clean and dry your measuring cup, the mixing bowl and your crystal growing chamber.



2. Boil a little more than one cup of water (because some will evaporate). While it's hot pour only one cup of water into a glass measuring cup, then pour into your mixing bowl.

3. Pour bit by bit your crystal growing powder until it's all dissolved. This should take no more than 5 minutes.

4. Carefully pour it into your crystal growing chamber making sure to leave behind all of the undissolved bits.

5. Then put your crystal into the write place and leave it for 15 minutes. A sunny warm place.



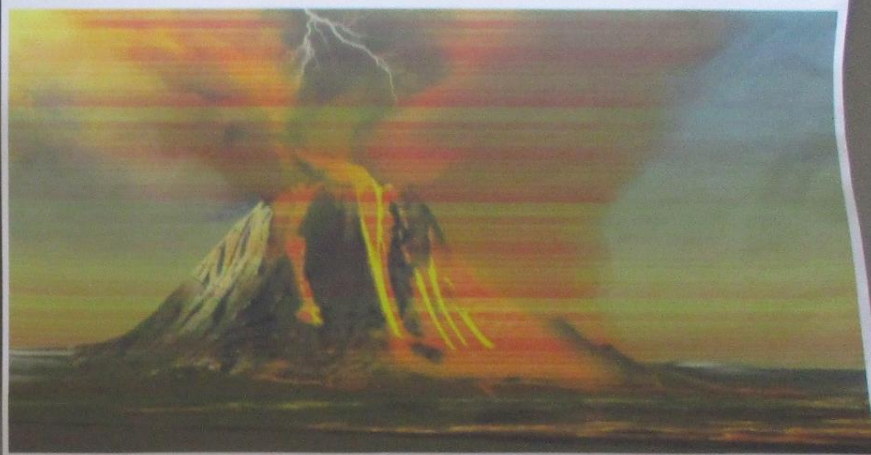
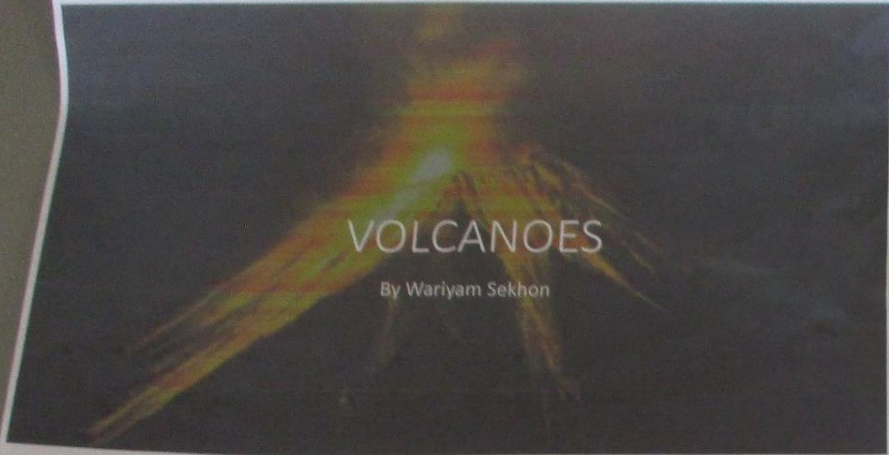
6. Calmly, tip your seed rock in (flat side down).

7. Leave the crystal un disturbed for as long as you want. The longer you leave it the bigger it is.

8. Get it out, by tilting the chamber and using a butter knife to gently scoop it out. Before that, tilt the chamber to remove the water. **NOW IT IS DONE!**







## Contents

- What is a Volcano?
- Why do Volcanoes erupt?
- Famous Volcanic eruptions!
- How I made my volcano
- How I made a volcano erupt.

A volcano is an opening in the earth's crust through which magma, ash and gas erupt. Volcanoes can be different shapes although they are commonly cone shaped Mountains. These cone shaped volcanoes are made up of layers of ash and lava. Most volcanoes are found at plate boundaries



17/03/2020

# The Scent of flowers



1. Rose	10/10
2. Primrose	8/10
3. Hyacinth	8/10
4. Beech	11/10
5. Petal	6/10
6. Lily	3/10

How I did it  
I went to a garden centre and smell some flowers carefully to catch the scent marking them out of 100 the strength of the scents.



Smelling flowers



Violet



Hyacinth

Type of enquiry  
Compare and contrast

Why flowers smell  
Flowers smell to attract insects to provide them

# How Does A Venus Flytrap Work

how long it takes to digest  
what it eats  
how it digests  
how it catches  
how it kills  
how it digests  
how it kills  
how it digests  
how it kills

Fun fact:  
It takes up to 12 DAYS to digest the fly or bug

Fun fact:  
Sometimes the bug is so small it escapes.

Fun fact:  
The trap can close 100 times a day



Why it digests  
It digests because it has enzymes in its stomach

I like Venus flytraps because they are related to other plants but they are different because they can catch and digest insects

The reason it burrows is due to having its head with its mouth open

## Bird Experiment

**Day 1:**  
On day one, it was very sunny and there was no rain or wind. In that day, the temperature was seven Degree Celsius. We put some bread out for the birds and we saw... two Blue Tits, Two Pigeons, one Jay, two Crows, a Blackbird, A Parakeet, a Starling. WOW THAT'S A LOT!!

**Day 2:**  
On day two, it was windy, dry and and it was ten Degree Celsius. In that day, We saw... a Jay, two pigeons, one Blue Tit, And two Robins.

**Day 3:**  
On day three, it was seven Degree Celsius, And there was no rain or wind. In that day we Saw... Two Robins, EIGHT Parakeets, a Thrush, And a Blue Tit.

**Day 4:**  
On day four, it was sunny but windy, And the temperature was for Degree Celsius. In that day we saw... one Crow. How unlucky

**Day 5:**  
On day five, it was sunny, no wind and it was Five Degree Celsius. In that day we saw... Five Robins, three Blackbirds, two Thrushes, Five Crows, three Pigeons, three Blue Tits, a Starling, and one Jay.

**Day 6:**  
On day six, it was not sunny, or windy and the Temperature was five Degree Celsius. In that day we saw... TWO DUCKS AND A WOODPECKER!!!

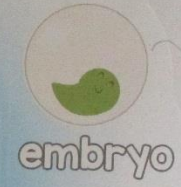
**Day 7:**  
On day seven, it was sunny and there was no rain or wind. In that day, the temperature was eight Degree Celsius. We put some bread out for the birds and we saw... two Blue Tits, Two Pigeons, one Jay, two Crows, a Blackbird, A Parakeet, a Starling. WOW THAT'S A LOT!!

# METAMORPHOSIS

adult frog



eggs



embryo



tadpole

## The Life Cycle of a FROG



froglet



tadpole with legs

Female frogs lay their eggs in water. The eggs are covered with a jelly-like substance called egg mass.

The single cell in the egg grows into an embryo. Cells are formed at this stage.

The embryo then turns into a tadpole. Tadpoles have gills to breathe, a mouth to eat, and a tail to swim like a fish.

At 8 weeks old the tadpoles grow their back legs.

By Saannah

The frog's tail has completely gone and now the frog can live on land.

At 12 weeks they lose their front legs and their tail shrinks. Froglets can now leave the water.

# What is the Smallest creature I can find?



Leaves from the garden



Leaf under the microscope



Red mite under microscope

### Steps

1. Collect leaves from my garden.
2. Examine leaves under a digital microscope
3. I discovered more creatures on the underneath side than on top of the leaves
4. I saw something red moving on the leaf under the microscope. It was so small I couldn't see it on the leaf with my own eyes.
5. I lowered the microscope to see the insect more clearly. I could then see the legs.
6. To work out which creature it was I matched the picture with pictures of mites on Wikipedia.
7. The large photo of the Spider mite is a picture from Wikipedia. The body is similar shade of red and the legs are pale yellow. It has 8 legs
8. The Wikipedia page said Spider mites are less than 1 mm (0.04 in) in size and vary in colour.



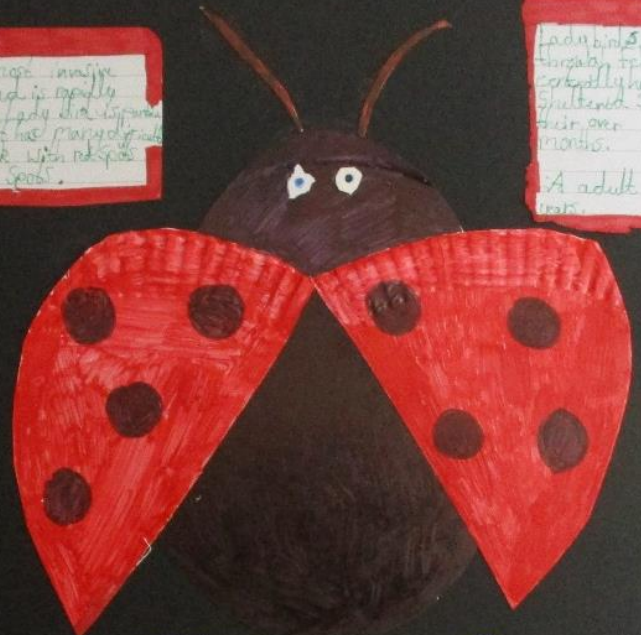
Spider mite photo from Wikipedia

Spider mite	Family: Tetranychidae	Phylum: Arthropoda
Kingdom: Animalia	Subclass: Acari	Superfamily: Tetranychodea
Class: Arachnida	Order: Trombidiformes	

Not all ladybirds is the same. Some ladybirds in the same pond and is rapidly killing the other species. This lady bird is very difficult to identify as it has many different patterns and includes black with red spots stripes and orange like white spots.

Ladybirds hibernate from October all the way through to spring. Some ladybirds and small beetles hibernate. Some should be kept for sheltered spots outside to grow but they are their own wintering and don't die in winter months.

A adult ladybird can live between 1 and 2 months.



# LADYBIRDS

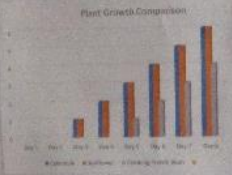
Ladybirds eat aphids which is why they are so common in the garden and are a natural alternative to spraying with chemicals.

Ladybirds are a type of beetle. Ladybirds play dead to defend themselves. They absorb a yellow liquid when they get stressed or sense danger.

Tracie Dickson

# COMPARING 3 PLANTS IN A WEEK!

By BOP! (Burr)



■ these shot up but went all higher over time.



day 0      day 14      day 14      day 14



day 2      day 3      day 5      day 6

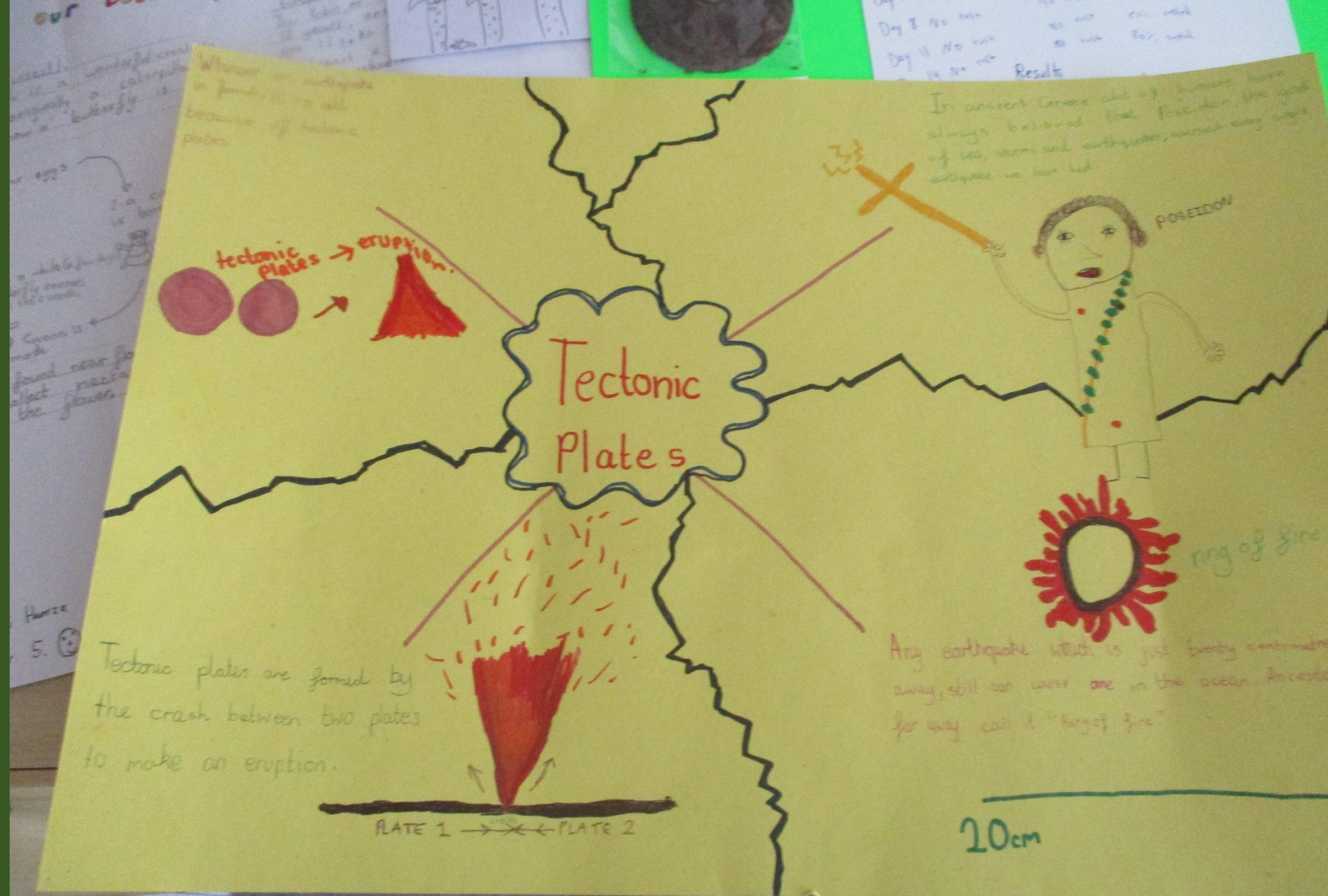
Choosing and Planting!



Calendula!      Sunflower!      day 1 Climbing Bean!      day 1 french bean!

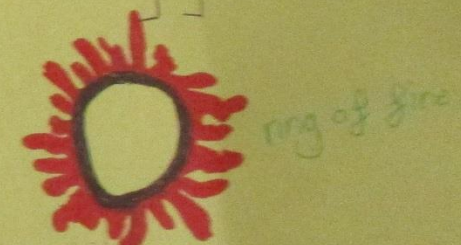
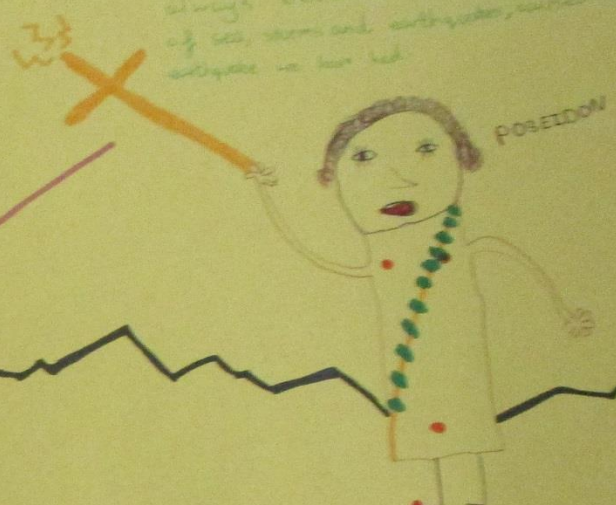
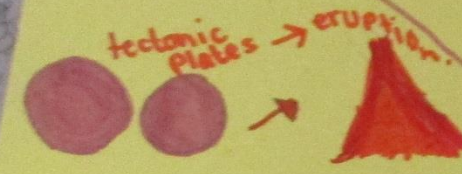
# Year 5





Why are earthquakes in families all because of tectonic plates

In ancient Greece all of humans have always believed that Poseidon, the god of sea, storms and earthquakes, carried away with earthquake in his bed.



Tectonic plates are formed by the crash between two plates to make an eruption.



Any earthquake which is just twenty centimetres away, still can cause one in the ocean. Ancestors for away call it "ring of fire"

20cm

do we see in our L  
Butterfly (cassell)  
butterfly is a  
insects  
butterfly  
the grass is  
the grass is  
the grass is  
already washed to suit a

### Research about Cat Grass

Here are two fluffy cats who need to eat cat grass to keep them healthy.



Cat Grass is grown indoors and it is especially for cats.



### What is Cat Grass?

It is a grass mixture that is grown from seeds such as barley, wheat, oats or rye.

Cat grass helps cats to digest their food and it also helps them to cough up hair balls.

Cat Grass also keeps your cat's fur shiny.

Cat Grass provides cats with vitamins.

Cats get hair balls because they groom or wash their fur with their tongue.

Chlorophyll is a green pigment in the grass which helps freshen your cat's breath.

Shm's  
1-2010  
D: Olivia  
P: Piel  
R: Adam  
Samir  
ra  
e  
o

our local  
What is Cat Grass?

Cat grass helps  
cats to digest  
their food and

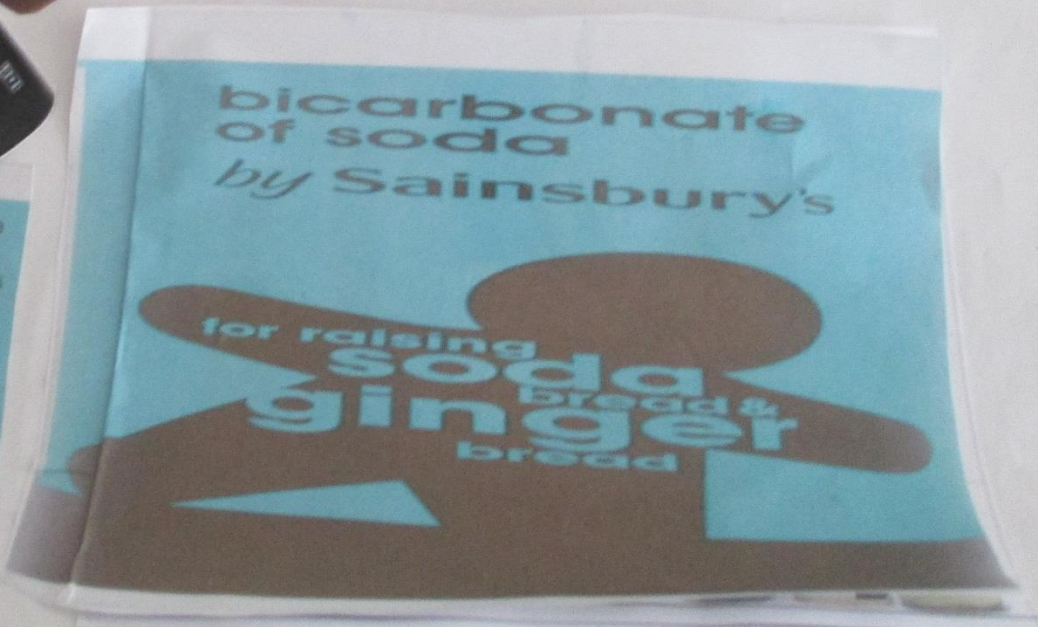
a grass  
mixture that  
grown from  
ds such  
V, V

Which type of vinegar will make the most growth?

What we used

Bicarbonate of soda,  
Sainsbury's malt vinegar,  
Aspell organic red wine  
vinegar, Balsamic  
vinegar, Sainsbury's  
RWV, Waitrose RWV  
Mirin vinegar and  
Blue dragon vinegar

First we measured  
the vinegar and  
then the bicarbonate  
of soda and then  
take the results.



the  
wash  
with their  
tongue.

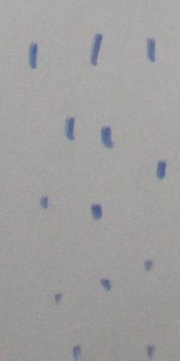
A:  
B:  
C:  
D:  
E:  
F:  
G:  
H:  
I:  
J:  
K:  
L:  
M:  
N:

Grass provides  
with vitamins.

Chlorophyll is a  
green pigment  
in the grass which  
helps freshen your  
pet's breath.

### A-Z Storms in 2019-2020

- A: Aiyah O: Olivia
- B: Brendan P: Piet
- C: Ciara R: Róisín
- D: Dennis S: Samir
- E: Ellen T: Tara
- F: Francis V: Vince
- G: Gerda W: Willow
- H: Hugh
- I: Iris
- J: Jan
- K: Kitty
- L: Liam
- M: Maura
- N: Noah



### Clouds (Year 5)

3 main types of clouds

- ① High level e.g. cirrus  
(5-7 Km)
- ② Mid level e.g. nimbus  
(2-7 Km)
- ③ low level (0-2 km)  
e.g. stratus, cumulus



### 1. What is Coronavirus?

Coronaviruses are a large family of viruses that can cause a wide range of illnesses. Covid-19 is a new strain that has been identified on humans for the first time.

### 2. Types of Coronavirus

Coronaviruses can be mild such as the common cold or severe like the Middle East Respiratory Syndrome and Severe Acute Respiratory Syndrome.

### 6. Prevention and Treatment

There is currently no specific treatment for Coronavirus. All treatment is targeted that symptom relief, people are asked to stay in isolation, regularly wash hands and stay away from people who are unwell.

### 3. How does the virus spread?

The new virus started in Wuhan, China and is thought to spread via droplets that people cough, sneeze or exhale. It can also live on surfaces for several hours.

### 4. Global Spread

The current outbreak of COVID-19 resulted in roughly 7000 cases in China during the first month. After this there were a further 80,000 cases reported globally during the second month (Feb 2020).

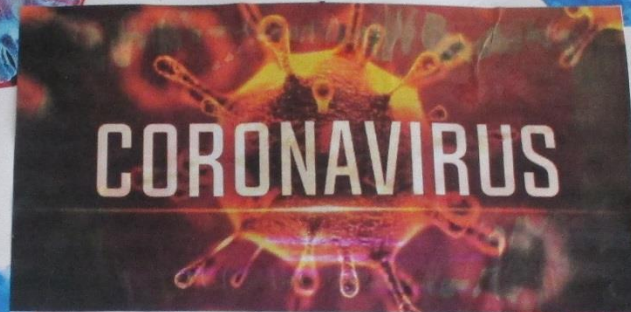
### 5. Symptoms

The common signs are

- High fevers
- Cough
- Breathing difficulties
- Muscle pain
- Tiredness

### 8. Who is affected?

Generally the disease in children relatively is rare and mild. Elderly people and those with underlying health problems are more at risk in general. If you feel unwell, you are advised to contact healthcare services either online or by telephone.



By Sienna Gill Yr5

OSCAR YR 5

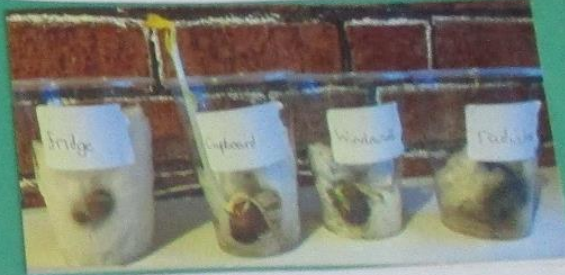
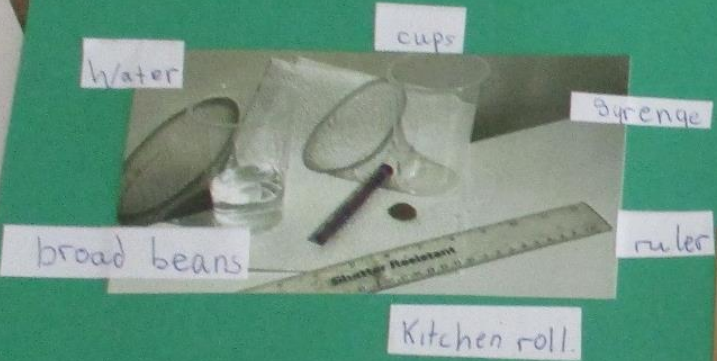


**Aim:**  
To see in which location the broad beans will grow the best

**Prediction**  
I think the plant on the window sill will grow the best because it will have sunlight and water

- Method:**
1. place some kitchen roll in a cup
  2. put the broad bean between the kitchen roll and the cup
  3. Add 25ml of water to the cup.
  4. Label the cup with the location it will go in
  5. Repeat this for all 4 cups
  6. place the beans in their location
  7. Water the beans daily with 5ml of water using a syringe
  8. Measure the bean shoots and roots daily with a ruler and record them in the results table.

**equipment:**



**RESULTS:**

Location	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Roof	0	0	0	0	0	0	0	0	9	21	29	50	66	75
Windowsill shoot	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Windowsill root	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fridge shoot	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fridge root	0	0	0	0	0	1	8	11	59	94	123	136	171	178
Cupboard shoot	0	0	0	0	0	0	0	0	2.7	3.7	4.8	7.8	10.8	14.5
Cupboard root	0	0	0	3	9	17	19	22	24	29	30	30	30	30
Radiator shoot	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Fair test**

Variables to change - Location of cup with the bean in

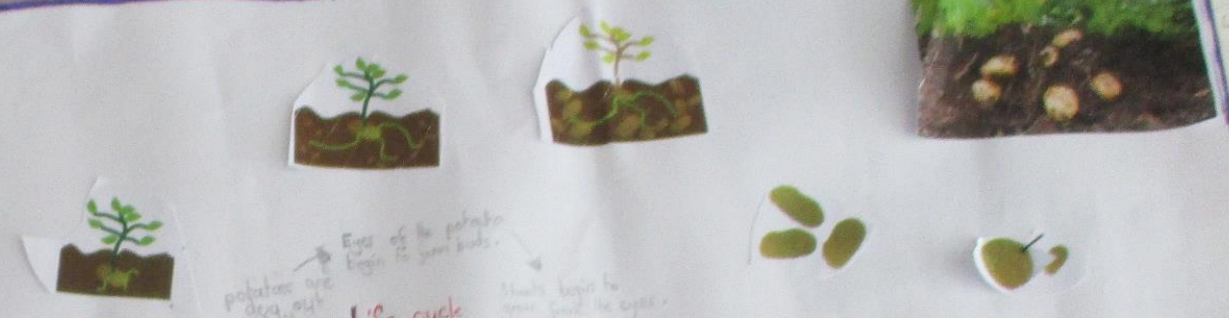
What to keep the same - plant them all at the same time  
amount of water given and time given

The bedding (the amount)  
The cup size

Measure the plants with the same ruler.

**Conclusion:**

My prediction was wrong because the broad bean in the cupboard actually grew the best. The bean that grew the fastest was the one on the radiator because it was the warmest. In the end it died as it had too much heat. The bean in the fridge did not grow as it was too cold. The bean in the cupboard grew the tallest as it had heat but not too much. The shoot was not green though because it had no sunlight. The bean on the window took longer to grow as it was not always sunny. From this experiment I learned that temperature is more important than light for a bean to grow.



**Life cycle of the potato**

potatoes are dug out of the soil.

Eyes of the potato begin to form buds.

Stems begin to grow from the eyes.

potatoes are planted into the ground and a plant begins to grow.

potatoes begin to sprout and spread.

potatoes begin to form.

potatoes begin to turn yellow.

potatoes begin to turn yellow.



A potato is Contains potassium, vitamin C, and fiber.

Unlike that a bunch of dead apples, a potato is still alive when harvested.



**Fun facts:**

The potato is the most important non-Cereal crop in the world, and the fourth most important crop over all. Only corn, wheat and rice are more important. In the US, potato products are the second most consumed food overall, trailing only dairy products. Potatoes are 80% water and 20% solids.



# WHAT HAPPENS WHEN BAKING POWDER IS ADDED TO DIFFERENT LIQUIDS

## INGREDIENTS

2x tablespoon of vinegar  
 1 teaspoon of baking powder  
 100ml of liquid ->  
 Dr Pepper, Coke, water and sprite



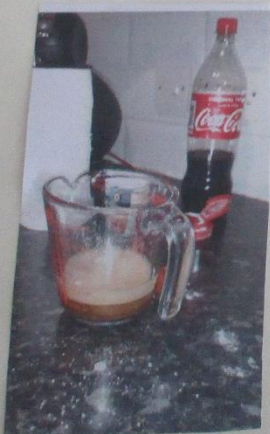
## WHAT I DID

I added two tablespoons of vinegar and one teaspoon of baking powder to Sprite, Dr Pepper, Coke and warm and cold water to see what happened after 30 seconds and then at one minute.



## WHAT I FOUND OUT

I found out that Dr Pepper created the most sizzling and hot water dissolved the baking powder the fastest.



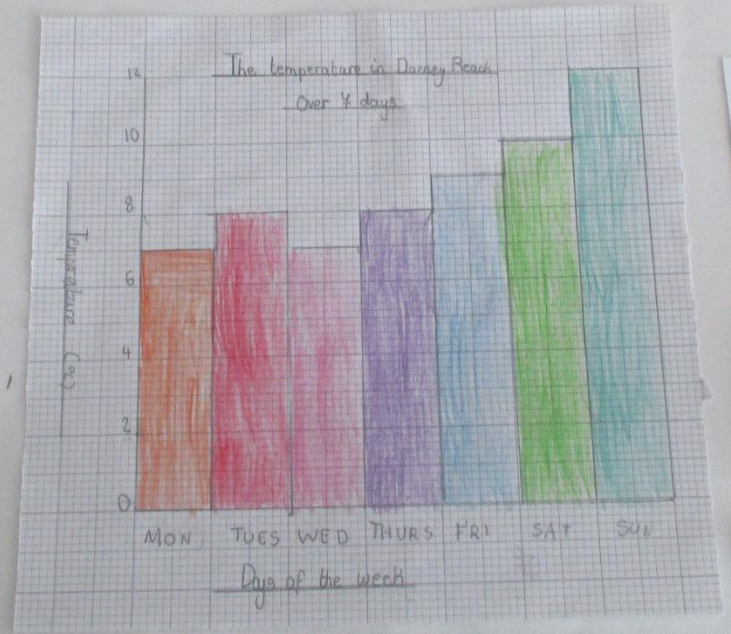
BY MATTHEW TOWNS  
 YEAR 5

	30 SECONDS	1 MINUTE
COKE	FIZZING AND FROTHING A SMALL AMOUNT	1 MIN 30 SECONDS STILL FIZZING
SPRITE	FIZZING A LOT AND FROTHING HIGH	1 MIN 6 SECONDS DISSOLVED BAKING POWDER
DR PEPPER	FIZZING LOUDLY AND FROTHING THE MOST	1 MIN 14 SECONDS STILL FIZZING AND BAKING POWDER DISSOLVED
COLD WATER	CLOUDED THE WATER AND FIZZED	39 SECONDS BAKING POWDER DISSOLVED ALREADY
HOT WATER	CLOUDED THE WATER FIZZED AND BAKING POWDER DISSOLVED	

# The Weather! by Phoebe (Year 5)

Weather Data Table from Daney Beach

Date	Temperature	Rain	Sunshine	Wind
Mon 2 <sup>nd</sup> March	7°C	—	✓	✓✓
Tues 3 <sup>rd</sup> March	8°C	✓	✓	✓
Wed 4 <sup>th</sup> March	7°C	✓	✓	✓
Thurs 5 <sup>th</sup> March	8°C	✓	✓	—
Fri 6 <sup>th</sup> March	9°C	—	✓	—
Sat 7 <sup>th</sup> March	10°C	—	✓	—
Sun 8 <sup>th</sup> March	12°C	✓✓	✓	✓





# BIO-DIVERSE PLANET



A BIO-DIVERSE place is where lots of animals are. For example the rain forest is a bio-diverse place, because there are thousands of animals that live there. But a non bio-diverse place is a palm tree farm or a city, because there are not many types of animals that live there.



Do you think we live in a Bio-diverse planet?

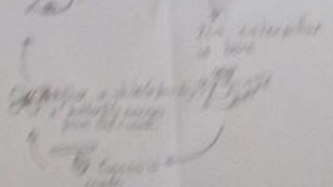
## Which animals do we see in our local park?

Common Chiffchaff  
The common chiffchaff is normally found in parks, but sometimes he can be seen in woods. He can be seen in parks, but sometimes he can be seen in woods.



Rock Dove  
The rock dove is a little white bird. He can be seen in parks, but sometimes he can be seen in woods.

Butterfly (caterpillar)  
The butterfly is a colorful creature. He can be seen in parks, but sometimes he can be seen in woods.



They often get found near flowers. They are very colorful and can be seen in parks.

Common Frog  
The common frog is a green and black creature. He can be seen in parks, but sometimes he can be seen in woods.



Common Toad  
The common toad is a brown and black creature. He can be seen in parks, but sometimes he can be seen in woods.



By B. Harris July  
Year 5. (1)

# Year 6



## What is metamorphosis??

**The Stages in detail**

- The female lays eggs away from the tree.
- The egg hatches and a caterpillar emerges.
- The caterpillar grows and sheds its skin several times.
- Before going to the next stage, it loses weight and shrinks.
- The chrysalis forms and the caterpillar is inside.
- The chrysalis turns brown and the caterpillar is inside.
- The caterpillar is now a butterfly and it is ready to fly.

**Fun Facts**

- Metamorphosis is a biological process by which an animal physically develops with marked external change.
- Metamorphosis is a biological process by which an animal physically develops with marked external change.
- Metamorphosis is a biological process by which an animal physically develops with marked external change.

## Weather Change in a Week

**Tuesday**

**Wednesday**

**Thursday**

**Sunday 15<sup>th</sup>**

## FINDING OUT ABOUT FRUIT

### PINEAPPLE

Shape of fruit: Pineapple

Country: Brazil

Season: Spring

Flavour type: Sweet and tangy

Health benefit: Good for digestion

### ORANGE

Shape of fruit: Round

Country: Spain

Season: Winter

Flavour type: Sweet and sour

Health benefit: Good for immunity

### POMEGRANATE

Shape of fruit: Round

Country: Iran

Season: Autumn

Flavour type: Sweet and tart

Health benefit: Good for heart

### GRAPES

Shape of fruit: Bunch

Country: France

Season: Summer

Flavour type: Sweet

Health benefit: Good for skin

**NOTE:** I wanted to know more about the fruit of all.

**METHOD:** I wanted to find out how when the fruit was first discovered. I looked at the books. I also looked at the internet. I also looked at the pictures of the fruit. I also looked at the pictures of the fruit.

**RESULTS:** These are the fruits.

**CONCLUSION:** I found that pineapple grows in the ground and the pomegranate flower is like a tree. I also found that the grapes are from South Africa. I suppose them to come from Europe.

## MY SCIENCE PROJECT

For my science project, I decided to see what animals I can see and hear in my garden at different times of the day and on different days. I set up a table and put traps for the animals that I saw and heard. I have recorded my results in this table and have made a graph and shows my conclusions. I hope you enjoy learning about what animals come into my garden.

DATE	TIME	ANIMALS	NOISES
17/03	7:00	1 squirrel	1 bird
17/03	8:00	2 squirrels	2 birds
17/03	9:00	3 squirrels	3 birds
17/03	10:00	4 squirrels	4 birds
17/03	11:00	5 squirrels	5 birds
17/03	12:00	6 squirrels	6 birds
17/03	13:00	7 squirrels	7 birds
17/03	14:00	8 squirrels	8 birds
17/03	15:00	9 squirrels	9 birds
17/03	16:00	10 squirrels	10 birds
17/03	17:00	11 squirrels	11 birds
17/03	18:00	12 squirrels	12 birds
17/03	19:00	13 squirrels	13 birds
17/03	20:00	14 squirrels	14 birds
17/03	21:00	15 squirrels	15 birds
17/03	22:00	16 squirrels	16 birds
17/03	23:00	17 squirrels	17 birds
17/03	24:00	18 squirrels	18 birds
17/03	25:00	19 squirrels	19 birds
17/03	26:00	20 squirrels	20 birds
17/03	27:00	21 squirrels	21 birds
17/03	28:00	22 squirrels	22 birds
17/03	29:00	23 squirrels	23 birds
17/03	30:00	24 squirrels	24 birds

**CONCLUSION:** I saw lots of squirrels in my garden. I also saw lots of birds.

**NOTE:** I saw lots of squirrels in my garden. I also saw lots of birds.

### NATURE OBSERVATION IN MY GARDEN

**FUN FACT:** I expected to see lots of squirrels but surprisingly only saw 1!

**FUN FACT:** I saw 2 herons fly over my garden! I think this was because I live near the river.

**17/03/2020**

BY CHLOE BAVAZZANO Yr 6

# The Science of Weather

**Definition:** Weather is the state of the atmosphere at a particular time and place. It is determined by the temperature, humidity, air pressure, and wind.

**Climate:** Climate is the average weather conditions over a long period of time (usually 30 years or more) for a particular area.

**Weather vs. Climate:** Weather is short-term, while climate is long-term.

**Factors Affecting Weather:** Latitude, longitude, altitude, and proximity to water bodies.

**Types of Weather:** Sunny, cloudy, rainy, snowy, windy, foggy, etc.

**How Weather is Measured:** Thermometer (temperature), barometer (air pressure), anemometer (wind speed), hygrometer (humidity), etc.

**Why Weather Changes:** The Earth's atmosphere is constantly moving and changing due to the uneven heating of the Earth's surface by the sun.

**Global Warming:** The Earth's temperature is rising due to the greenhouse effect caused by the increase in greenhouse gases.

**Climate Change:** A long-term change in the Earth's climate system, which can be caused by natural factors or human activities.

**How Climate Change Affects the Season?** Climate change can lead to more extreme weather events, such as droughts, floods, and hurricanes.

**How to Reduce Climate Change:** Reduce energy consumption, use renewable energy, and reduce carbon emissions.

# CLIMATE CHANGE!

**WHAT IS CLIMATE CHANGE?** Climate change refers to long-term shifts in temperatures and weather patterns. While climate change does refer to any change, it is commonly used to describe global warming, or an overall increase in the world's average temperature.

**WHAT IS WEATHER?** Weather is the state of the atmosphere at a particular time and place. It is determined by the temperature, humidity, air pressure, and wind.

**WHAT IS CLIMATE?** Climate is the average weather conditions over a long period of time (usually 30 years or more) for a particular area.

**HOW IS CLIMATE CHANGE AFFECTING THE SEASONS?** Climate change is affecting the seasons in many ways. In the Northern Hemisphere, the spring season is starting earlier and the autumn season is ending later. In the Southern Hemisphere, the opposite is true.

**THE EFFECT ON BEES AND POLLINATORS** Bees and other pollinators are essential for many crops and wildflowers. Climate change is affecting their behavior and the timing of their seasonal activities.

**5 TIPS ON HOW TO TRANSFORM YOUR GARDEN INTO A WILDLIFE HAVEN!**

1. Plant native vegetation.
2. Avoid using pesticides.
3. Provide water.
4. Create shelter.
5. Connect habitats.

**HOW IS CLIMATE CHANGE AFFECTING WILDLIFE?** Climate change is affecting wildlife in many ways. Many species are struggling to survive in their natural habitats due to changes in temperature, precipitation, and sea level rise.

**HOW IS CLIMATE CHANGE AFFECTING WILDLIFE?** Climate change is affecting wildlife in many ways. Many species are struggling to survive in their natural habitats due to changes in temperature, precipitation, and sea level rise.

# OUR DIVERSE PLANET

**Arctic**

**Desert**

**Mountain**

**Ocean**

## WE ARE ONE!

Jayson 1/15

# WHAT HAPPENS TO WATER, OIL AND SYRUP WHEN YOU PUT THEM ALTOGETHER IN A GLASS?

**The Results:** It was oil that the syrup stayed on the bottom and the water in the middle and the oil floating on top!!!

**EQUIPMENT:**

**The Method:** Firstly I put the water in the glass and added red food coloring so you can see the difference between water and oil. I put the syrup in one I used to the bottom, finally I put the oil in and I stayed at the top!!!

**Labels:** Red Water, Oil, Syrup

17/03/2020

**SCIENTIFIC ENQUIRY ON EARTH'S AMAZING WILDLIFE**  
BY SOHINI SIRHA (YR 10)

**The spotted jellyfish** is not like the transparent jellyfish you can find in the beach. It is a very rare species, and it is very difficult to find. It is a very rare species, and it is very difficult to find. It is a very rare species, and it is very difficult to find.

There are about 270 species of porcupinefish in the world, and most are in the tropical regions. The largest porcupinefish, the *Megascopus*, can grow up to 3.5 feet in length, including a large, inflated air bladder. When inflated, the porcupinefish can float on the water's surface.

Turtles are present in all oceans and seas, and measure up to 80 cm in length. They are found in all parts of the world. The largest turtle, the Galapagos tortoise, can weigh up to 1.5 kg with a spotted shell. They are found in the Galapagos Islands, and they are very rare.

**Asian fish** were brought to the world's attention after they were given to the Japanese emperor as a gift in 1854. They are very rare, and they are very difficult to find. They are very rare, and they are very difficult to find.

**OUR WONDERFUL PLANET IS HOME TO SO MANY AMAZING CREATURES. SADLY A LOT OF THEM HAVE BECOME EXTINCT. LET'S DO EVERYTHING IN OUR POWER TO SAVE WHAT WE HAVE GOT LEFT.**

**THE REPLACEMENT OF COPPER & IRON.**

**Experiment**  
Copper Sulphate (CuSO<sub>4</sub>)  
Iron nails

**Method**

1. Weigh out 10g of iron nails for reaction.
2. Add 5g of CuSO<sub>4</sub> to 100 ml of water in a beaker.
3. Put the iron nails in the solution and observe.

**Observation**  
The iron nails become reddish-brown and the solution turns blue.

**Conclusion**  
The iron in the nail has replaced the copper in the solution.

The reaction: Fe + CuSO4 -> FeSO4 + Cu

**Images:** [A series of small photographs showing the experiment in progress, including the setup, the reaction, and the final products.]



**CLASSIC DARK**      **Milky bar**

**Melting time:** 5 mins 45 secs  
**Fat content:** 20.5g

**Which chocolate melts the quickest?**

- 50g of Classic Dark
- 1/2 of a L bar of Milky bar
- equal heat class

**Melting time:** 3 mins 25 secs  
**Fat content:** 15g

**Aero**

**Melting time:** 6 mins 20 secs  
**Fat content:** 15g

**Dairy Milk**

**Melting time:** 4 mins 20 secs  
**Fat content:** 15g

**17/03/2020**

# METALS VS LIQUIDS

**LEAD** ← EVERY DAY  
**BRASS** ← AFTER  
**TIN** ←

**Goal:**  
To find out which metals react with acids and which do not. To see if acids can be used to clean metals.

**Equipment list:**

- Various metals
- Acids
- Liquids: coke, fizzy drinks, vinegar, lemon juice and salt

**Method:**

- We have taken various metals like copper, zinc, tin and put them in a beaker of water and left them for a few days.
- We have also taken nails and pennies and put them in fizzy drinks, coke, carbonic acid mixed with vinegar, lemon juice and salt to see what would happen.

**Results:**  
The results were as follows:

- All the metals that we put into the water started changing except the tin. After some research we found out that tin does not react like other metals. (Metals react when iron and oxygen come in.)
- The metals that was left in coke got cleaner and didn't rust. (It has the phosphoric acid, citric acid, and carbonic acid in it which does the cleaning.)
- The metals that was left in fizzy drinks and vinegar also got cleaner and no rust particles formed on it. The combination of being soda and vinegar will form in a non-toxic chemical reaction that will help dissolve the grime.
- The lemon juice and salt was the best between all three for cleaning, but no rust occurred. (The acidity of lemon juice helps to remove rust from the metal underneath, while the salt acts as a gentle abrasive that won't leave scratches in the steel. Both are environmentally friendly and won't damage your skin or lungs as you use them.)

**Notes:**  
Copper is a very ductile metal and has a soft orange color. It is very malleable and does not react with water. It is used for electrical wiring, plumbing, and coins.  
Zinc is a silvery-grey metal and is harder than copper. It is used for galvanizing steel and in batteries.  
Tin is a silvery-white metal and is softer than copper. It is used for solder and in alloys.  
Lead is a heavy, malleable metal and is used for radiation shielding and in batteries.  
Brass is an alloy of copper and zinc. It is used for musical instruments and decorative items.  
Coke is a form of carbon that is used in the steel-making process.

**Observations:**  
Copper water pipe: **NAIL RUSTED AFTER LEFT IN WATER**  
Coke: **CLEANER AFTER LEFT IN COKE**

## Which drinks are bad for our teeth?

**Method:**

1. Firstly, I chose a type of drink (for example orange juice).
2. Next dip in your Litmus paper for about 15 seconds.
3. Then wait for the colour to show. And let dry.
4. Finally compare to the chart from below.

**Equipment:**  
A selection of every day drinks. And Litmus paper. And the PH colour chart.

**Results:**  
Litmus paper: **X = not healthy, = healthy**

**DANGER:**  
Which drink we found was worse. The acid rain was interesting to see whether we could find one which could be worse than the rest. So we tried pure lemon juice and water and you can see the colour was sure red!

**CONCLUSION:**  
Overall we have learnt which drink is healthiest for our teeth.

**by Sophia Bridge**

## What elements are in the composition of the air we breathe?

**Oxygen:** This is one of the main gases we breathe. It has the chemical symbol O and atomic number 8. It is a member of the chalcogen group in the periodic table. It is a colorless, odorless gas that is a key element in many biological processes. Its molecules consist of two oxygen atoms.

**Nitrogen:** This is the second main gas we breathe. It has the chemical symbol N and atomic number 7. It is a colorless, odorless gas that makes up about 78% of Earth's atmosphere. Liquid nitrogen boils at 77.4 kelvins (-195.8 degrees Celsius) and is used as a coolant.

**Argon and Carbon dioxide:** they have the atomic numbers 18 and 6. They make up a very small amount of the Earth's atmosphere.

**Neon, Helium, and Methane:** They have the atomic numbers 10, 2, 14. They make up a tiny amount of the Earth's atmosphere.

**How climate change is affecting the atmosphere?**

Certain gases in the atmosphere block heat from escaping. Long-lived gases that remain semi-permanently in the atmosphere and do not respond physically or chemically to changes in temperature are described as forcing climate change. Gases, such as water vapour, which respond physically or chemically to changes in temperature, are seen as feedbacks.

**What are the main greenhouse gases?**

Carbon dioxide is the most important greenhouse gas. It is produced from the use of fossil fuels to generate electricity (for example, coal-fired power plants) and to power vehicles. Methane is a very effective greenhouse gas, but with a shorter lifespan in the atmosphere than carbon dioxide. It comes from a variety of sources. Some sources are natural, methane escapes wetlands and oceans at a significant rate. Other sources are anthropogenic, which means

man-made. It is also produced from cows when they break down cellulose in their rumen.

**The molecules of oxygen:**

**The molecules of nitrogen:**

**The molecules of argon:**

**The molecules of carbon dioxide:**

**The molecules of neon:**

**The molecules of helium:**

**The molecules of methane:**

**17/03/2020**

# All about Red Squirrels

*Amazing climates*

*Addorable*

*Cute*



*Adventures*

*With red squirrels you must be observant. They will spend most of their time in the trees and avoid the ground. They will only come down to the ground to eat or to drink. They will only come down to the ground to eat or to drink. They will only come down to the ground to eat or to drink.*

*The tail of the red squirrel is used to balance with pine of pine and branches. There are several different tail colors ranging from white to black and they are most common in Great Britain in white. The tail of the squirrel is always white when it is in winter. The tail of the squirrel is always white when it is in winter. The tail of the squirrel is always white when it is in winter.*

*Red squirrels are very smart. They will use their tails to balance. They will use their tails to balance. They will use their tails to balance.*

# What Animals Live In My Garden?



The diagram is a circular chart with the following categories and animals:

- VERTEBRATES** (outer ring)
- MAMMALS** (inner ring): Frog, Hedgehog, Rabbit, Pigeon, Mouse
- BIRDS** (inner ring): Robin, Pigeon, Mouse
- INVERTEBRATES** (outer ring)
- WORMS** (inner ring): Worm
- BEETLES** (inner ring): Beetle
- FLIES** (inner ring): Fly
- SPIDERS** (inner ring): Spider
- SNAILS & SLUGS** (inner ring): Snail, Slug
- INSECTS** (inner ring): Insect

## What happens to bread in 2 weeks

### Observing over time!

On the seventh day the bread started to curl but did not mould at all over the last 2 weeks!!!

I had fun doing the experiment even though they must have added preservatives to the ingredients!!


The bread did not go mouldy because of the amount of preservatives in the ingredients!

Aaron Yr 6

17/03/2020

## HOW DOES FRUIT REACT OVER TIME?

### STRAWBERRY



24 hours


**Strawberry salt:**  
The strawberry has crystallized and the salt is all around the jar.

**Strawberry Baking powder:**  
The fruit and powder have sunk down to the bottom of the jar.

**Strawberry vinegar:**  
The water above the salt pile and the strawberry got lighter.

**Strawberry sugar:**  
The fruit is very moist and it became really fuzzy.

### LEMON



24 hours


**Lemon salt:**  
The lemon went a little cloudy and the water went yellow.

**Lemon Baking powder:**  
The whole lemon has bubbly and so has a gas, you can see it.

**Lemon vinegar:**  
All that has changed is that the water turned a light yellow.

**Lemon sugar:**  
Everything else turned water, and the lemon has split apart.

day 1      day 4



day 2      day 8

**Strawberry salt:**  
The salt that attached to the edge of the strawberry, the strawberry is bubbling.

**Strawberry Baking powder:**  
The strawberry is covered with the baking powder.

**Strawberry vinegar:**  
The water is bubbling the colour next of the strawberry which makes it lighter.

**Strawberry sugar:**  
The sugar has dissolved.

**Strawberry salt:**  
The strawberry is sinking in the water.

**Strawberry Baking powder:**  
The powder has turned black and all of the powder has sunk.

**Strawberry vinegar:**  
The water is bubbling the colour next of the strawberry which makes it lighter.

**Strawberry sugar:**  
The sugar has dissolved and the strawberry is sinking.

**Lemon salt:**  
The salt has separated but the lemon isn't much different.

**Lemon Baking powder:**  
The powder is bubbling on top of the lemon.

**Lemon vinegar:**  
The vinegar has changed a yellow colour.

**Lemon sugar:**  
The sugar has nearly all dissolved.

**Lemon salt:**  
The salt is starting to separate and the lemon is sinking more.

**Lemon Baking powder:**  
The lemon has got bubbles of baking powder on top.

**Lemon vinegar:**  
The vinegar has really changed yet.

**Lemon sugar:**  
The lemon has gone out of hand and so keep the lid on.

by Catherine y6

### How many times do you have to shuffle cards, for them to be fully shuffled?

All you need is a deck of cards and a pair of hands.

#### Method

1. Sort the cards into order of suit
2. Shuffle the cards once and check the order of the cards. Continue to do this checking each time how well the cards are shuffled. Remember to keep a record of how many times the cards have been shuffled


#### Prediction

I predict that it would take about 3 to 4 shuffles for the cards to be adequately shuffled.


#### Results

I found it took 7-8 times, for the cards to be fully shuffled. I was incorrect with my original theory of 3 to 4, it took twice as many shuffles for cards to fully combined.

By Noah Wylie y6



## Sharks



Sharks are ocean creatures or as some people call it marine life. They do lay eggs and they also give birth to live young. If they lay eggs they are oviparous and if they give birth to live young they are called viviparous.

### Whale Sharks

Whale sharks are the largest sharks in the world. They are about 40 feet, whale sharks eat plankton, krill, fish eggs and small fish. Whale sharks are omnivores and are quite harmless. Most whale sharks migrate.

### What is the smallest shark in the world?



The smallest shark in the world is the dwarf lanternshark. It's maximum length is 20 cm long.

### There bodies



Sharks have three main body parts, the head, trunk and tail. Sharks have gills on both sides of their head, the gills filter oxygen from the water. Sharks usually have 5-7 pairs of gills on there body.

### Did you know?

Sharks don't have any bones in their body as it is entirely made of cartilage.

Sharks have over 50,000 teeth in their life. Most sharks have teeth in layered rows, they don't regrow teeth one by one, but they have lots of rows inside their mouth which are constantly regrowing.





by Jessica Needs y6



17/03/2020

# What kind of taster are you?

**What you need:**



**The test:**

**Kingdom Kingdom**  
The **pharynx** has for the pink tongue on your tongue. These contain your taste buds.

**RESULTS**

Name:	William	meat	2/5	Taster
Name:	Maria	meat	2/5	non taster
Name:	Maria	meat	5/7	taster

**Conclusion:**  
In our family there are two tasters and one non-taster. This does not match up with the common population.

**William 116**

# ELEPHANT TOOTHPASTE

**WHAT YOU'LL NEED:**

- food coloring (blue)
- hot water
- dish soap
- yeast
- Hydrogen Peroxide
- an empty bottle for explosion
- Ruler

**STEP 1**  
If you collect all the ingredients and things that you will need to make the explosion of Elephant Toothpaste.

**STEP 2**  
ADD IN:  
• 9 drops of coloring  
• 1 cup hydrogen p.  
• 1 tbs. of dish soap

**STEP 3**  
yeast  
WATER

**STEP 4**  
NOW ADD BOTH MIXTURES TOGETHER AND TAKE A STEP BACK HERE, WHERE IT GETS SUPER INTERESTING


**STEP 5**  
SUCCESS

**INFO**  
once you've mixed the bottle will, in a separate cup mix a 1/4 cup of warm water & 3/4th of yeast for 30 seconds.

**NOW!!!**  
ALSO POUR IN YOUR EMPTY BOTTLE

**By: Mikael Palmer**

I had such fun and enjoyed my experiment! (Pictures above)



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