P.6/5
Cross Curricular Learning

#stayhomestaysafe #p6/5areawesome

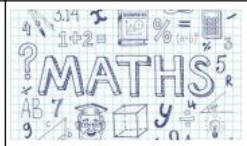
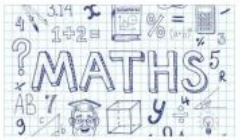
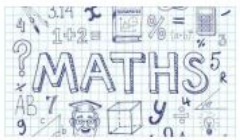
P.6/5
Cross Curricular Learning
What to expect!

- At the beginning of each week we will upload 3 PowerPoints into the Home Learning 2021 folder on teams. Literacy, Numeracy and General.
- Teachers will be on hand to support throughout the school day.
- Teachers will host daily live meets at 9.10am and 1.05pm where they will talk through your task. These will be for help, support, check ins and fun will take place! Feel free to join whenever you can.
- You can work through the activities at your own pace, choosing activities you would like to complete ☺

#p6/5areoutofthisworld

Suggested Timetable

P6/5 Home Learning Suggested Timetable

	9:00-10:30am	Break 10:30-11am	11am-12:30	Lunch 12.30 -1:00	1.00-2.00	2.00-3.00
Monday			 		Human Body	
Tuesday			 		Mary Queen of Scots	
Wednesday			 		Human Body	PE
Thursday			 		RME/French	
Friday	 		ICT		Mary Queen of Scots	PE

Your daily lives are at 9:10am and 1:05pm everyday!

1.3.21 – Science – The Human Body

Starter -How well do you know your bones?

There are twelve pairs of this type of bone. They form a cage to protect the heart and lungs.
I am the _____.

This bone protects the brain from getting damaged.
I am the _____.

This bone is large and is a frame protecting the kidneys. The bones in the legs are also attached to this bone.
I am the _____.

I am made up of lots of smaller bones. I help you to pick things up.
I am the _____.

I am the largest bone in the body. I am in the leg.
I am the _____.

femur ribs cranium phalanges pelvis

1.3.21 – Science – The Human Body

LI: To discuss some common problems of bones and how their incidence can be reduced.

If you need a recap of what we have learned so far, click here for a reminder:

https://www.bbc.co.uk/bitesize/clips/ztfnvcw

Today we are going to research common problems we have with bones. Can you think of any issues/problems people encounter with their bones?

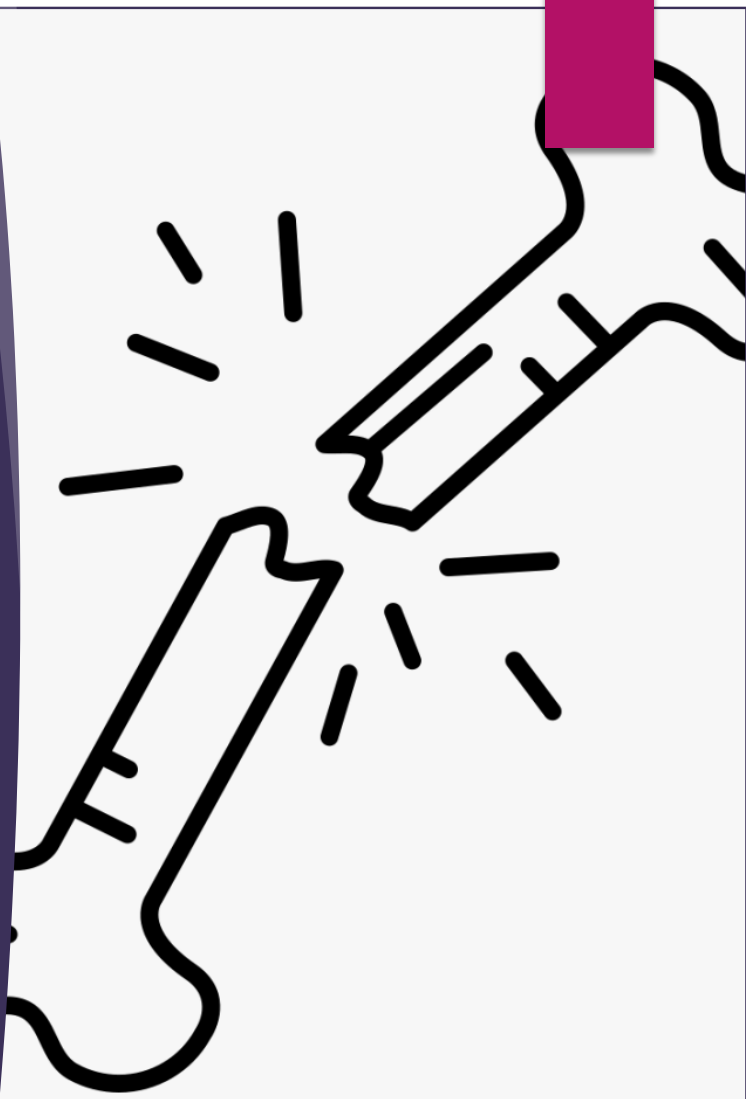
Bone Fractures

- First, we are going to look at bone fractures/broken bones.
- Have you ever broken a bone or do you know someone who has?
- What happened? How did you feel? What was involved in your recovery process?

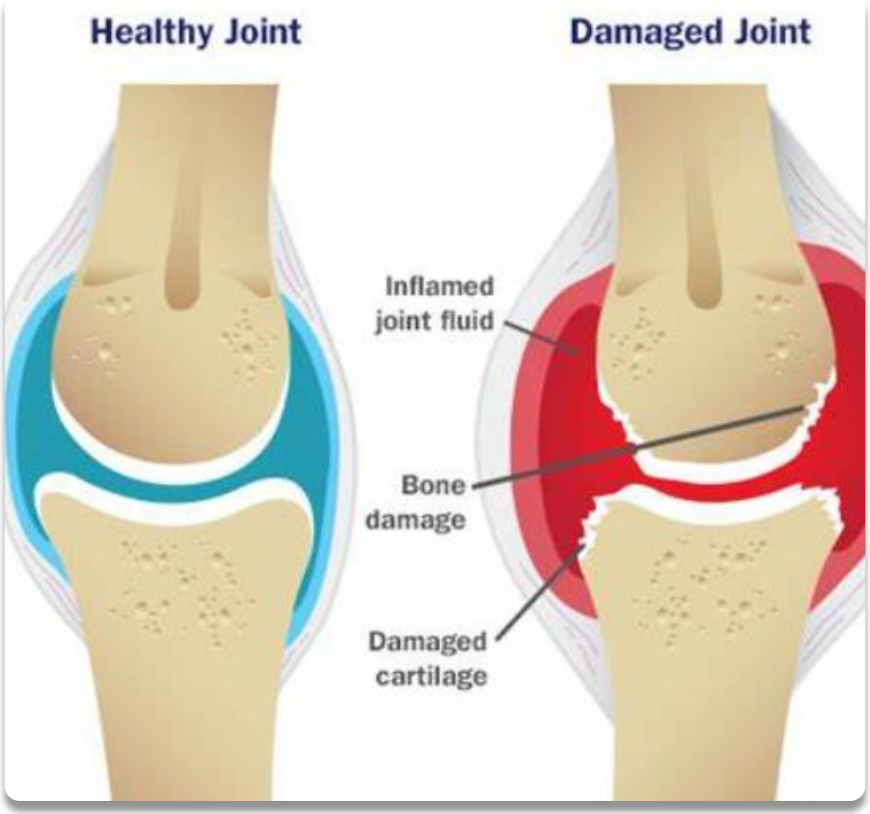
- Most broken bones are caused by falls or by being in some sort of accident.
- There are many different types of fractures.
- When you break a bone there will often be bruising and swelling. A doctor will order an X-ray to determine if the bone is broken.

Bone Fractures

- Most broken bones are treated with a cast, splint or brace. Why do you think this is needed?
- In the first few days after a fracture, the body forms a blood clot around the broken bone to protect it and delivers the cells needed for healing.
- Then, an area of healing tissue forms around the broken bone. This is called a callus. It joins the broken bones together. It's soft at first, then gets harder and stronger over the following weeks.
- Have a think about what you could do to help the recovery of a broken bone.
- What precautions could you take to minimise the risk of it happening again?

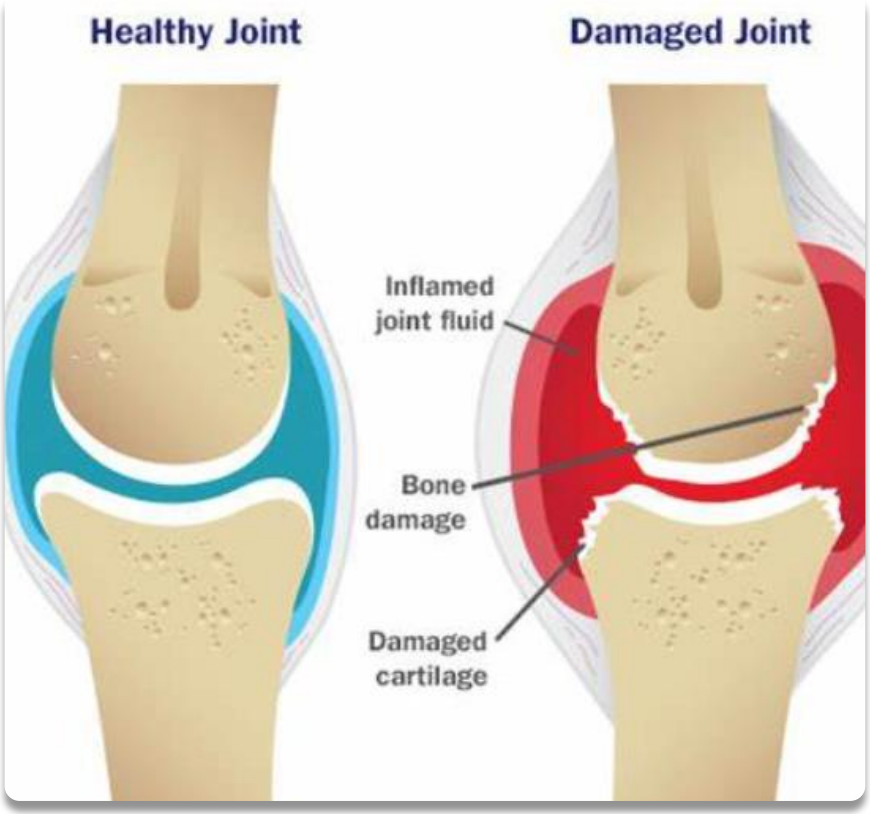


Arthritis



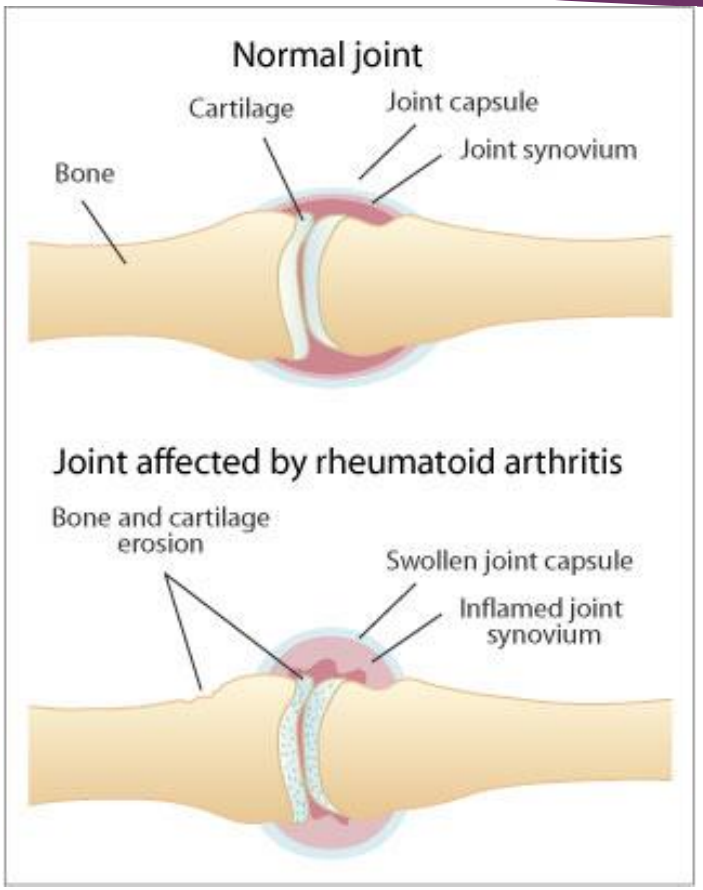
- **Arthritis** is a word used to describe pain, swelling and stiffness in a joint or joints. Arthritis isn't a single condition and there are several different types.
- Around 10 million people in the UK are thought to have arthritis. It can affect people of all ages, however, some forms of arthritis are more common in older people.
- There is no cure for arthritis, however, taking painkillers and anti-inflammatory drugs can help reduce the symptoms of arthritis and allow people to stay active. Keeping active will also reduce pain, stiffness and swelling.

Osteoarthritis



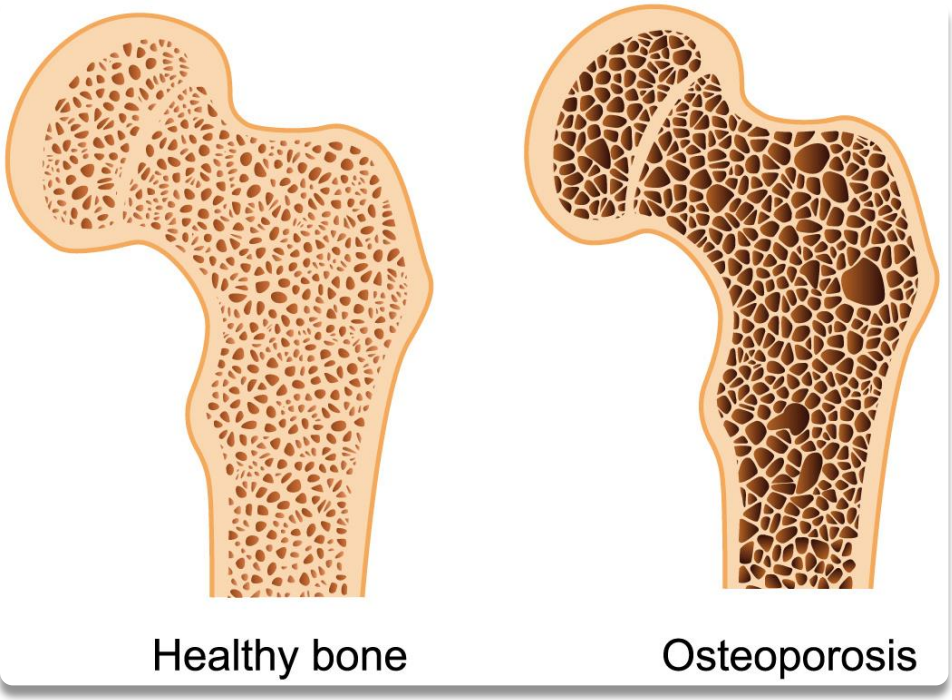
- **Osteoarthritis** is the most common type of arthritis.
- As part of normal life, your joints are exposed to a constant low level of damage. In most cases, your body repairs the damage itself and you do not experience any symptoms.
- But in **osteoarthritis**, the protective cartilage on the ends of your bones breaks down, causing pain, swelling and problems moving the joint. Bony growths can develop, and the area can become red and swollen as the bones rub against each other.

Rheumatoid Arthritis



- **Rheumatoid arthritis** is another common type of arthritis.
- It is an autoimmune disease.
- This means your immune system (which usually fights infection) attacks the cells that line your joints by mistake, making the joints swollen, stiff and painful.
- Over time, this can damage the joints, cartilage and nearby bone.

Osteoporosis



- **Osteoporosis** is a health condition that weakens bones, making them fragile and more likely to break. It develops slowly over several years and is often only diagnosed when a fall or sudden impact causes a bone to break (fracture).
- Losing bone density is a normal part of ageing, but some people lose bone density much faster than normal. This can lead to **osteoporosis** and increases the risk of broken bones.
- There are ways of keeping your bones healthy and preventing **osteoporosis**. You can find out more about them during our task.

Task: Choose one common bone problem to research and gather information on to create a Fact File.

Things to include in your Fact File:

Name of Bone Problem:
(Choose from Bone Fractures/Arthritis/Osteoporosis)

Brief Description of the Problem:
(What is it? What issues does it cause?)

Cause of the Problem:
(Why does it happen? What causes it?)

Treatment of Problem:
(How is it treated? Can people recover from it? Is there a cure?)

Prevention of Problem:
(What can people do to minimise the risk of the problem occurring?)

Diagram of Problem:
(Can you draw a diagram of what the problem looks like?)

Feel free to present your Fact File in any way you would like. Remember to include all the important points and try and write it in your own words.

Here are some useful links to get you started:

- **Bone Fractures:**

https://www.youtube.com/watch?v=FRsuzrYSXII&feature=emb_logo

https://kidshealth.org/en/kids/broken-bones.html

- **Arthritis:**

https://www.youtube.com/watch?v=jeOZixiLGqY (Start watching at 20s – 1m20 for the part on Arthritis ☺)

- **Osteoporosis:**

https://www.youtube.com/watch?v=fE2zcs2fYrg

https://www.nhs.uk/conditions/osteoporosis/

Optional STEM Challenge 3 - Exploring Movement

- **Construct a model arm to see how bone and muscle work. Consider:**
  - How well does cardboard represent bone?
  - How well elastic represent muscle?
  - How well does the paper fastener represent a joint?

Optional STEM Challenge 3 - Exploring Movement

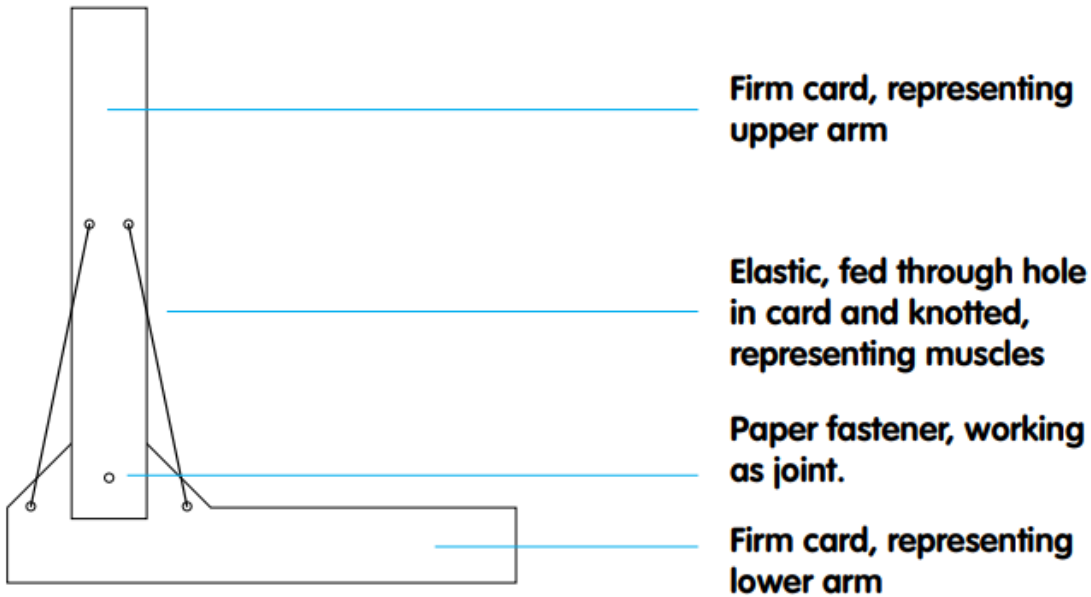
Exploring the body

Resources required:

- [ ] two pieces of stout card
- [ ] two pieces of elastic
- [ ] a paper fastener

Exploring movement

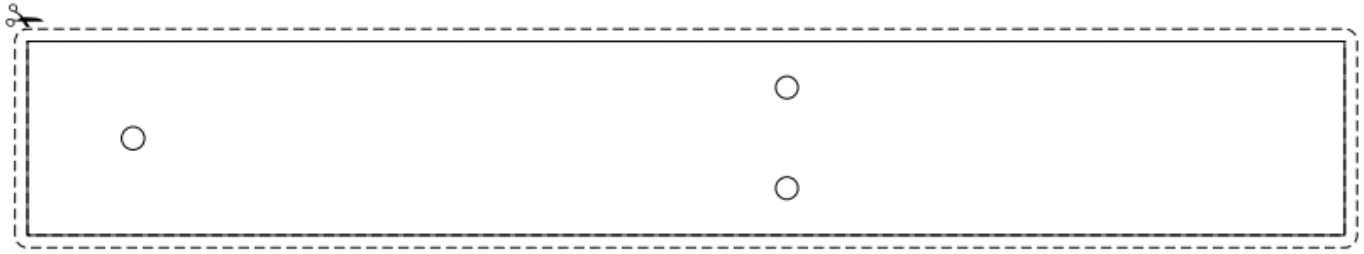
Where one bone meets another we have a joint; these are essential for movement. Where there are joints, muscles control the movement. However, muscles can only pull on a bone; they can't push it. They can only apply a force in one direction. In this activity you'll be making a model of the elbow joint and seeing how muscles make the lower arm both bend and straighten. When you've assembled the model arm, it will look like this:

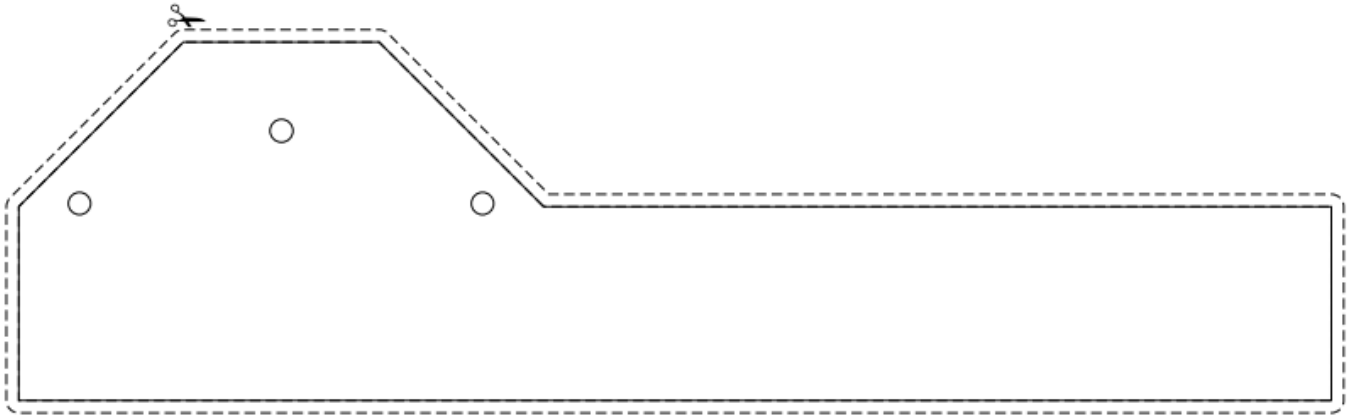


Optional STEM Challenge 3 - Exploring Movement

1. You'll need the two shapes below cut out of card. Make holes where the black holes are.
2. Then put the pieces of card over each other so that the larger holes line up. Push the paper fastener through the holes and open up the tabs. You should now have a jointed arm.
3. Now push one of the pieces of elastic (a rubber band cut will work well) through one of the small holes and tie a knot so it can't come back out again. Then feed the other end through a hole in the other card (look at the picture of the completed arm to see which one) and tie a knot in the other end so it can't come out either. Repeat with the other piece of elastic. You might need to adjust the lengths so that both are gently taut.
4. Compare your model to a picture of the elbow joint. See what you have made and how it compares with the actual joint. Feel your upper arm and identify the bones and muscles in your own arms. Feel which muscles are tensed when you raise your lower arm and force your lower arm down.

Optional STEM Challenge 3 - Exploring Movement





2.3.21 and 5.3.21 - IDL
Mary Queen of Scots

- L.I. – To create a personal research project on the life of Mary Queen of Scots.
- Read the following slides to gather some important information on Mary Queen of Scots.

Mary Queen of Scots

Who was she?

- Mary was the queen of France and Scotland in the 16th Century. She also had a right to become the queen of England.
- She was related to the Tudor royal family. King Henry VIII was her great uncle.
- She married three times and had one son who became King James VI of Scotland and King James I of England.
- She was executed for plotting against Elizabeth I.

Early Life

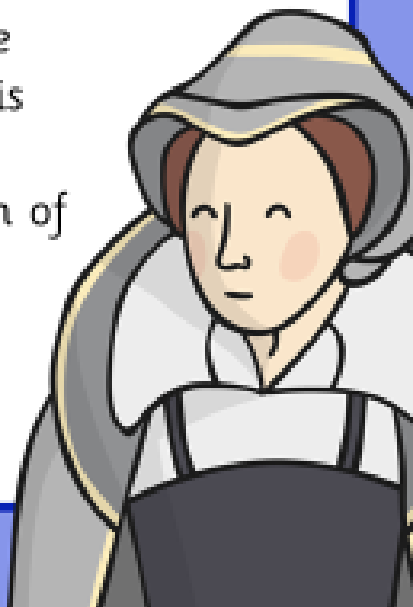
- Mary was born in Scotland on the 8th December 1542. She was the daughter of King James V of Scotland and Mary of Guise.
- Her father died soon after Mary was born, making Mary the Queen of Scots when she was only a baby.
- Mary's mother knew that her daughter would need to marry. King Henry VIII wanted Mary to marry his son Edward. Many Scots hated this idea, as it was Henry's idea to rule Scotland as well.

- Mary's mother was French, so it was decided that Mary should marry a French prince. France and Scotland were allies (friends).
- This made King Henry angry, and when he sent an English army to Scotland, 5 year old Mary was sent away in a ship to France.

Queen of France

- When Mary lived in France she learned to become a princess. She learned how to speak Italian, Spanish and Latin. She could speak French very well.
- Mary wrote poetry and loved music and dancing. She learned to sew and was very good at needlework. In her spare time she went hunting and horse riding.
- Mary grew up with Prince Francis, the son of the French king. Francis was a year younger than Mary.
- Mary and Francis were married in 1558. Mary was 15 and Francis was 14. This was the year when Elizabeth I became queen.

- In 1559 the king of France was badly injured while jousting. He died soon after. This meant that Francis became the King of France.
- Mary was now the Queen of France and the Queen of Scotland.



Returning to Scotland

- After only a few months of being king, Francis became ill of an ear infection. He died on the 15th December 1560.
- Mary's mother had also died. Mary did not know what to do, and she was very sad, so she returned to Scotland.
- Scotland was very strange to Mary. She spoke French and could not understand the Scots. She went to live in the Holyroodhouse Palace in Edinburgh. Her mother and father made the palace like a French castle. Mary was very happy here.
- The preacher John Knox tried to persuade Mary to become a Protestant, but she refused as she was a Catholic.

- In England, Elizabeth I refused to marry. Mary wanted to marry again and she chose to marry Lord Darnley. Darnley was a nobleman who, like Mary, was related to the Tudor royal family.
- Not many people liked the idea of Mary marrying Lord Darnley.

Lord Darnley

- Darnley was jealous of David Rizzio, Mary's Italian secretary and most trusted friend. One evening, Darnley and his friends seized Rizzio and killed him.
- Mary no longer loved Darnley, she was scared of him. She gave birth to their son in 1566. She named him James. He would one day become the King of Scotland.
- Mary wanted to end her marriage to Darnley.
- On the night of February 10th 1567, there was a loud explosion. A house had been blown up. Darnley's body was found in the garden outside of the house. It seemed he had ran out of the house and had been murdered.

- People were suspicious of James Hepburn, the Earl of Bothwell. Bothwell was one of Mary's advisors and had dreams of becoming the King of Scotland.
- Bothwell was sent to court for Darnley's murder, but his soldiers scared everyone and he walked away a free man.

Earl of Bothwell

- Bothwell now wanted to marry Mary. At first she said no, but eventually she agreed to marry him.
- They married on 15th May 1567 in Holyroodhouse Palace.
- Many people did not want Bothwell to be their king and accused them both of Darnley's murder. Mary had made a big mistake.
- People turned against Mary. The Scots nobles gathered an army and the two sides met at Carberry Hill. However there was no battle and Mary was taken prisoner.
- Bothwell fled to Denmark where he died in 1578.
- Mary was held in Lochleven Castle. In 1567, she agreed to give up the crown to her son, who became King James VI.
- After 10 months as prisoner in the castle, Mary escaped with the help of Willie Douglas and his brother. She disguised herself as a servant and escaped the castle.

Fleeing to England

- Mary fled south to England. She never returned to Scotland or saw her son again. Mary hoped that Queen Elizabeth I would help her. Mary had made another mistake, Queen Elizabeth did not want to help Mary and did not know what to do with her.
- The English government saw Mary as a threat to their Queen. Elizabeth had many enemies. Spain was her biggest enemy, and they might try to remove her from the throne and make Mary Queen of England.
- If Elizabeth died without a child to succeed her, Mary and her son were next in line for the throne.
- Elizabeth kept Mary a prisoner in England for 18 years. Mary wrote to Elizabeth asking to be set free.
- In 1570 the Pope in Rome said Elizabeth was no longer the rightful queen of England. Many Catholics now believed Mary was England's lawful queen.

Mary's trial and death

- English Catholics were blamed for plots to get rid of Elizabeth. There were spies and plotters everywhere.
- In 1586, English spies uncovered a new plot to make Mary queen by killing Queen Elizabeth with the help from Spain.
- The plotters were rounded up and executed. Letters from Mary seemed to link her to the plot.
- In Scotland, her son James did little to help her. Mary was found guilty of treason and was sentenced to death.
- At Fotheringhay Castle, Mary Queen of Scots was executed.
- Elizabeth I never married. She died in 1603 and James VI of Scotland became James I of England too.
- Mary was buried in Peterborough Cathedral, but had a new tomb made for her in Westminster Abbey in London.

Information to include :

- Mary's early life
- Mary's return to Scotland from France
- Mary's marriage to Henry, Lord Darnley
- The death of David Rizzio
- Prince James's birth
- The murder of Henry, Lord Darnley
- Mary's marriage to Bothwell
- Mary's imprisonment and escape to England
- Mary's execution

Other interesting facts

- Mary was tall (5 feet 11 inches) and she had red hair
- She spoke many languages – French, Latin, Greek, Spanish, Italian
- Her hobbies included golf, horse riding, sewing, music (she played the harp), dancing and poetry
- Famous words she stitched while in prison were 'In my end is my beginning'

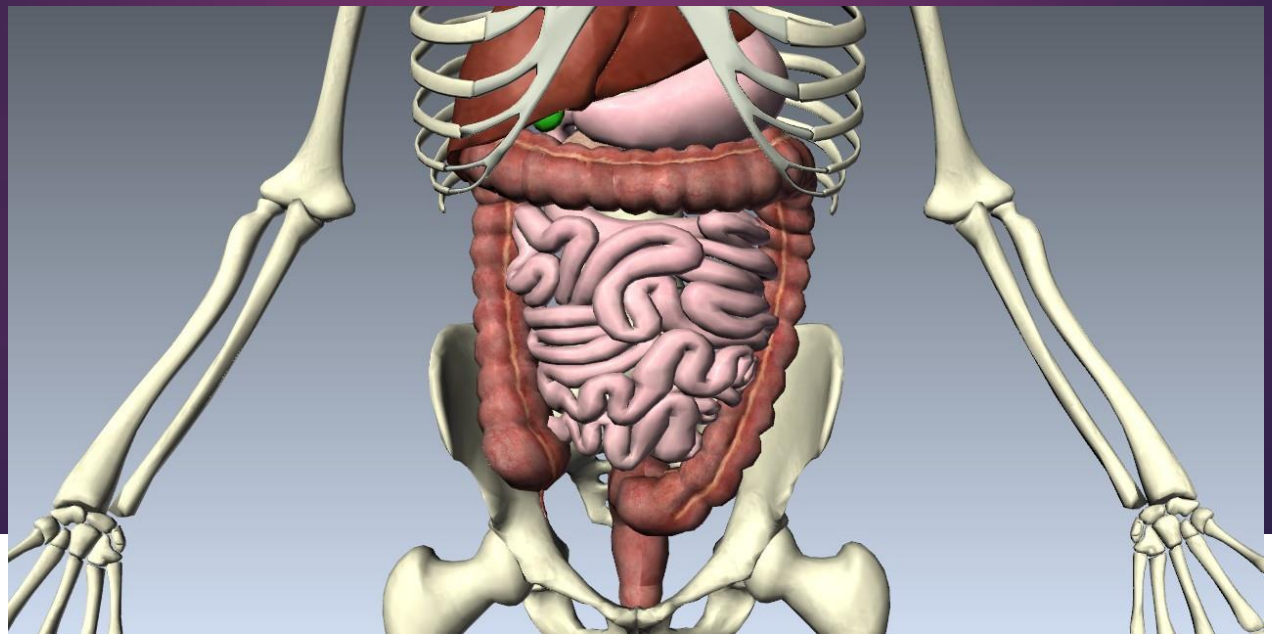
Useful Websites

- You can select information from powerpoints, videos, websites.
- Your project can be completed as a word document, powerpoint, poster, leaflet or however you wish to create it.

- https://web.archive.org/web/20121031025415/http:/www.bbc.co.uk/schools/primaryhistory/famouspeople/mary_queen_of_scots/
- https://www.theschoolrun.com/homework-help/mary-queen-of-scots
- https://kids.kiddle.co/Mary,_Queen_of_Scots

3.3.21 – Science -The Human Body

LI: To label the parts of the Digestive System.
To describe the function of the Digestive System.

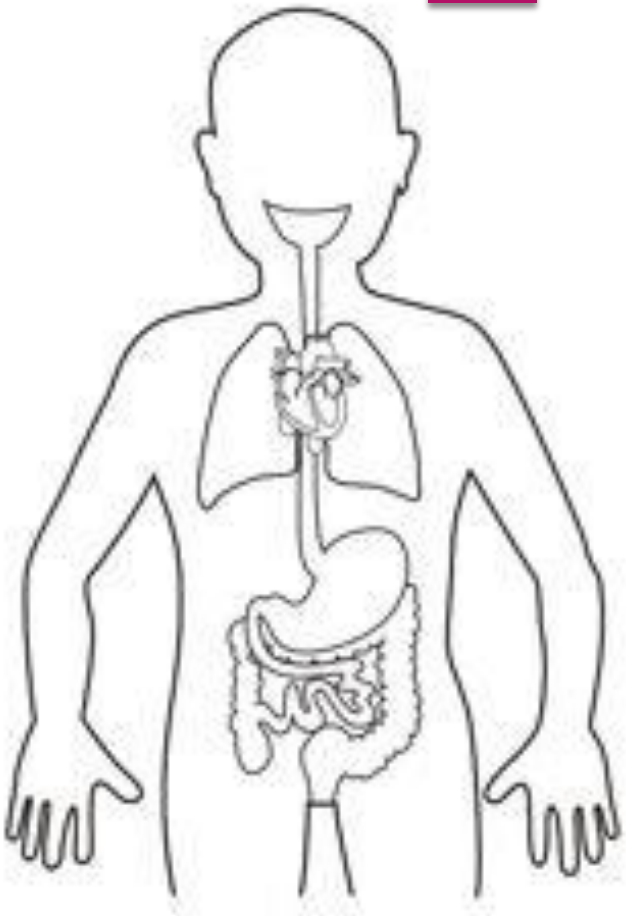


Starter

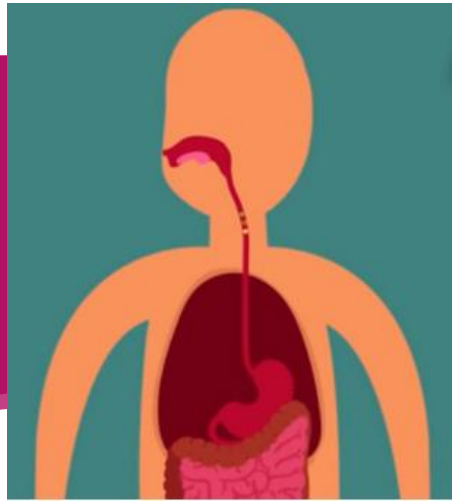
- Today we are going to be looking at what happens to food as it moves through our body.
- Using the diagram here: →

Draw and then describe what journey you think food goes on after we have eaten it.

- Consider the organs in our body that are used during the digestion journey.
- What is the purpose of our digestive system?



The Digestive System



- Click here to explore the interactive digestive system:

http://www.tenalpscommunicate.com/clients/siemens/humanbodyOnline/#pages/digt/info-digestion-full

- These short animations on BBC Bitesize talk you through exactly what happens in the digestive system.

What is the Digestive System?

https://www.bbc.co.uk/bitesize/topics/zv9qhyc/articles/zby2xyc

What happens to food in your mouth?

https://www.bbc.co.uk/bitesize/topics/zv9qhyc/articles/z7w3gwx

What happens in your stomach?

https://www.bbc.co.uk/bitesize/topics/zv9qhyc/articles/zc4cf82

What happens in your intestines?

https://www.bbc.co.uk/bitesize/topics/zv9qhyc/articles/zdkfvk7

Organ	What happens	Why
Mouth	Food is chewed up and mixed with saliva.	Breaking it down into smaller pieces.
Oesophagus	Muscles contract along the oesophagus.	To move food from the mouth to the stomach.
Stomach	Food is mixed with chemicals and churned up.	Continuing to break it down
Small intestine	Some chemicals are absorbed into the blood.	Those nutrients can then be used to supply parts of the body with energy and what they need to stay alive and grow.
Large intestine	Absorbing water.	Water is re-used by the body.

The Digestive System

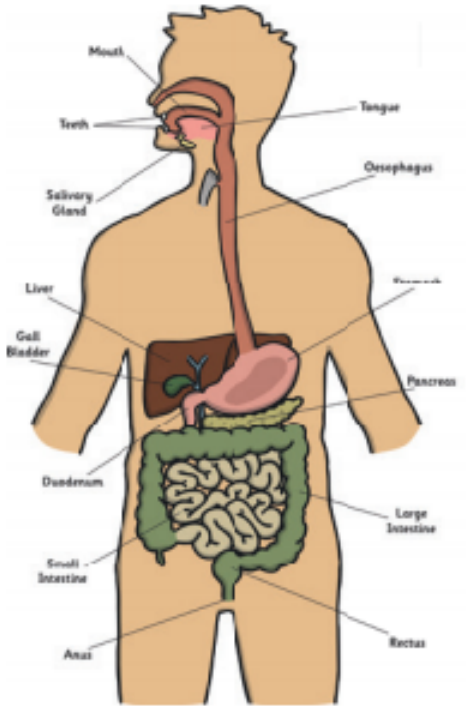
Have you ever wondered what happens to your food after you've chewed it in your mouth? Your body is amazing and has a system that sorts and uses the food you eat to make sure your body has everything it needs to work properly. This is called your digestive system. Here's how it works...

Before the Stomach

First of all, we all know that you put food in your mouth to eat it. You enjoy the taste and the feel of the food in your mouth whilst your teeth break it down into smaller pieces. Saliva is the juice in your mouth that is mixed with your food to help make it softer.

When food is small and soft enough to be swallowed, it goes down a big tube to your stomach called the oesophagus (say: a-soff-a-guss). Muscles in the oesophagus take turns to move the food to your stomach. These muscles are so good at this job that they could even get the food to your stomach if you were standing on your head! (Don't try to eat your tea standing on your head though!)

The Digestive System



Fact File

- An adult eats about 500kg of food per year.
- Your body can produce up to 1.5 litres of saliva every day.
- An adult oesophagus is about 25cm long.
- A camera has been invented now that is as small as a pill (called Pillcam). It can be swallowed so it passes through your oesophagus in order to take photos of the inside of your body. It can take up to 55,000 pictures over the 8 hours that it's in there! It's been used since 2001 to let doctors see inside patients.

The Digestive System

At the Stomach

When the chewed-up food arrives in the stomach, it is mixed with acid that breaks the food down even more into something that looks a bit like porridge- this substance is called 'chyme'.

After the Stomach

The next part of the journey for your food (which doesn't look like food anymore) is through the small intestine. In the small intestine, all the goodness is taken out of the food so it can go off to different places in the body to keep you healthy.

When the small intestine has done its job of getting all the goodness out of the food, all the material that is unwanted goes into the large intestine. Then, it makes its way out of the body as poo at the end of the large intestine.

So, there you have it. Isn't your body clever?

Task: Answer the following 10 questions

Use Information from the previous slides to help.

1. Why do you have to chew food before it goes down the oesophagus?

2. What mixes with the food in your mouth?

3. How much food does the average adult eat in a year?

4. Put these organs in the correct order to show the stages of the digestive system:

large intestine // mouth // small intestine // stomach // oesophagus

5. Where in your body does all the waste go right before it leaves the body?

Task: Answer the following questions

6. Why do you think a patient at a hospital would be required to swallow a camera?

7. What does 'chyme' look like?

8. In the 'After the Stomach' section, the author has used brackets to remind us that the food does not look like food at this point. Why doesn't it look like food?

9. Why has the author written '(say: a-soff-a-guss)' in the 'Before the Stomach' section?

10. At the end the author says: 'Isn't your body clever?' Do you agree? Why or why not?

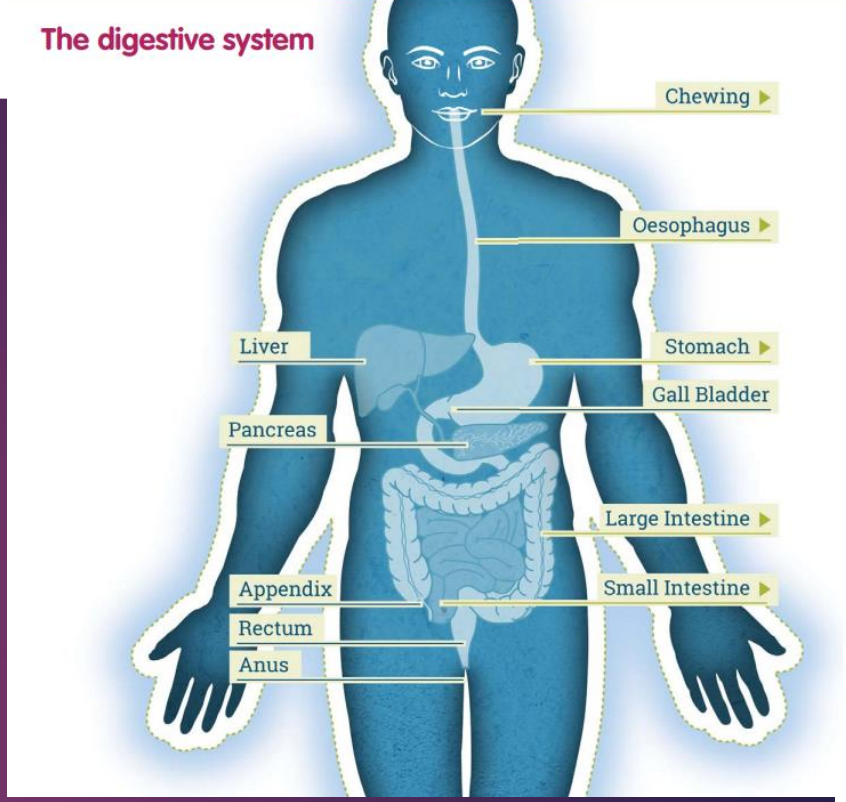
Optional Experiment: The Digestive System

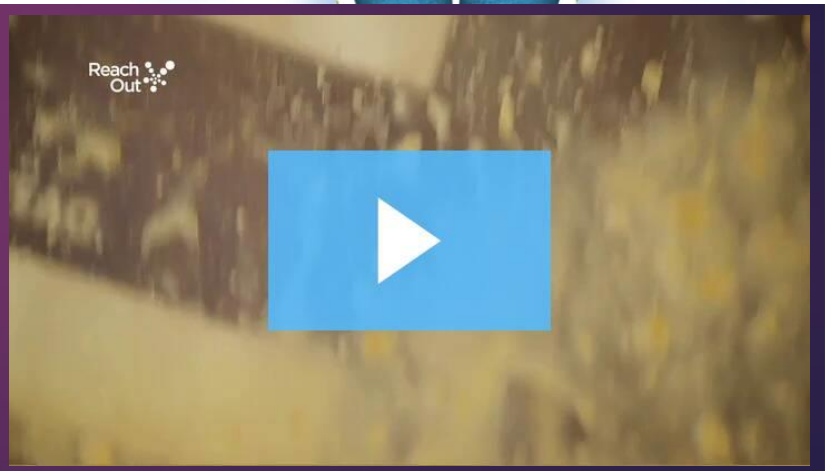
Feel free to have a go at this optional science experiment which represents the Digestive System.

Click the video link to follow the demonstration, or read the instructions on the next slides.

Please upload any pictures or videos of your experiments if you choose to take part!

Remember to ask an adult for permission first!





https://www.stem.org.uk/?wvideo=3q6sgpqrz7

Optional Experiment: The Digestive System

You will need:
Some food (banana, biscuits or cereal)
Water
Plastic freezer bag
Pair of tights
Plastic cup and tub

- You are going to construct a human digestive system. Everyday materials will represent each main part, so you will need to use your imagination. You are going to follow the journey that a banana (moist food) and a biscuit (dry food) would take as they travel through the body, starting at the mouth.
- The biscuit and banana needs to be squashed and ground up to represent chewing. A few drops of water (representing saliva) should be added. This will end up with a ball of food (bolus) just as we do in our mouths.
- The biscuit and chopped banana need to be pushed with a finger (representing the tongue), into the plastic bag (representing the oesophagus).
- The food should then be gripped and squeezed hand over hand, down the 'oesophagus' in the sealable bag to represent the stomach. Pour the water from the cup (representing stomach acid) into the bag.
- The bag should then be sealed (representing closing the valve to the stomach) without much air in the bag.

Optional Experiment: The Digestive System

- The food and water should be squeezed in the 'stomach' until it's fairly liquid and smooth. While doing this think about what is happening; this is how digestion takes place. If food escapes from the top seal (valve) this is what happens when a person vomits. However, normally food stays in the stomach for around 6 hours.
- Next a small hole should be cut in the bottom of the bag (representing the pyloric sphincter) and (with assistance) pour the 'food' into only the top 1/3 of the stocking/tights leg (representing the small intestine). This will take two people.
- Whilst one cuts the hole, the other holds the leg open at the top and uses their other hand to squeeze the material together a bit lower down, in order to prevent the food from going immediately down the whole leg!
- Then squeeze the food through the stocking (the small intestines). The water coming out through the walls represents the nutrients going to the rest of the body.

Optional Experiment: The Digestive System

- At the end of the stocking leg is the foot (large intestine). There are 'good' bacteria here and last bits of water and nutrients are absorbed into the body. Cut a hole in the end as the food approaches.
- Finally squeeze the remaining food into the small plastic cup with a small hole cut in the bottom (representing the rectum and anus).
- Squeeze their waste through the hole in the cup into a bowl (toilet).
- When you've finished, make sure everyone is clean and all the mess is disposed of.

5.3.21 – ICT – Whose profile is this, anyway?

- LI: to recognise the importance of having a positive digital footprint.

Starter

- Read each of the profiles on the next slide.
- Write a short description of who you think each person is. What type of person are they? What do you think they like, dislike and care about?

What assumptions do you make about the people behind these profiles?

Profile 1

Here are the photos from prom, everyone looks amazing!

Checked in to Young Fashion Design Conference at Glasgow School of Art

My little brother Alex is the most annoying person on this planet.

Shared link: My First YouTube Video – 50 Facts About Me

Just watched the latest Riverdale episode. Omg obsessed!!

Profile 2

Checked in to Carrick Academy

I hate school parties #laaaaame

Checked in to Ed Sheeran Concert at SSE Hydro

Just won the game! Absolutely buzzing. Only one more till the championship #winning

Shared link: 10 Signs Your Parents are Trying to Ruin Your Life

Profile 3

Anyone up for a game of football later?

Shared link: 25 Photos of hilarious FAILS you MUST see

Check out this website, I wrote all the coding for it. :D #proudmoment

Checked in to Nandos at Silverburn

Yass, chicken fajitas for my dinner later! The only thing my mum can *actually* cook well lol!

The truth about our characters.

Profile 1

This profile belongs to Erin.

She's not long finished 6th year at school and is at university and is studying business.

She dreams of one day starting her own fashion label.

She cares most about her family and friends.

She volunteers at a local charity shop on the weekends.

She loves listening to music and watching movies.

Profile 2

This profile belongs to Mark.

He is in 5th year of secondary school.

He is leaving school at the end of the year to start his apprenticeship as a trainee engineer on the Cal Mac ferries.

He plays rugby.

He enjoys spending time with his family.

He can play the guitar.

Profile 3

This profile belongs to Megan.

She is currently in 6th year at school and is considering going to university to study either engineering or technology.

She is part of the school's football team.

She has two cats.

She loves gaming and football.

How we know what we (think we) know

- There's a lot of personal information which can be found on the internet.
- Some of that information can cause us to make assumptions about people that aren't true. Sometimes we use these inaccurate assumptions to judge or make decisions about someone. Always try to make sure you really know the things about people that you **think** you know.
- With that in mind, be careful about the persona you create online. Your privacy matters. You can protect it by only sharing things you are sure you want to share.
- Think about what your friends, parents, teachers, the police, an employer or yourself in ten years would think of your profile. Don't share anything you wouldn't want them to see.

Task - Keeping it private

- Look at the three scenarios.
- Decide whether or not it would be OK to share online. Why or why not?
- Write down the reasons for your decisions.
- What might the consequences be?

Scenario 1 – Ben posts a status inviting all his online friends to Amit's birthday party.

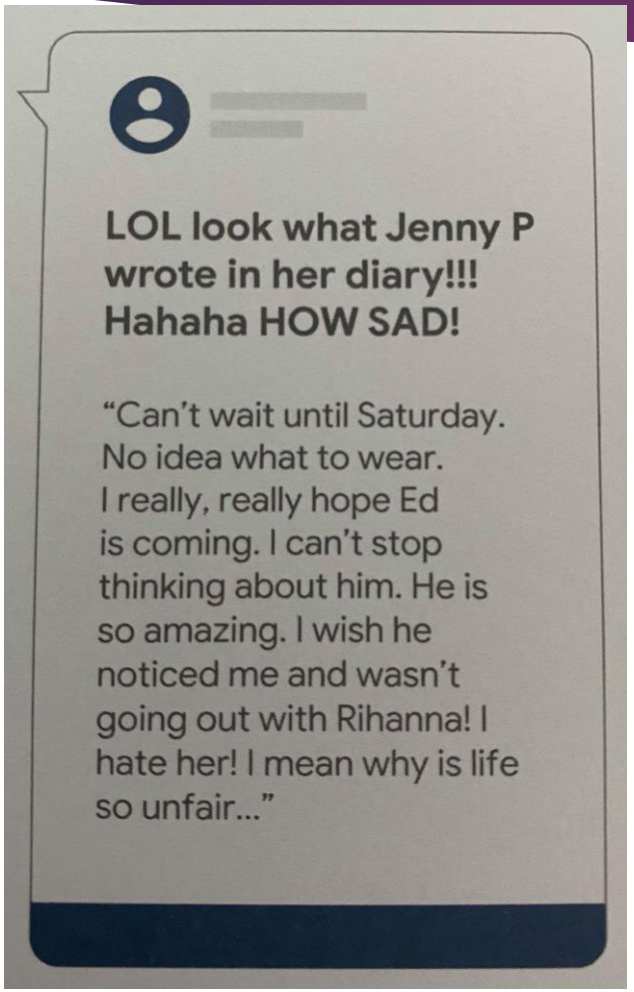
Keeping it private

- Look at the three scenarios.
- Decide whether or not it would be OK to share online. Why or why not?
- Write down the reasons for your decisions.
- What might the consequences be?

Scenario 2 – Emma posts a nice message on Mark's profile.

Did you know – Home Insurance won't pay out (if there has been a robbery) if you have publicly announced you are away on holiday on Social Media!

Keeping it private



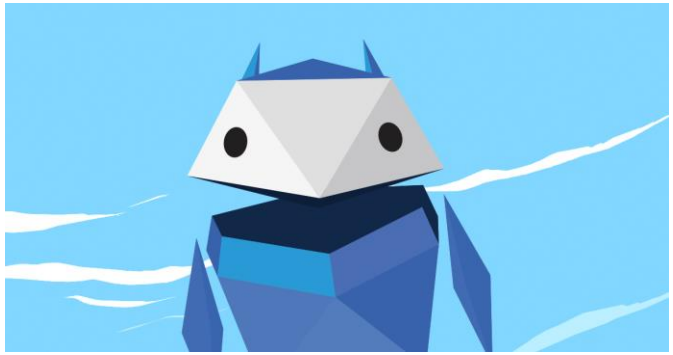
- Look at the three scenarios.
- Decide whether or not it would be OK to share online. Why or why not?
- Write down the reasons for your decisions.
- What might the consequences be?

Scenario 3 – Alison shares what she found in Jenny's (another girl from school) diary. She's not friends with Jenny online so reckons she won't see her post.

Extension Task: Play the Mindful Mountain Game

- Click the link below to have a go at playing an Internet Safety game.
- Interland (beinternetawesome.withgoogle.com)

- Consider why the character in the game is called an oversharer.
- How has playing the game made you think about what people should share online?



5.3.21 – IDL
Mary Queen of Scots

- **Continue with your personal research project on Mary Queen of Scots if you have not finished it.**
- L.I. – To create a line drawing of a castle, a Tudor lady or a Tudor rose.
- Using the links below follow the step by step instructions for your drawings.
- https://www.youtube.com/watch?v=vQIKUqZDT7k
- https://www.youtube.com/watch?v=GJCV_PRF2TI
- https://www.youtube.com/watch?v=opXUQ7kOkWs&t=27s