

ST. ANNE'S
CATHOLIC
HIGH SCHOOL

SUMMER 2026

BURNERS & BEAKERS

THE SCIENCE DEPARTMENT NEWSLETTER

'Act justly, love tenderly, walk humbly with your God'

Introduction

Welcome to the Summer Term edition of ***BURNERS AND BEAKERS***.

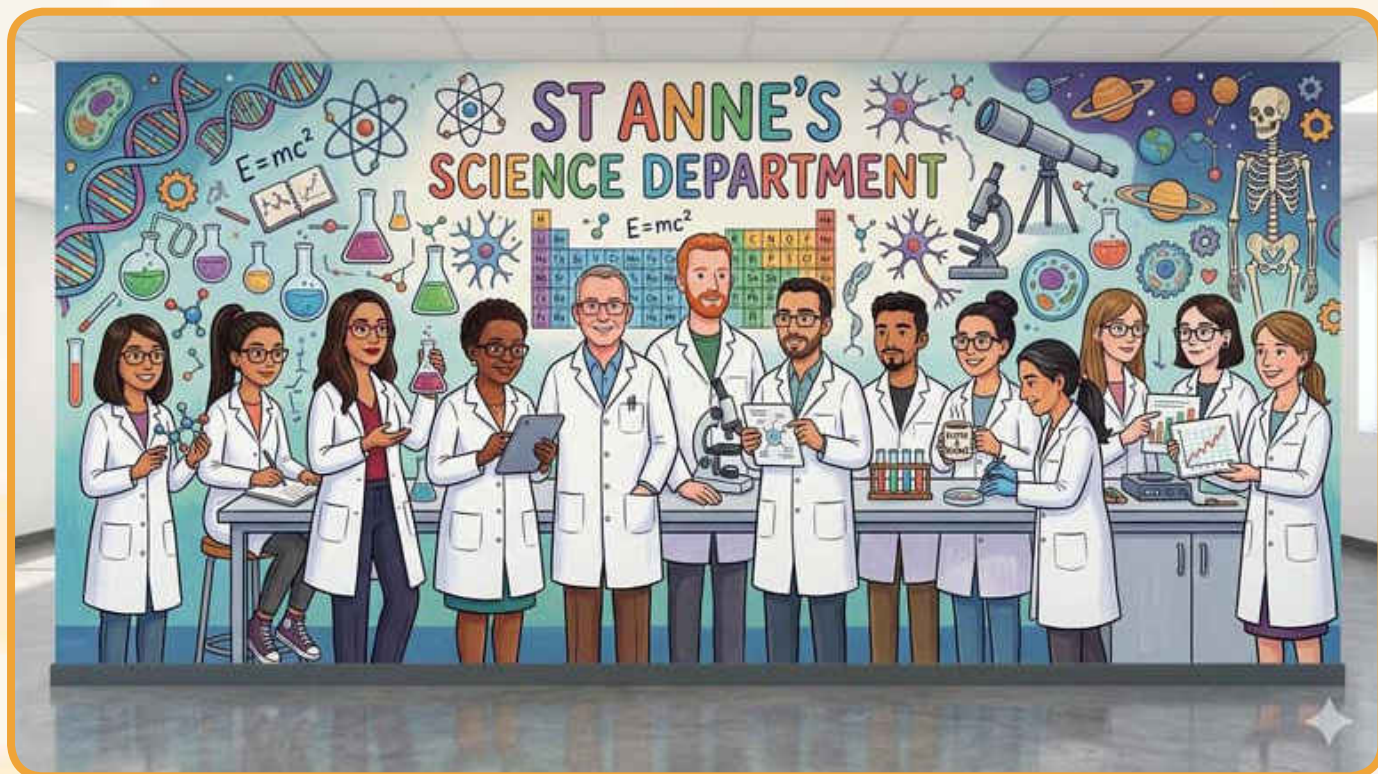
What a busy term this has been! Well done to all our students for making it to the end of this final and important term. The science department has been engaged with experiments, exam preparation, exams themselves, and all the highs and lows that come with that. We just want to say thank you to the parents for supporting the girls through this stressful time, your love and care have made a difference, and we have seen this with the students really wanting to achieve their best! In science we have prepared the students for these exams by offering interventions, exam technique help, revision tips and that's just the start! We can't even list all the ways our staff have gone above and beyond in this very stressful period for all.

Amongst the exams there has also been lots of fun and learning, as always. In this edition you can expect to see some of that great learning in examples of student work and fantastic articles written by our students; budding science journalists! We also have some tips to build science capital over the summer holidays.

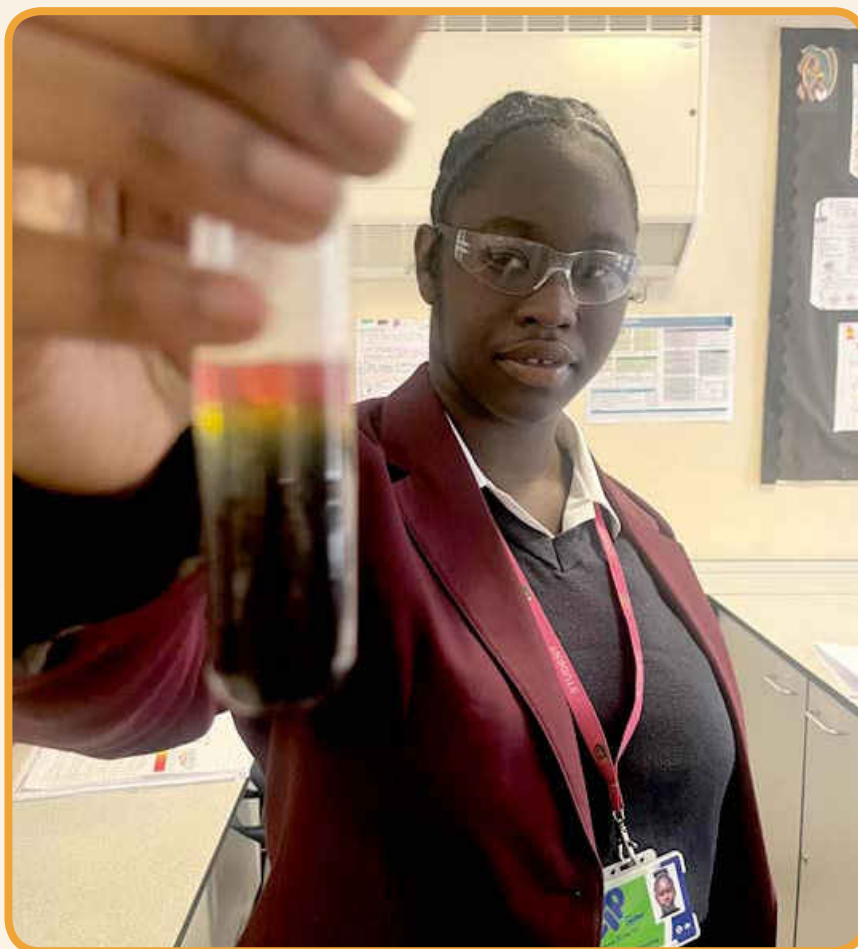
We are incredibly sad to say that we are saying goodbye to the following staff members at the end of the Summer Term: Mrs Adeleke, Mrs Khan and Ms Singleton. They have been instrumental in delivering the high-quality education we provide. They will truly be missed. We wish them all the best in their new endeavours.

We hope you all enjoy this edition and have a safe, happy and well deserved summer break!

The Science Department



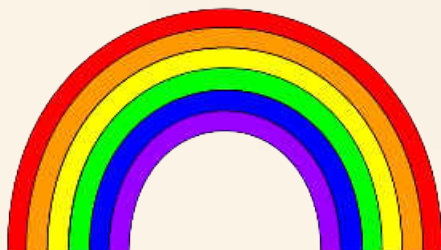
Year 8 Create Rainbows in the Science Lab!



Year 8 students have been exploring the fascinating world of acids and alkalis. As part of the topic, students learned how indicators can be used to identify different pH values and distinguish between acidic, neutral and alkaline substances.

Putting their new knowledge into practice, students took part in an exciting practical activity where they carefully layered solutions of different pH values to create “rainbows in a test tube”. The colourful experiment demonstrated how indicators change colour across the pH scale, producing a beautiful spectrum of colours.

The activity was a fantastic opportunity for students to develop their practical laboratory skills, apply their scientific understanding and see chemistry come to life. Well done to all of Year 8 for their enthusiasm and excellent work!



Kidney Dissection



Triple Science Year 10 students recently learnt about kidney structure and function with a kidney dissection.

Our kidneys are vital, fist-sized organs shaped like beans that sit just below your rib cage on either side of your spine. They act as the body's filtration system, cleaning the blood and balancing essential fluids and minerals to keep you healthy.

Here are some surprising facts about them:

- **They are blood hogs:** Despite making up less than 1% of your total body weight, your kidneys receive about 20% of all the blood pumped by your heart every single minute.
- **Heavy-duty filtration:** Your kidneys filter about 180 to 200 litres of fluid every 24 hours — that's enough to fill a standard hot tub!
- **Tiny microscopic filters:** Inside each kidney are about one million tiny blood filters called nephrons. If you were to unravel and line up all the nephrons from both kidneys, they would stretch for roughly 4 miles.
- **They're hormone factories:** Beyond just cleaning your blood, kidneys make erythropoietin (a hormone that tells your bone marrow to make red blood cells) and help activate vitamin D to keep your bones strong.
- **Leftover kidneys in a transplant:** If you ever need a kidney transplant, your old, damaged kidney is actually left right where it is. The new, donated kidney is placed in your lower pelvis instead.
- **You only need one:** You can live a perfectly normal, healthy life with just a single kidney. In fact, nearly 6,000 kidney transplants are performed in the UK every year to help those with kidney failure.

Six Ways to Build Your Scientific Capital

What is Science Capital? This is where you read, watch and **do** science outside of your science lessons and curriculum. This helps you to be more interested in science and the world around you. Universities love candidates with good science capital. To build your science cultural capital you can do a combination of the following:

1. Attend a **STEM/Science Club** at school, for example Robotics club.
2. Watch documentaries or science programmes at home — no, **Stranger Things** or **Young Sheldon** do not count as science programmes! Things like BBC's **Spring Watch**, BBC science podcasts, Netflix science documentaries like **Unknown: The Lost Pyramid** etc.
3. Go to museums — there are many free ones in London, namely the **Natural History Museum** (my favourite) or the **Science Museum** in South Kensington. **The Grant Museum** in Euston is great if you love to see preserved specimens and they famously have a jar of preserved moles (pictured, right)!

If you can't physically get there, they do virtual tours via their websites...

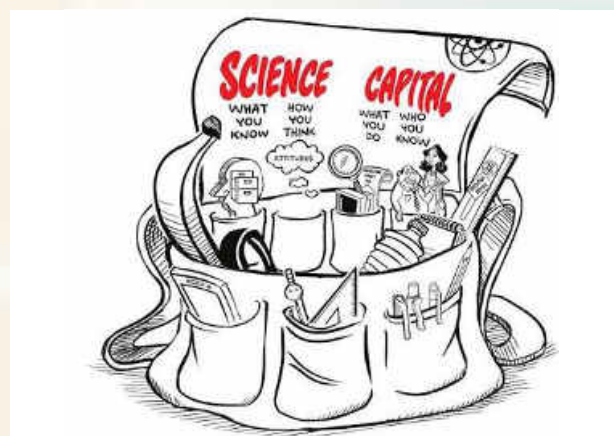
Check them out here:

- <https://www.sciencemuseum.org.uk/virtual-tour-science-museum>
- <https://www.nhm.ac.uk/>

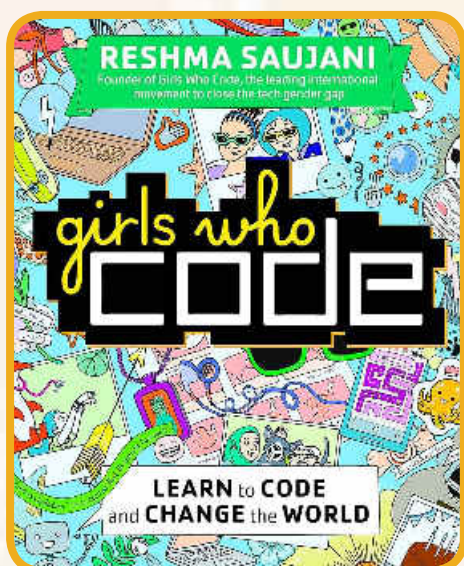
4. There are quite a few good **TikTok accounts** that you can follow to build your science knowledge.

Here are a few cool **STEM themed TikTok accounts** to follow:

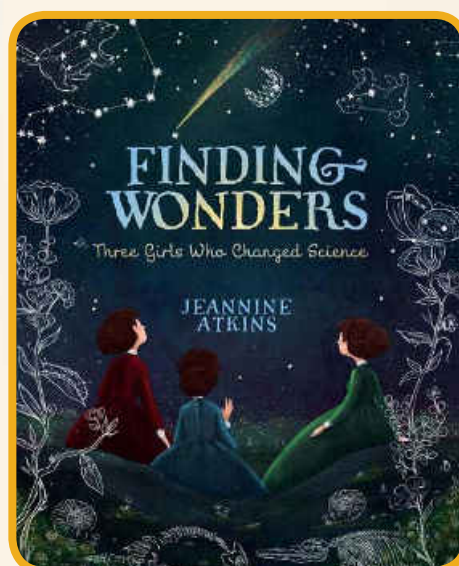
- [@mattgreen.jgm](#) — science raps
- [@chemteacherphil](#) — chemistry demos
- [@Instituteofhumananatomy](#) — an amazing (but graphic) anatomy video stream
- [@CareerswithSTEM](#) — for career inspiration, hacks and laughs



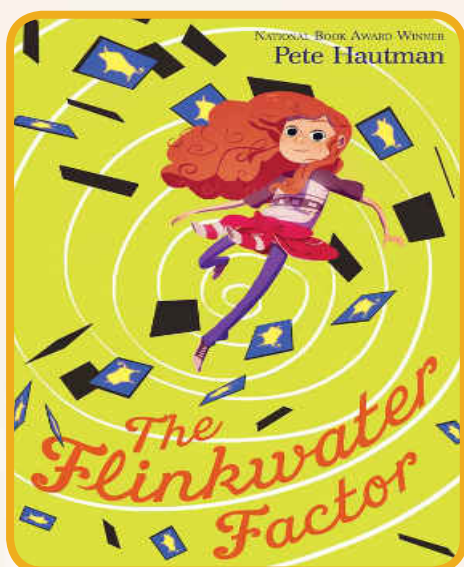
5. Reading **STEM based books**. Here are four fab ones for KS3/4:



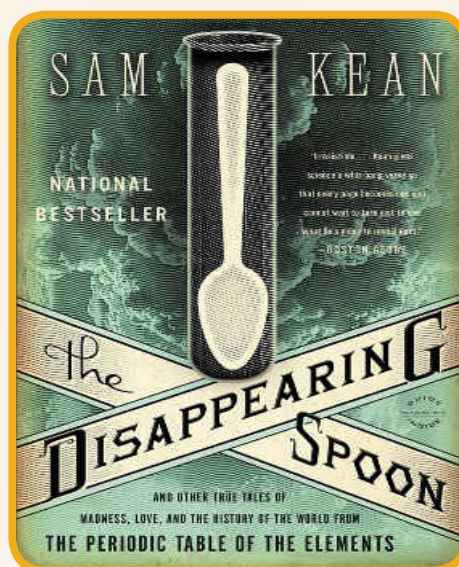
Girls Who Code
— Reshma Saujani



Finding Wonders: 3 Girls Who Changed Science
— Jeannie Atkins



The Flinkwater Factor
— Pete Hautman



The Disappearing Spoon
— Sam Kean

6 **Summer Programmes/Summer Schools at Universities**

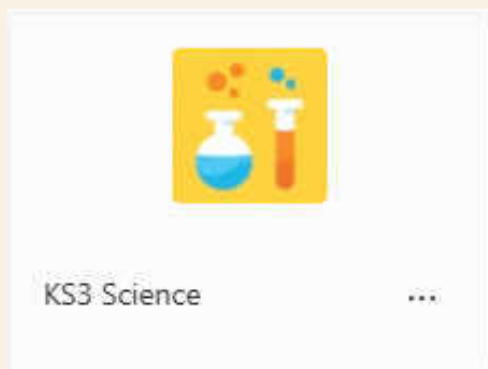


For older students, Year 9 and above, many universities run summer programmes in engineering or general sciences... Look out for these. **Imperial**, **UCL** and **Kings** are but a few to offer these, usually they are free or heavily subsidised. Just go to Google and type in *University Summer Schools London*.

KS3 Resources

Just a reminder that students can find resources for these topics on [Kerboodle.com](https://www.kerboodle.com) and on **Microsoft Teams** in their class pages and general KS3 Science page.

Just follow the pathway below on KS3 Science:



Documents > General > Class Materials > KS3 Revision

KS4 Summer Term Recap

Once again, we have reached another busy and exciting summer term! Our Year 11 students have been working incredibly hard, completing the final stages of their courses and preparing for their GCSE examinations through focused revision and dedicated study. Throughout this challenging and often stressful period, they have demonstrated remarkable resilience, determination, and maturity. We are immensely proud of all they have achieved and would like to congratulate them on their efforts so far. We wish them the very best for their remaining examinations and every success in the next stage of their journey. We look forward to hearing about your future achievements and wish you every happiness and success in your future endeavours.

Biology	Chemistry	Physics
<ul style="list-style-type: none">Unit 4 Genetics & EvolutionUnit 5 Ecology	C9 Organic Chemistry C10 Chemical Analysis C11 Earths Atmosphere	P5 Electricity in the Home P7 Radioactivity P13 Electromagnetism
GCSE Examinations		

Our Year 10 students have also worked exceptionally hard this term as they prepared for their end-of-year assessments. Through their revision and commitment to their studies, they recognise the importance of building strong foundations in scientific knowledge, as well as developing effective revision habits that will support them throughout Year 11 and beyond.

We are extremely proud of the effort, determination and positive attitude they have shown, and we hope they continue to build on this momentum as they move into this important stage of their GCSE journey.



The topics we have covered this term are:

Biology	Chemistry	Physics
B4 Organising Animals and plants B8 Photosynthesis B9 Respiration	C5 Chemical Changes C6 Electrolysis	P8 Forces in Balance P9 Motion P10 Forces & Motion
Year 10 End of year assessments		

Remember there is a huge amount of support materials shared with students on Teams. Please encourage your daughter to access these valuable resources. They are being updated regularly to provide students with all the information they need to succeed.



You can also find great support videos on YouTube, just make sure they are aimed for the AQA examinations:

- **Cognito:** <https://www.youtube.com/@Cognitoedu>
- **Free Science Lessons:** <https://www.youtube.com/@Freesciencelessons>
- **Science Shorts:** <https://www.youtube.com/@ScienceShorts>
- **Fuse School:** <https://www.youtube.com/@fuseschool>

Practising past papers is also highly recommended. Again these links can be found in the Science Team page or in your child's class team as what we call "ExamPro Links". You could also try the following sites:

- **AQA Website:** <https://www.aqa.org.uk/find-past-papers-and-mark-schemes>
You can download a selection of past papers, mark schemes, and examiner reports in PDF format. Use the filters for your specific subject (Biology, Chemistry, Physics, or Combined Science) and tier (Higher or Foundation).
- **Physics & Maths Tutor (PMT):** <https://www.physicsandmathstutor.com/past-papers/>
A popular site that organises AQA GCSE science revision by topic, including notes, revision questions, and past papers.
- **MME Revise:** <https://mmerevise.co.uk/gcse-science-revision/>
Offers AQA GCSE science past papers and specific exam questions organised by topic, complete with mark schemes. They also provide free worksheets and paid predicted papers.
- **Save My Exams:** <https://www.savemyexams.com/gcse/>
Provides AQA GCSE Biology, Chemistry, Physics, and Combined Science exam questions and answers by topic (note: access to some resources may require a subscription).

Other Tips for Using Exam Questions

- **Know Your Specification:** Ensure you are using questions that match your specific course code and tier (e.g., Combined Science Trilogy, Higher Tier).
- **Review Mark Schemes:** Mark schemes are crucial for understanding how to structure answers and gain all available marks.
- **Practice Under Timed Conditions:** Use full past papers closer to your actual exams to practice time management and build confidence. Ask your child about the 3 pen method we promote in class.

Science Article Competition Winners



We know that our students are just amazing, and here is just one reason why: over the next few pages please take a look and a read of the articles/posters submitted by some of our students on all things science, ranging from AI to Neuroscience, to Caffeine and to glow sticks! What a range! Just like our girls!

Thank you so much for the entries received for the Science Newsletter article submission. The quality was top notch! It was difficult to pick winners, but the following girls made stand out entries.

Angelica 8-2 • Dumebi 9-5 • Ella-Rose 8-4 • Hannah 8-5
Janet 7-6 • Maryam 8-1 • Marygold 8-6

Please enjoy their articles...

By ^{Mariam} **WHY IS AI HARMFUL TO THE ENVIRONMENT?**

AI has been causing many problems like illnesses from pollution from power plants and more, and many animal deaths due to problems like melting ice for examples making many polar species lose their habitats.

AI (Artificial Intelligence) means computers imitating human intelligence to make decisions for performing tasks which would typically require human intelligence. e.g. Content Creation, Learning & Research, Healthcare & Science, Automation (Ground detection, self driving features etc).

Even though AI can be useful to complete work, AI can often be inaccurate like answer on Google AI Overview. AI uses lots of water to cool down and approximately 80% of it evaporates as hot vapor into the atmosphere before reaching its atmosphere again. This vapor becomes rain hundreds of miles away, and the process continues many times, distributing water unevenly between different places, leading to climate change far quicker than you think causing many illnesses and much more.

You can save the environment by limiting a. use rubbish waste and plant trees to produce oxygen or for better air breathing and absorb harmful carbon dioxide.

Hannah 8-5



CAFFEINE: HOW IS IT BAD FOR YOU?

Today, caffeine is consumed amongst many young people, whether it is in energy drinks like boost, or coffee. It provides energy and alertness to the body. But the question is, how is it really bad for you? Read on to find out more about this interesting topic.

For starters, your body naturally produces a chemical called adenosine, which acts as an internal sleep battery monitor. The more that is built up, the more tired you feel. But caffeine is almost identical to adenosine, so when you consume caffeinated drinks, the caffeine rushes to your brain and replaces the adenosine. This blocks natural sleep signals, which tricks you into making feel wide awake.

But your brain won't accept this trick. To bypass the block, it grows more places for the adenosine. This makes it so that one can of an energy drink or one cup of coffee isn't enough so, you need more to create that same energy boost.

Now, if you stop drinking that caffeine, your brain is left with many places for the caffeine and adenosine, so your body produces excessive amounts of adenosine creating a major crash of tiredness. This causes many different things to happen.

For example:

- **The Headache** — Caffeine causes blood vessels in your head to shrink. When it leaves your body, the blood vessels come back to their normal size and blood rushes through, causing the headache.
- **Mood Swings** — Your brain stops releasing chemicals that make you happy, like dopamine leaving you grumpy.

It takes a week for your brain to return to normal.

In conclusion, caffeine doesn't supply the energy that you think it does, rather it drains energy instead. Instead, trade the energy drinks and coffee for a glass of water and a good sleep schedule.

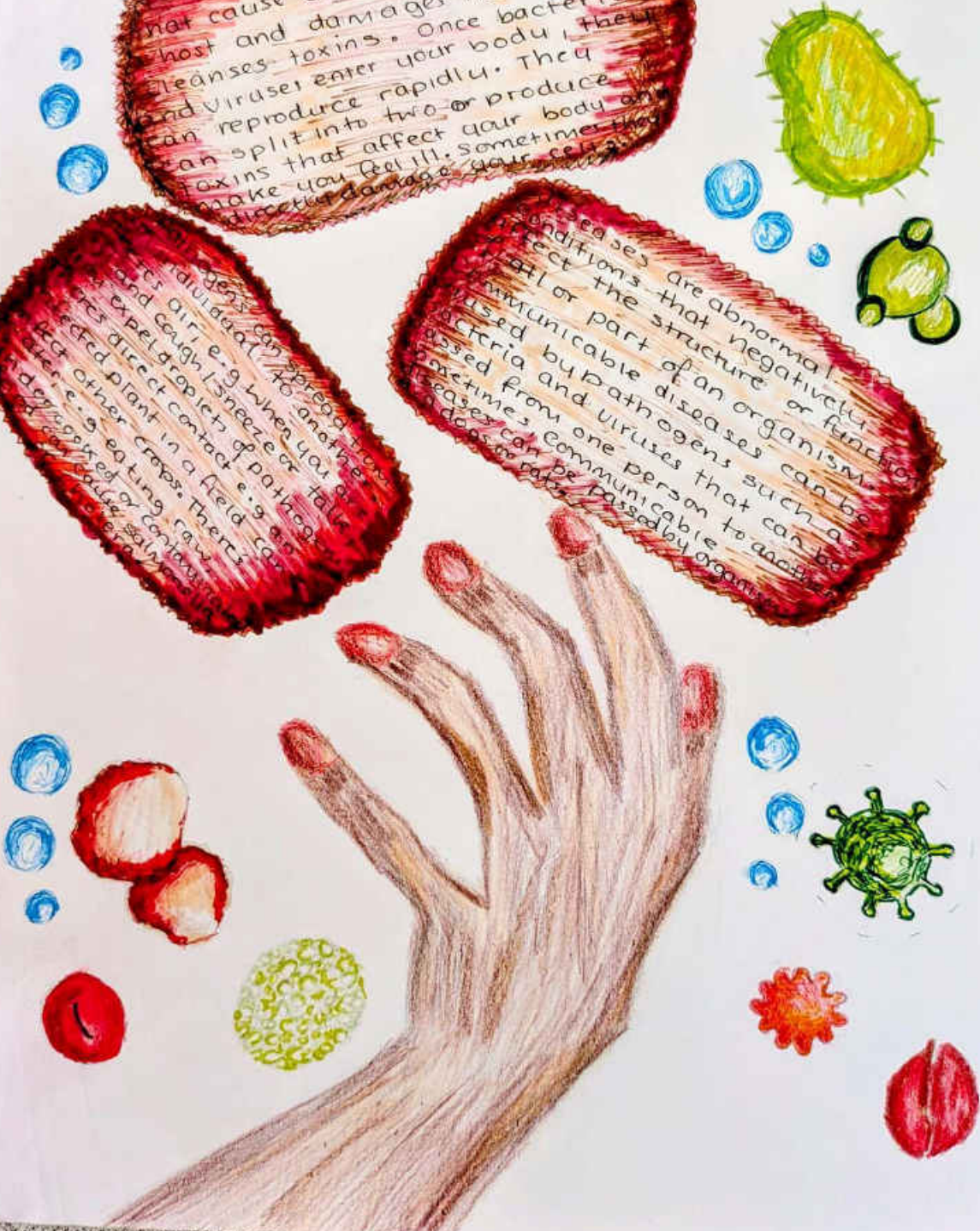
Janet 7-6

PATHOGENS & disease

Pathogens are biological agents that cause disease by invading a host and damages tissue or cleanses toxins. Once bacteria and viruses enter your body, they can reproduce rapidly. They can split into two or produce toxins that affect your body and make you feel ill. Sometimes they can even damage your cells.

Pathogens can spread from one individual to another through air, e.g. when you sneeze or cough, or through direct contact, e.g. shaking hands or touching surfaces. They can also be spread by insects, e.g. mosquitoes, or by other plants in a field, e.g. through soil or water. They can also be spread by animals, e.g. through their droppings.

Diseases are abnormal conditions that negatively affect the structure or function of an organism. They can be caused by pathogens such as bacteria and viruses that can be passed from one person to another. Some diseases can be passed by organisms that do not have a pathogen.



Dumebi 9-5

ARTICLE BY ELLA-ROSE 8-4

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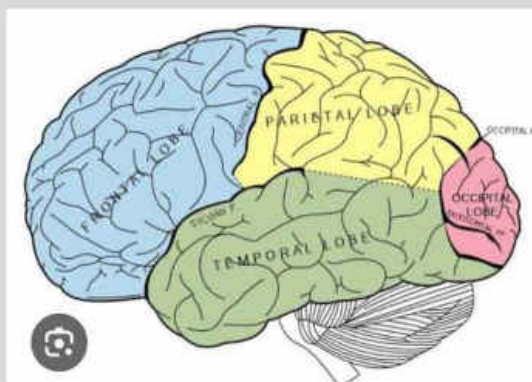
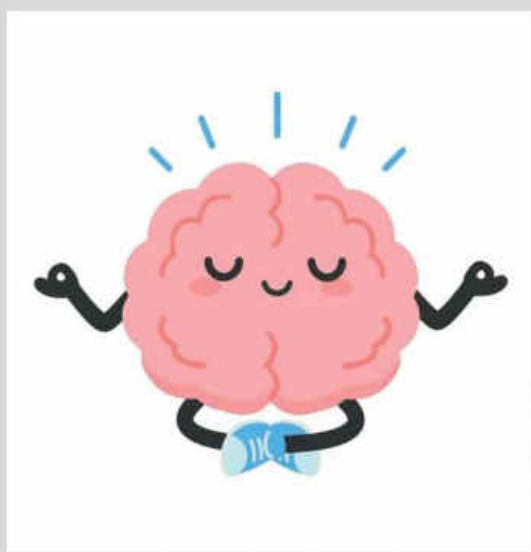
LETS TALK NEUROSCIENCE

So have you ever wondered why you react in such a way or how the human brain functions..? Then have a read on about the different parts of the brain and its functions!

the first part is the frontal lobe or ""prefrontal cortex" this is a vital part of the brain that plays a huge role in our cognitive and the behaviour.

next is the temporal lobe which is a MAJOR part that is located by the ears . Which you could probably guess by now that is responsible for processing auditory signals (information) and language comprehension (understanding).

Then, we have our parietal lobe which is responsible for processing our sensory information (touch , feel , pain and temperture) and our spatial awareness (position, size and shape of objects) and also Navigation!



And Lastly is the occipital Lobe which is located at the very back of the brain. This parts main function is to process information and it is very small. primarily responsible for interpreting visual stimuli, including color

CAREER PATHWAYS

Dealing with the brain can be very difficult and challenging so this is why we have people with special roles (jobs).

Key roles include...Neuropharmacologists (special scientists that study how drugs and medicine interact with the nervous system) Neurosurgeons (highly trained doctors who preform surgical procedures on The brain - example tumors-) and they are of course many more!

Which colours attract the brain..?

Did you know that your brain actually has a certain

preferenc towards different colours?

For example high striking colours
red : triggers the sympthetic system
yellow : the most visiable colour and
easiest colour for the human eye to
catch

Ella-Rose 8-4

Global warming is causing Earth's ice caps, glaciers, and sea ice to melt at an accelerating rate due to rising air and ocean temperatures. This rapid loss of ice drives global sea-level rise and disrupts critical ocean and weather circulation patterns worldwide.



2009

In 2009, there were about 20,000 and 25,000 individuals worldwide.

Polar bears, particularly in western Hudson Bay, experienced a relatively late sea ice breakup, allowing them to remain on the ice hunting longer than in previous decades.

In 2013, there were about 22,600 - 32,000 individuals.



2013

hunting platform and forcing them to travel faster ice drift.

In 2013, there were about 22,600 - 32,000 individuals.

Polar bears faced significant challenges as Arctic sea ice reached a new record low, significantly reducing their hunting platform and forcing them to travel faster ice drift.

In 2017, there were about 26,000 and 30,000 individuals.

Did you know? That you can actually detect their DNA in the snow!



2017

ARTIFICIAL INTELLIGENCE

You all may know AI as fun, helpful, creative but do you know the dark side of AI.



2015

In 2015, there were 26,000 individuals.

The massive energy demand of AI systems rely heavily on fossil fuels, which speed up climate change and melt Arctic sea ice. This ice is essential for polar bears to hunt seals. Without it, they struggle to find food, causing their bodies to waste away.

AI harms polar bears in 2 ways through increased energy driven climate change, and by helping them through improved conservation technology.

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January 21/05/26
MARYGOLD 8-6

Marygold 8-6

GLOW STICKS: HOW DO THEY WORK?

Have you ever wondered how a simple plastic tube can light up the night without any batteries or heat? The secret lies in a fascinating process called chemiluminescence.



Inside a glow stick, there are actually two separate compartments. The outer plastic tube contains a solution of phenyl oxalate ester and a fluorescent dye. Floating inside that liquid is a small, fragile glass vial filled with hydrogen peroxide. When you "crack" the glow stick, you are breaking that glass vial, allowing the two chemicals to mix for the first time.



This mixture creates a chemical reaction that releases energy. Instead of releasing that energy as heat (like a fire would), it transfers the energy to the dye molecules. The dye molecules get "excited" and then release that extra energy as beautiful, glow light.

Try putting it in the freezer! It will last longer, but be dimmer. Science truly can brighten up the dark!

Angelica 8-2

AI...

THE ENVIRONMENTAL IMPACT

AI, AI and more AI – it has taken over our world! If you have a question, forget going to the library, forget asking your teacher, and don't even bother even reading articles, why would you? AI uses an average 3 seconds to deliver an answer to your screen and you are ready to go... Sounds great right! Even though AI can be very helpful, it can hurt the environment by warming up the earth. This is known as climate change.

Huge computers use up massive amounts of electricity in buildings called data centres. They use up big amounts of fossil fuels and with thousands of people using it daily, this means these computers must stay running all the time. This is bad for polar bears because they need ice to hunt their prey and if the planet gets hotter the ice starts to melt. Scientists are worried that polar bears will become endangered soon if the situation worsens

In my opinion, I think people should still be able to use AI moderately, as companies could use renewable sources of energy such as wind and solar panels. If as a planet we work together, we can protect polar bears while enjoying our tech.

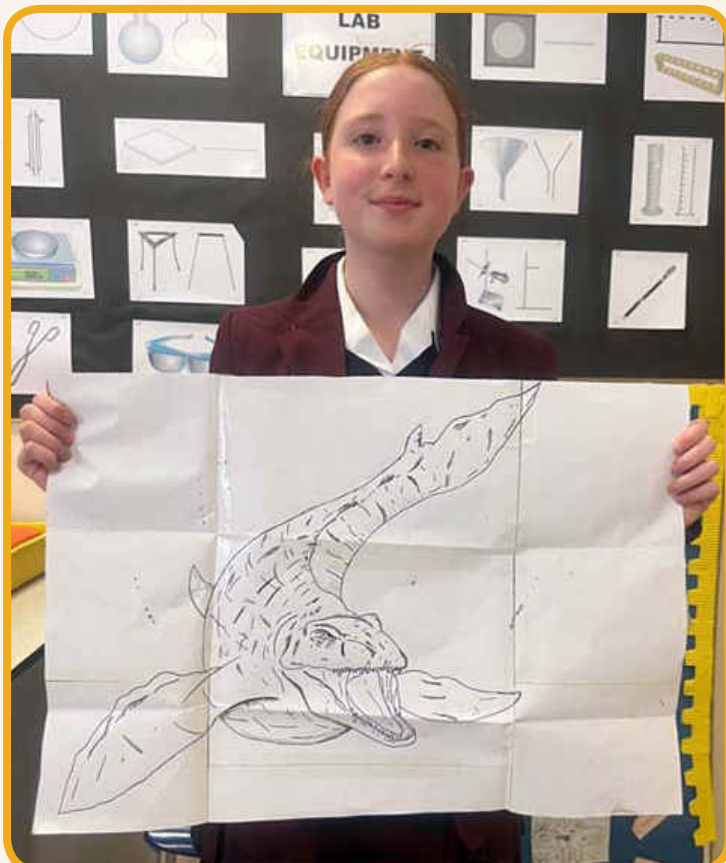
Maryam 8-1

Science Showcase

Did we tell you that our students are amazing?!

Well, if you don't believe us, take a look at some of these excellent examples of class and homework from our girls. We hope you enjoy reading through them. Well done to the girls whose work has been featured from 7-5, 8Y3, 8X4 and 9X2. Your teachers were so impressed with the quality of your work this term. Keep it up!

EXCITING EXTINCTION!



Florence 8-1 presents her artwork of the extinct marine species, the Mosasaur.



Ece 8-1's informative and colourful study of the Therizinosaurus.



8X4 students brought extinct creatures roaring back to life through their incredible artwork!

Their presentations were not only engaging and imaginative, but also packed with fascinating facts — teaching us all something new about the past. It was a truly exciting exploration of extinction, creativity and discovery.

Well done, girls!

THERIZINOSAURUS

- Mongolia

- Long neck
- a small head
- 1 large round body

• They are 10m long.

• Therizinosaurus is one of the most unusual dinosaurs ever discovered. Its name means 'syrthe Lizard', referring to its extremely long curved claws. It lived during the late Cretaceous period, around 70 million years ago.

Unlike many large dinosaurs, it did not hunt other animals. Instead it was plant eater which makes its scary appearance even more surprising.





vaccines are made by growing viruses or bacteria in a laboratory. these microorganisms are either weakened or deadened. so it is harmless. you get shot with it, but don't worry, it's not as harmful.

NO.1 - VACCINE INJECTED

Told you, anyways. **NO.1 - VACCINE INJECTED** - vaccines go through 3 steps to get to the body.

Hello there! My name is HOQAISA, SAJOE! I am a vaccine. I heard there is a disease going around and you could possibly get it. Oh no, I heard it was deadly too. But, don't fear! I am here to help. You might be wondering... how can I, HOQAISA, let me just say vaccine, can help? Let turn the page and see... go on then. I'm already on the next page waiting.



white blood cells are the immune system's produced in bone marrow to defend the body against bacteria, viruses, fungi and parasites. The white blood cells see this piece of the germ and know it is not supposed to be there. It kind of reminds me of an intruder breaking into a house. Guards know they are not supposed to be there so they guard them.

NO.2 - WHITE BLOOD CELLS RECOGNISE THE GERM

WHY DO WE NEED VACCINES?

ALL IMAGES VIDEOS

VACCINES HELP TO GET THEM FIND.

Vaccines are super important because they train your body to fight off diseases without actually getting sick.

They have been one of the greatest success in medicine. They allow us to prevent some of the worst diseases in the world.

WHY COVID-19?

Check here for more info.

Wanted to get vaccine check here

or call 07 2386 7851

your body makes "memory cells" that remember how to fight that germ in the future.

NO.4 - MEMORY CREATED

NO.3 - DEFENSE SYSTEM STRONG

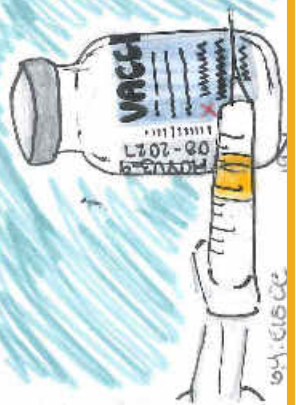
oops... kind of spotted the spy. anyway, these white blood cells start making special fighters (antibodies and T-cells) to attack the germ!

NO.5 - PROTECTS FOR THE FUTURE

if the real disease/germ ever attacks, your white blood cells already know how to deal or quickly, so you don't get sick.

When that ends a journey but at least vaccines are very important and how they could protect you! Anyways, see you next time.

THE VACCINATION STORY THE END



THE GREAT ALEXANDER FLEMING (1881-1955)

22
1991

Fleming discovered lysozyme, an enzyme that helps fight bacteria, after noticing it in mucus and tears.



During WW1, he served in the Army Medical Corps and studied infections in wounded soldiers.



1914 ~ 1918

1945



Fleming received the Nobel Prize in Physiology or Medicine alongside Howard Florey and Ernst Boris Chain for the discovery and development of penicillin.

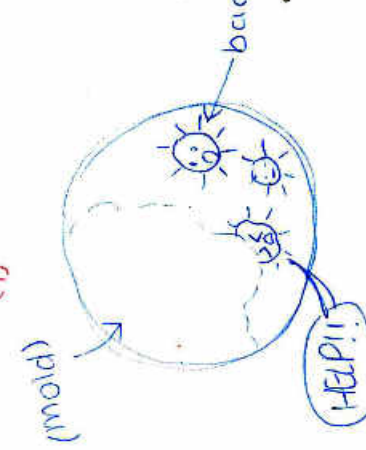
1881



Alexander Fleming was born on August 6th in Lochfield Scotland.



1928
(9)



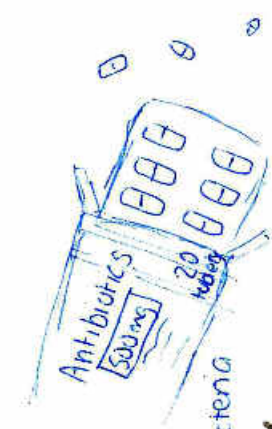
Fleming made his famous discovery of penicillin when he observed mold killing bacteria in a laboratory dish.

Fleming graduated from St Mary's Hospital Medical School in London with a medical degree.



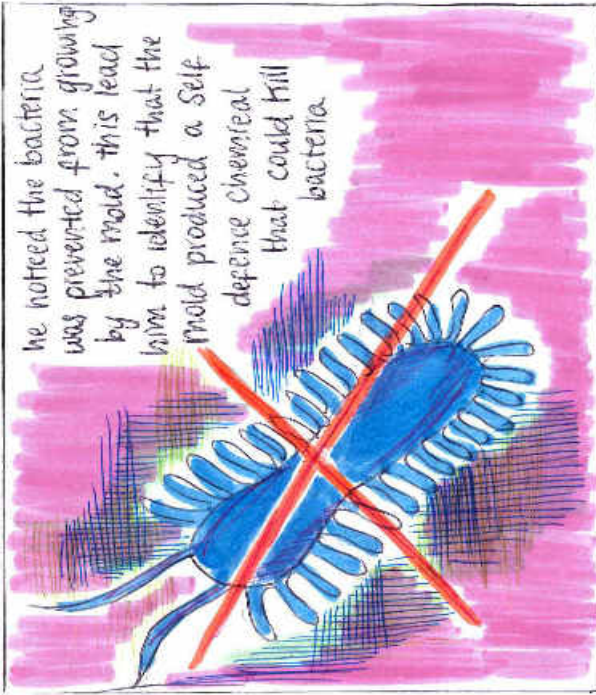
1906

1940s

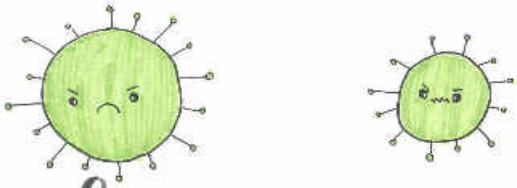


Scientists developed penicillin when they observed mold killing bacteria ~~into~~ into a widely used antibiotic, saving millions of lives during WWII.

HOW WAS PENICILLIN DISCOVERED



Claudia 9X2



Alexander

fleming

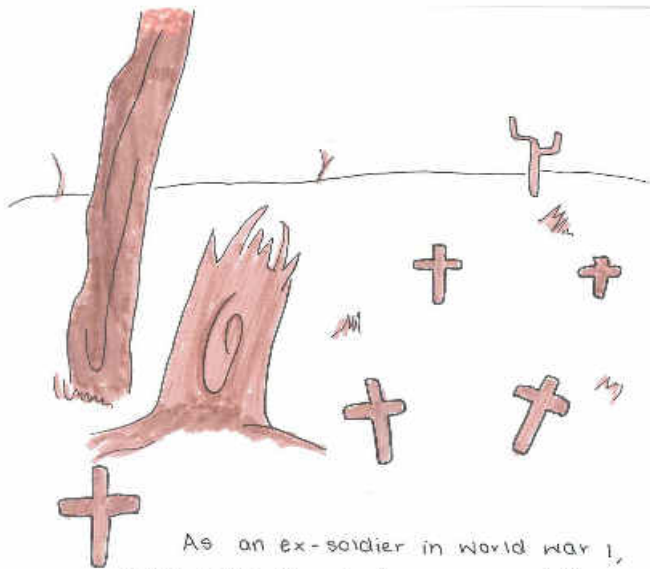
discovery of penicillin

Children's illustration book
9-14+

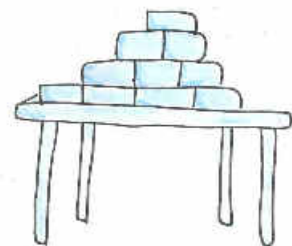
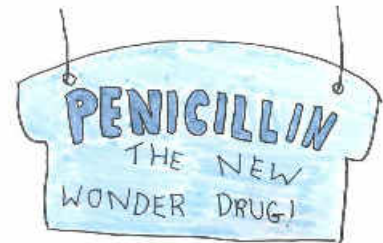


One day, in 1928, Fleming came back from his holiday and found something peculiar. What he found was some cultures of the *Staphylococcus aureus* bacteria which he'd meant to throw away, but had died. Instead of throwing them away, he stopped to think what might have caused some of his sample to die and the rest to live. After a lot of time and effort in his lab, Fleming worked out that some of his sample had been affected by a particular fungus - which he then managed to grow himself.

author : Alaina
illustrator : Alaina



As an ex-soldier in World War I, he'd seen hundreds of soldiers die due to bacterial infection, and he figured that, if the fungus could kill bacteria on his bench, it might also kill bacteria in wounded soldiers.

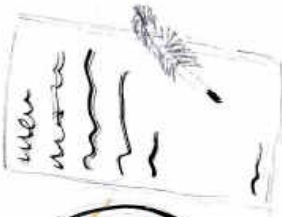


And he was right. Having renamed his mould juice penicillin, it was ready for public consumption in time for the next war, on D-Day.

Alaina 9X2

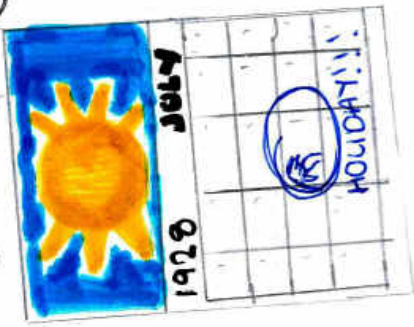
ALEX FLEMING (1881-1955)

Fleming was a Scottish physician and microbiologist best known for discovering penicillin in 1928, the first world's antibiotic, which revolutionised medicine and saved millions of lives.

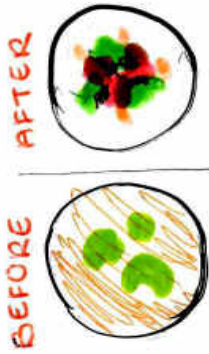


One day, Fleming was researching how bacteria can be killed by growing them on agar plates.

He had left a number of plates when he went away on holiday.



When he returned, he found mould growing on the plates.



He noticed that the mould seemed to kill the bacteria.

WHERE DID THE BACTERIA GO?



The mould did this by producing an antibiotic substance.

- ANTIBIOTIC SUBSTANCE



Fleming called this substance...

PENICILLIN

THANKS FOR THE NAME!

I WILL CALL YOU PENICILLIN!



Fun fact: Penicillin was discovered on accident.

Without penicillin, we wouldn't have effective treatment for bacterial infections like strep throat, ear infections, skin infections and sexually transmitted infections. All thanks to Alex Fleming, we can treat all of these now!

Arctic Wolf

Where do they live?

Arctic wolves live in the cold Arctic regions of northern Canada and Greenland, especially on tundra and icy islands.

How do they manage to survive?

Arctic wolves survive by having thick white fur for warmth and camouflage, small ears to reduce heat loss, and strong teamwork skills that help them hunt animals like musk oxen and arctic hares in freezing conditions.

What do they eat?

Arctic wolves mainly eat musk oxen, arctic hares, caribou, lemmings, and sometimes seals or birds when food is scarce.

How long do they live?

They usually live 7-10 years (about) in the wild, though some can live longer in protected environments like zoos.

How do they interact with humans?

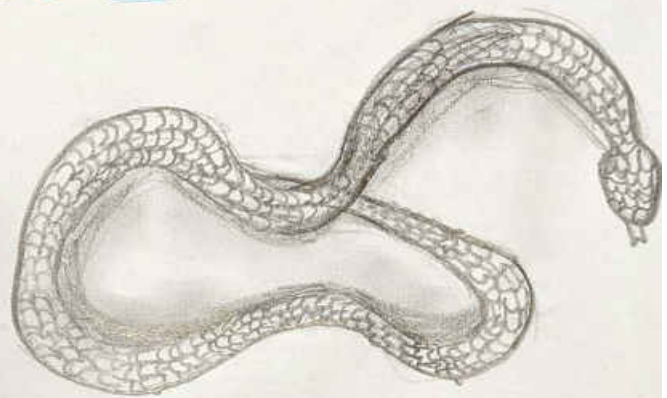
Usually Arctic wolves rarely interact with humans because they live in remote arctic areas, and they are usually shy and avoid people rather than acting aggressively.



That's a
→ arctic
wolf.

TIBETIAN HOT-SPRING SNAKE


They live in exclusively high altitudes on the Tibetan Plateau. They rely on geothermal hot springs to survive freezing temperatures.



Interesting Facts:

- ♥ The longest one found is 2.55m (they are small)
- ♥ Harmless and friendly
- ♥ Critically endangered
- ♥ Extraordinary Genetic Mutations.
- ♥ Unusual Reproduction and diet shifts.

These snakes feed on amphibians and fish.



High Himalaya Frog
(This snake eats this)

When was the first one ever discovered?

It was first found in 1907 by the British physical and herpetologist Frank Wall.

ENDANGERED TWO-HUMPED WILD CAMEL

Where do they live?

These camels other known as *Camelus ferus* live in only four isolated, arid pockets of The Gobi and Taklamakan deserts.



FUN FACTS!

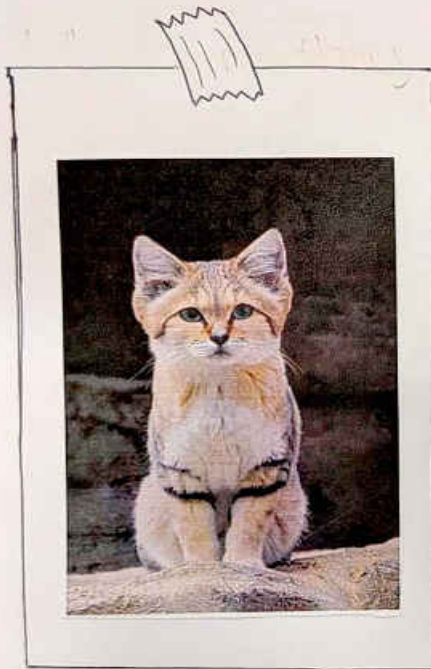
- Camels are herbivores! so they only eat things like coarse grass and thorny shrubs!
- Camels like the *Camelus ferus* typically live between 30 - 50 years in the wild!
- Camels often form affectionate bonds with their caretakers or owners but they can be occasionally aggressive or wilful if they feel threatened!

how do they survive in the desert?

Camelus ferus camels survive in it's habitat through many adaptations like having fat-filled humps help them get more energy if food and water is scarce.

SAND

Cats



Where do they live?

Sand cats, (or *Felis margarita*), endure the harsh, dry conditions of the arid deserts of North Africa, the Middle East and Central Asia. Roaming in these stony, sandy, vast planes, these felines are used to the temperatures reaching 80°C in the summer, but can drop to -0.5°C in the winter. This means sand cats need ways to cool down, and keep warm!



Lifespan

In the wild, they can live 6-8 years but in captivity, around 12-15 years

How do they survive?

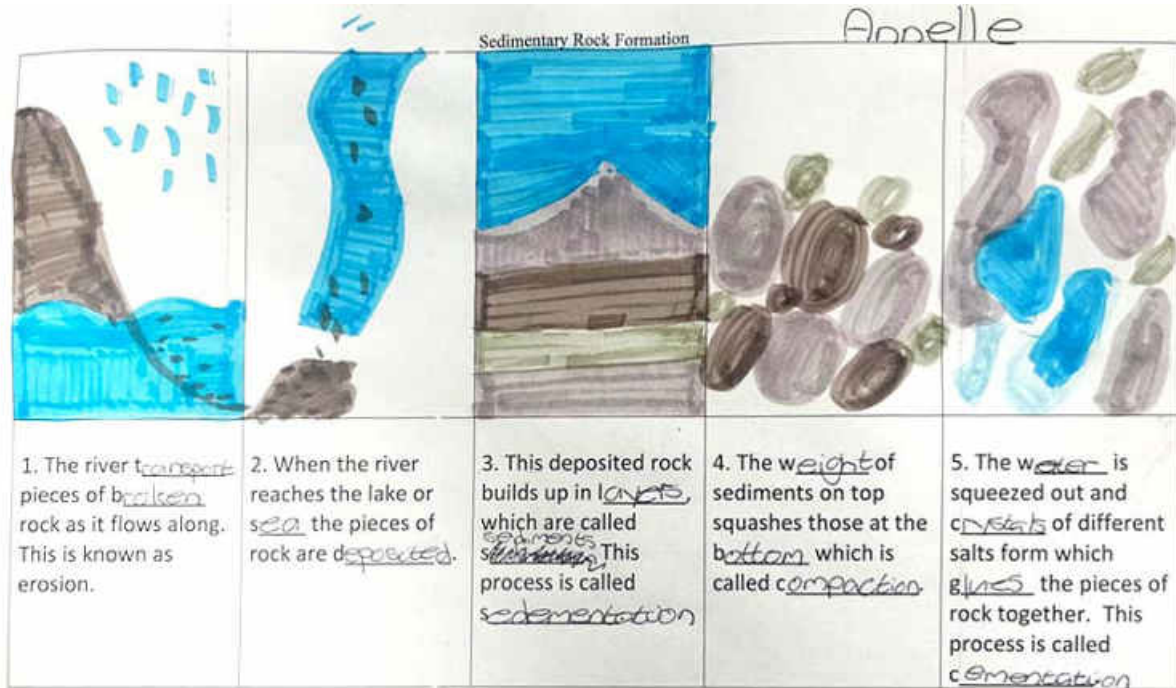
These little creatures have adapted perfectly to their habitat. The thick fur protects them from extreme temperatures in winter (to keep warm) and in the summer (to protect sensitive pads from burning sand). To regulate heat, sand cats pant and take refuge in shady areas. They can go long periods without food or water and have fur-lined nostrils to filter out sand to protect their respiratory system in dusty plain plains. They also have large greenish-yellow eyes that give them excellent night vision because they hunt in the dark at night when it is cooler. Their body length is 39-52 cm.

Diet

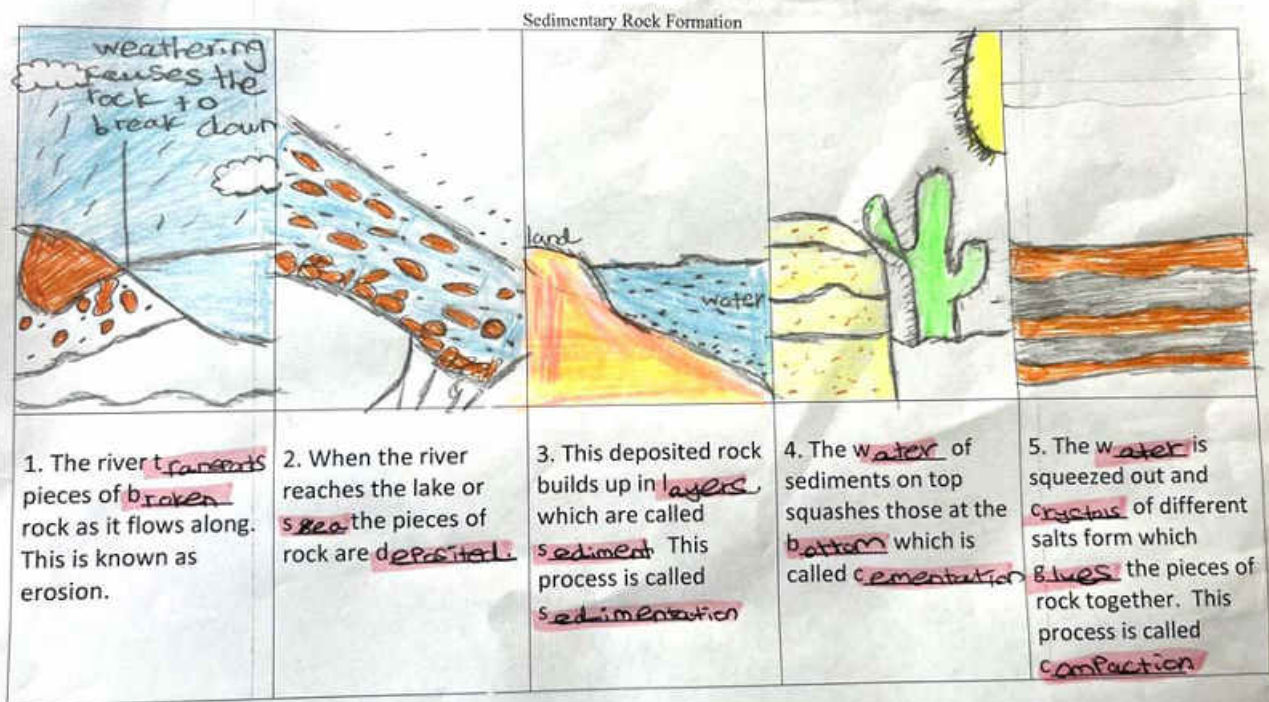
70% of their diet is small desert rodents, small birds, insects, reptiles and sometimes even venomous creatures like Cobras and Scorpions!

COMIC STRIPS: SEDIMENTARY ROCK FORMATION

8Y3 students brought geology to life by turning the story of sedimentary rock formation into vibrant comic strips. From layers of sand and silt to the powerful forces that press them into stone, their creative work transforms a scientific process into an engaging visual journey – proving that learning rocks when imagination takes the lead. Well done, girls!



Annelle 8Y3



Asenat 8Y3

COMIC STRIPS: SEDIMENTARY ROCK FORMATION

Sedimentary Rock Formation

<p>1. The river <u>transports</u> pieces of <u>broken</u> rock as it flows along. This is known as erosion.</p>	<p>2. When the river reaches the lake or <u>sea</u> the pieces of rock are <u>deposited</u>.</p>	<p>3. This deposited rock builds up in <u>layers</u>, which are called <u>sediment</u>. This process is called <u>sedimentation</u>.</p>	<p>4. The <u>weight</u> of sediments on top squashes those at the <u>bottom</u> which is called <u>compaction</u>.</p>	<p>5. The <u>water</u> is squeezed out and <u>crystals</u> of different salts form which <u>glues</u> the pieces of rock together. This process is called <u>cementation</u>.</p>

Dea 8Y3

5119-R050

Sedimentary Rock Formation

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Ella-Rose 8Y3

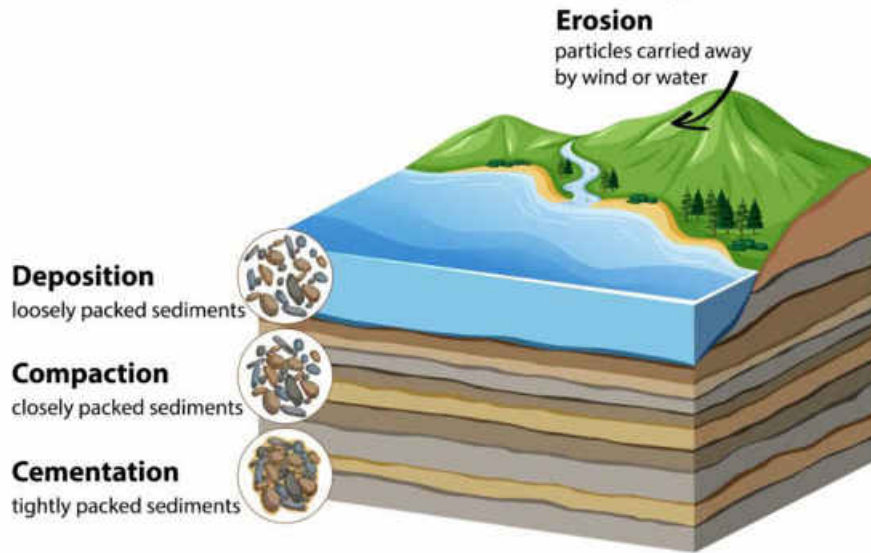
COMIC STRIPS: SEDIMENTARY ROCK FORMATION

Sedimentary Rock Formation

				
1. The river transports pieces of broken rock as it flows along. This is known as erosion.	2. When the river reaches the lake or sea the pieces of rock are deposited.	3. This deposited rock builds up in layers which are called sediment. This process is called sedimentation.	4. The weight of sediments on top squashes those at the bottom which is called compaction.	5. The water is squeezed out and crystals of different salts form which glues the pieces of rock together. This process is called cementation.

Ella-Rose 8Y3

Formation of Sedimentary Rocks



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