
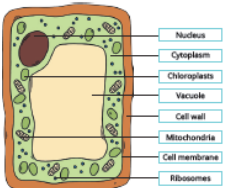
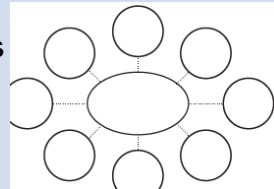






# Year 8 Knowledge Organiser - Autumn 1

Just reading through your books or a knowledge organiser is not always an effective way to revise. Instead, you should do something with the information. Choose an example of the revision methods on the pages or see if you can come up with another method.

The knowledge is evolutionary not revolutionary. Approximately half the knowledge is new and half helps you revise. Many of the activities are changing. We hope you enjoy them.

Subject	Page Number	Subject	Page Number
Multidisciplinary Lessons	3	Geography	34
Art	6	German	36
Food	15	History	42
DT	24	English	44
PE	25	Maths	48
Science	29	RE	51
Computer Science	33	Music	53
		A range of bonus ideas to prevent boredom	57

Idea	Explanation
<p>Make some flash cards or PowerPoint slides. Make top trumps.</p> 	<p>Write down key words, quotation, questions or equations on one side of a card. On the other side, write the definition or answer. Use them to test yourself.</p>
<p>Plant Cell</p>  <p>Make a poster.</p>	<p>Turn your notes into posters with lots of colour and illustrations. Summarising the key information in a different way is an effective way of learning and your brain will remember the colours more easily. Do the title last!</p>
<p>Draw spider diagrams, or for the adventurous mind maps.</p> 	<p>Write the topic/keyword in the centre of your page. Add everything you know in subtopics. Then explore each subtopic in turn adding more ideas. Colour/pictures help you recall.</p>
<p>Write a song or a rap.</p> 	<p>Are there songs that stick your head. Change the lyrics to the information you want to learn. If you record and listen back it will be a more fun way of revising.</p>
<p>Plan a lesson</p> 	<p>If you teach something to someone else the chance of recalling it is really high. This has been found to be the most effective way of learning something for the long term.</p>
<p>Write a story or comic strip.</p> 	<p>Take the keywords or facts that you need to learn and turn them into a story or a cartoon. The sillier the story the more likely you are to remember it.</p>
<p>Write a quiz. Design a game.</p> 	<p>Playing is how we learn as young children and it is a very powerful way of learning throughout life. If we enjoy the game it helps us remember.</p>



- » Aspiration  
There are no barriers to your ambition
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- » Teamwork  
Together we achieve more
- » Humility  
Put others first
- » Courage  
Handle your fear
- » Hard work  
We need to make the most of our talents
- » Respect  
Treat others as you would like to be treated yourself
- » Service  
It is better to give than to receive
- » Integrity  
Be true to yourself
- » Forgiveness  
Forgiveness is a friendship preserver
- » Thankfulness  
Appreciate others, appreciate what you have
- » Perseverance  
Never give up



# 'May your choices reflect your hopes not your fears' (Nelson Mandela)

Hope is fuel for our soul. Often in life, we find ourselves in need of hope, especially in difficult or worrying times. However, Jesus teaches that hope is an unbreakable spiritual lifeline; something that can grow through encouragement and faith and something that is to be shared with others (Hebrews 6:19-20).

## EVERYONE CAN BE A HOPE CARRIER

Hope is like a baton used in a relay race. It's supposed to be held tightly as you run with it. However, hope is also too precious to keep to ourselves – it's supposed to be passed onto someone else. When we receive hope, there's always a greater purpose than just us. Hope comes to us, in order to flow through us. Who is 'running' alongside you this week who you can pass the baton of hope to?

**BIBLE STORY:** The Road to Emmaus (Luke 24:13-35). When we feel we have lost hope, others can give it back to us. We, in turn, become carriers of that hope to others.

LISTEN: 'Cornerstone' song

<https://www.youtube.com/watch?v=izrk-erhDdk>

This song is an encouragement to hold on, regardless of our circumstances – even in 'every high and stormy gale', to hope. For Christians, this hope is placed in Jesus Christ, whom they call 'The Cornerstone'. A cornerstone was the foundation and key stone in buildings. It was always laid first and held the building up.

Wonderful World by Louis Armstrong:

<https://www.youtube.com/watch?v=DRONFXoXsJ0>

For many people, looking at the wonder of nature can give them a new perspective and a renewed sense of hope. Where do you go to find a new hope?



**THINK:** Using these images, take a moment to think about the following: Where do you find your hope? What kind of hope do those around you need? What makes hope grow in what seem like barren and difficult circumstances?

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Look at this picture. The man in it looks like he is going on a journey of his own(!), but what do you think is happening? Watch the news story to find out! How is he being a hope carrier? What difference does what he is doing make?

<https://www.bbc.co.uk/news/av/uk-england-leeds-52213388/coronavirus-grimsby-teacher-delivering-dozens-of-lunches-a-day>

#### Activities:

We relabelled our classes in Key Stage 3 H, O, P, E. Why do you think that was a good thing to do after lockdown?

Which of our core values (left) relate to the theme of hope?

TWEET IT: There is a lot of negativity on social media at times. People are often negative to each other and negative to ideas. Think about the idea of hope and design a tweet in a maximum of 140 characters that sends a clear message of hope to others. What do you think is the most important thing people need to hear to help them through difficult times?

Use the 5 step conversation with someone important to you to reflect on your hopes.

1. GIVE THANKS for something that was good today.
2. ASK FOR HELP with something you have lost hope for.
3. REFLECT on your day and think about the things that made you feel hopeful and the things that felt unhelpful.
4. SAY SORRY for the times you gave up hope or took away someone else's hope.
5. DECIDE how you will keep hold of hope tomorrow.

Journaling This is a great way to get thoughts, ideas and experiences out of your head and onto paper in a creative, calming way that helps us to really understand what is going on and to emotionally engage and respond. Hope is a great topic to do this with. Maybe write it big and bold and around it write down thoughts, reflections and prayers around where your hope lies. It can help to see things from a more realistic and positive perspective! Or you could try drawing an El Salvadorian cross themed upon hope (which is a cross shape, full of bright colourful pictures and images)



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Watch: [https://youtu.be/rLY174n\\_KWA](https://youtu.be/rLY174n_KWA)

- What do you cherish the most?
- Do you ever find it difficult to be hopeful?
- What or who gives you hope for the future?
- Can you describe how hope makes you feel inside?
- What would you want to be doing, if you were able to?
- How do you want your new chapter to begin?

Right now, some people are feeling isolated, sad and alone. For some people they are struggling to see the hope. Think of a person, you think might be struggling and do something practical to encourage them. Watch: <https://youtu.be/nwAYpLVyeFU>

- Who would you like to spend time with right now if you could?
- How can you reach out to someone?
- How could you pass on hope to someone else?

Explore the website 'Project Hope Exchange'. How can you give hope and get hope? In other words, how can you find hope as well as being a source of hope for someone else?

Watch a film clip from 'Despicable Me'. An act of sharing something small leads to the restoration of hope: <https://www.youtube.com/watch?v=yFd-ubXcoyQ>.

Meditate and reflect by praying these prayers of hope:

[https://youtu.be/\\_8AYhU5zKcM](https://youtu.be/_8AYhU5zKcM).

Find these bible verses: Isaiah 40 v31 and Jeremiah 29 v11.

We fell asleep in one world,  
and woke up in another.  
Suddenly Disney is out of magic,  
Paris is no longer romantic,  
New York doesn't stand up anymore,  
the Chinese wall is no longer a fortress,  
and Mecca is empty.

Hugs & kisses suddenly  
become weapons,  
and not visiting parents and friends  
becomes an act of love.

Suddenly you realise that  
power, beauty and money are worthless,  
and can't get you the  
oxygen you're fighting for.

The world continues its life  
and it is beautiful.

It only puts humans in cages.

I think it's sending us a message:

"You are not necessary.  
The air, earth, water and sky  
without you are fine.  
When you come back,  
remember that you are my guests.  
Not my masters."

Attributed to Dr.Dhruv Chauhan



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# ZERO to HERO

ZERO to HERO: 'All of us, no matter who we are, or how insignificant we may think we are, has the potential to be a hero' It is sometimes hard to stand firm, be brave, show courage when everything around us causes us to be worried or scared.

Throughout the Bible though, we are told that God will be with us, always, and therefore, we should be able to conquer our fears. God commands us to have courage, having faith and confidence in Him.

*"No one has greater love than this, to lay down one's life for one's friends. You are my friends if you do what I command you. I do not call you servants any longer, because the servant does not know what the master is doing; but I have called you friends, because I have made known to you everything that I have heard from my Father. You did not choose me but I chose you. And I appointed you to go and bear fruit, fruit that will last, so that the Father will give you whatever you ask him in my name. I am giving you these commands so that you may love one another."*

Jesus speaking in John 15:13-17(NRSV)

**KEY QUOTE: 'Integrity is doing the right thing. Even when no one is watching' CS Lewis**

**LISTEN: "Give us your courage" - Tim Hughes**

[https://www.youtube.com/watch?v=nBE4v8IVlfs&disable\\_polymer=true](https://www.youtube.com/watch?v=nBE4v8IVlfs&disable_polymer=true)

This song is an encouragement to stand firm in the face of huge challenges –

*"For the truth of your Word we will stand. Give us your courage"*

**LISTEN: "Heroes" by David Bowie - sung by the Coach Choir**

[https://www.youtube.com/watch?v=DOOkAtg9dRw&disable\\_polymer=true](https://www.youtube.com/watch?v=DOOkAtg9dRw&disable_polymer=true)

Over 6000 strangers from 45 countries submitted a video in 3 days to sing 1 song. It's dedicated to all the frontline heroes who are keeping us safe in the midst of the Covid-19 global pandemic



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WATCH: What is courage? A short video with some intriguing thoughts about what courage may look like.

[https://www.youtube.com/watch?v=QlfEiLvxCoy&disable\\_polymer=true](https://www.youtube.com/watch?v=QlfEiLvxCoy&disable_polymer=true)



- What do these pictures make you think of?
- How do they demonstrate qualities of courage or lack of?
- How are the qualities of hero and superhero different? Or are they?

There are lots of stories about our NHS workers and other essential workers who are risking their lives, showing great courage, and going to perform their frontline work so that our lives can continue. They are showing a greater love and courage. Many of our NHS workers are living separately from their families during this time, to help to keep them safe. One such nurse is Sam. She has left her daughter, Rosie, and her husband (who is poorly) to keep them safe. As you watch this video celebrating their courage and heroism, think about the courage that they have both shown. <https://www.facebook.com/callthemidwifeofficial/videos/154813759301800/> You may have heard lots of stories of people who have done this before. Have you heard of Maximilian Kolbe? He was a priest when WWII broke out and was put into a concentration camp, as he was caught helping the Jews to escape Poland. He showed both great courage and love. One day the guards at the camp selected several prisoners to be killed, Kolbe asked to be selected so he could save the life of one man. He saved the life of a man called Franciszek Gajowniczek. Kolbe did not know this man, but knew that he was called by God to show both love and courage. A few weeks ago in Italy a Roman Catholic Priest Fr Barardelli was given the use of a ventilator that was needed to save his life as he was suffering with Coronavirus. The people who went to his church had paid for the ventilator to save him as everyone loved him as he was a great priest. On seeing the other patients in the ward, Fr Barardelli refused the ventilator as there were other, younger patients who needed it. He was willing to give his life to save another, showing great courage. Watch this clip about Fr Barardelli <https://www.youtube.com/watch?v=upox9NOOD2c> Would you ever be willing to put others before you?



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Think about when you have shown courage. How did it feel? Why did you decide to be courageous at that moment? Think about those today who are being courageous to help others at a risk to themselves. Think about how you might show courage today. How could you be a hero? Search for the Hero by M People

<https://www.youtube.com/watch?v=ntuqTuc6HxM>

#### Activities:

Read a book, poem or perhaps even a letter with characters that raise the issue of courage, e.g. poems and letters from those in the First World War. Explore how the main character showed bravery, did they consider themselves courageous, would other characters or others reading their story now think them courageous.

Look at the website of the Help for Heroes charity. Consider some of the testimonies it contains.

Mealtime/Tutor Time is together-time. Even if you regularly don't eat meals together, you can still create activities that nurture conversation. Ask open-ended questions at the table. Ask each person, "What's the best thing that happened to you today? the worst?"

Serve others in love- Don't underestimate the transformation that can come in your life as you joyfully and humbly serve others.

Create a plan:

How are you going to be a hero?

How are you going to serve yourself and help yourself grow?

How are you going to serve your family?

How are you going to serve your friends and help them grow?

#### Famous Quotes:

'I beg you take courage; the brave soul can mend even disaster.' Catherine the Great

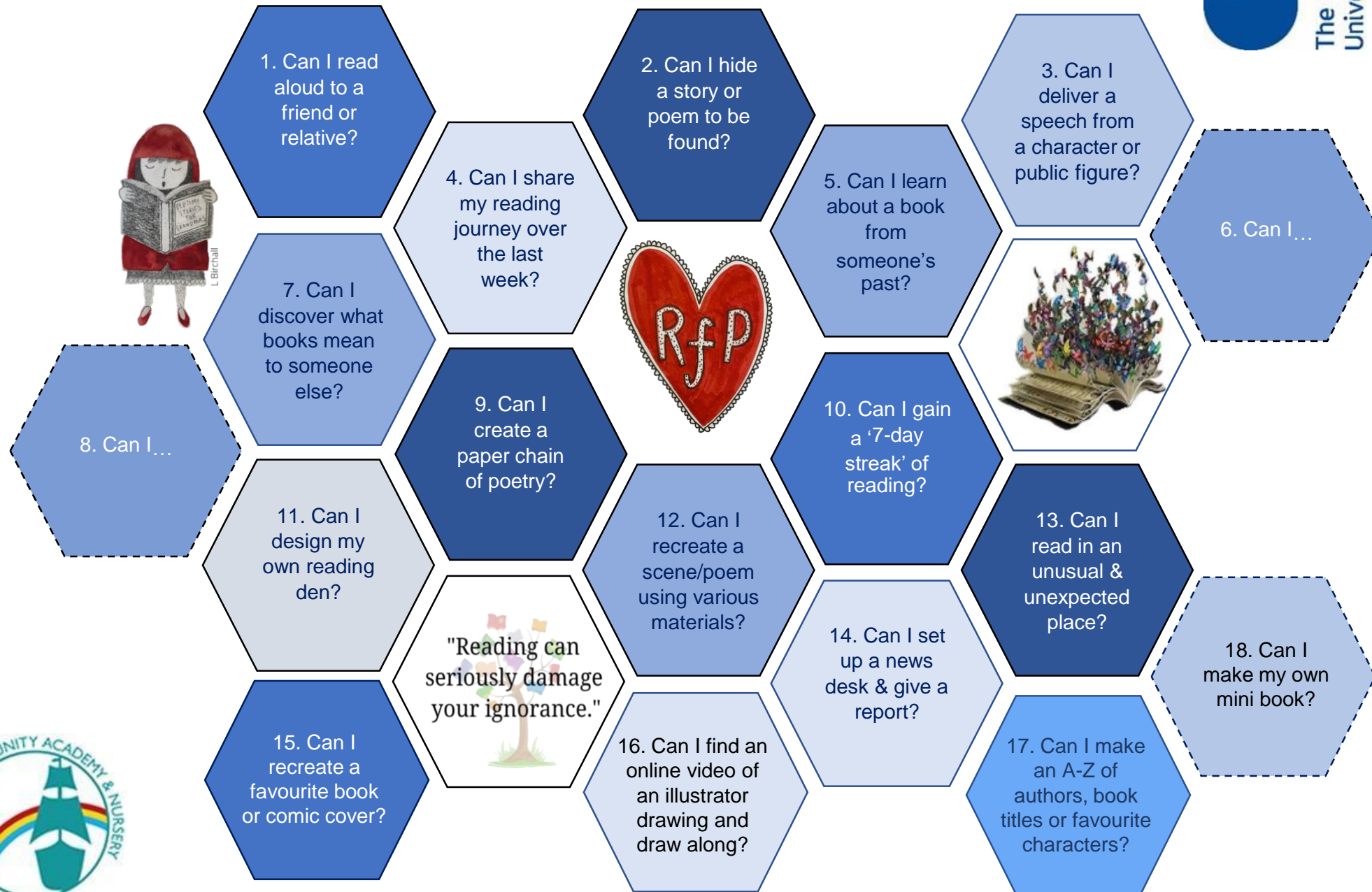
'Disturb us Lord, when we are too well pleased with ourselves'- attributed to Sir Francis Drake, believed to have been written by him before setting sail from Portsmouth in 1577. #

'Courage is not the absence of fear, but rather the assessment that something else is more important than fear.' Franklin D. Roosevelt

"May your choices reflect your hopes, not your fears." Nelson Mandela



# Sharing the Love of Reading: 11-16-year olds



## Questions, questions, questions...

Asking and answering questions (in our head and aloud) helps us to be better readers. We are constantly asking questions to encourage comprehension skills during reading and these can be broken into three clear sections; 'before', 'during' and 'after' reading.

Here are some examples you can try at home:

(You don't have to ask every question every time you read, try picking out 2-3 different questions each time you read.)

-----

### Before reading:

- Why did you select this book?
- What makes you think this book is going to be interesting?
- What do you think the book is going to be about (use the cover image, title and blurb for clues)?
- Does this book remind you of anything else you've already read or seen?

-----

### During reading:

- Who/What/Where/When/Why/How questions
- Will you catch me up on the story? What's happened so far?
- What do you think will happen next? Why do you think that?
- Why do you think the character did \_\_\_\_\_?
- If you were that character, what would you have done differently in that situation?
- How do you think the character is feeling right now?
- If the book was a TV show, which actors would you cast in it?
- Where is the book set?
- What does the place look like in your head as you read? Would you want to visit there?
- Did you learn any new words or facts so far?

-----

### After reading:

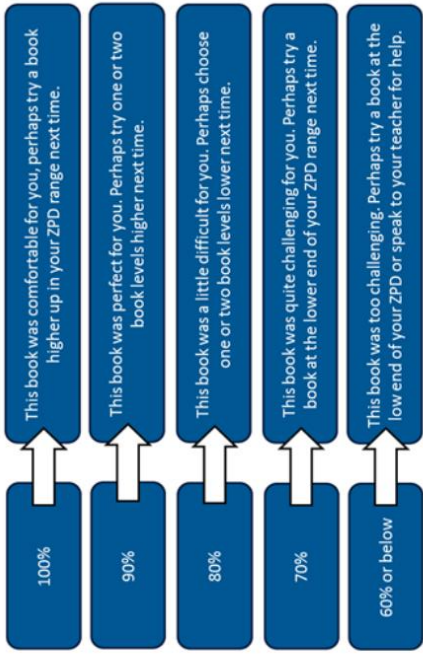
- What was your favourite part of the book? Why?
- Who was your favourite character? Why?
- What was the most interesting thing you learned from the book?
- Why do you think the author wrote this book?
- Would you have ended the book differently? Did it end the way you thought it would?
- If you could change one thing in the book, what would it be?
- Do you think the book had a good title? What different titles could it have had?
- Can you retell the story in your own words?
- Does this book remind you of anything else you have read? How so?





## To improve my Book Level:

- I will always quiz within my ZPD.
- According to my last quiz result, I should choose a book....



## To improve my Average Percent Correct:

I will use the 5 W's to review before I quiz

I will make notes when reading

I will take my time when quizzing

I will make sure my book within my ZPD range

I will quiz as soon as I finish my book

5 W's:  
What...  
Who...  
When...  
Where...  
Why....

## To meet my Points Target:



Aim for **100%** to earn all the points

I will stick with a book and finish it

I will fit in extra reading time:  
Before bed?  
On the bus?  
During lunch?

I will read **fewer long** books

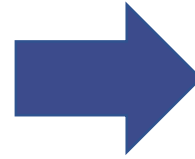
I will read **several shorter** books

If you are able to understand a book as you read, but struggle to remember events when you quiz, ask Miss Ling for a reading reminder sheet.



**Open University** research suggests there are three important ways to support readers and a love of reading.

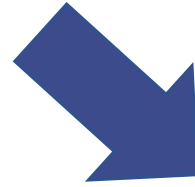
## Supporting Readers at Home



**Reading aloud** to your children shows them reading is a pleasure, not a chore. Older children can also read to younger ones.

\*Reading together doesn't have to be a story (recipes, news articles etc. all count too!)

\*If you are not confident in reading aloud, why not listen to an audiobook together.



**Children who read**, and are supported as readers, develop strong reading skills and do better at school. Research also shows that reading aids relaxation and has benefits for mental health.



**Book chats** encourage readers. Invite them to make connections and share their views. Join in with your views too! (Please see the next page for suggested questions you can ask about any book.)



I wonder  
if...why...what...  
who...



**Making time to read** alongside one another helps develop children's reading stamina and interest, Let them chose what to read and relax together (you don't need to be reading the same thing.)

\* Where can you 'fit' reading in? It could be 10 minutes before tea, when they come home from school, waiting in the car, before bed etc. You may find it easier to set a regular time aside, or fit it in around your other commitments.





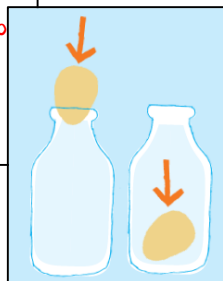
## CHANGES OF STATE

The brief: Make an egg fit into a bottle without breaking it.

### The method

1. Submerge the egg in a glass of vinegar for two days: the shell will become rubbery.
2. Heat the bottle in hot water – remember to use gloves or a tea towel when handling it.
3. Rest the egg on the neck of the bottle. 4. As the air inside the bottle cools down, it will contract and suck the egg down. Top tip: Try lubricating the egg with cooking oil or washing up liquid.

Now find out why this happens using your knowledge of solids, liquids and gases



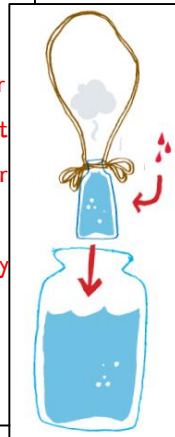
## HEAT TRANSFER

The brief: Create a colourful underwater volcano.

### The method

1. Cut a two foot length of string with a pair of scissors. Tie a knot around the neck of a salt shaker with one end of the string. Double-knot it to ensure the knot is secure. Repeat this process with the other end of the string, resulting in a handle to lower your shaker.
2. Empty and clean a large jar. Fill the clean jar about three quarters full with cold water.
3. Fill the salt shaker with hot water (with adult supervision) – as hot as you can get from your tap – to just below the neck. Add three to four drops of red food colouring.
4. Hold your salt shaker over the mouth of the jar by the string handle. Slowly lower the salt shaker into the jar until the shaker is completely submerged and resting upright on the bottom of the jar. Observe how the coloured water erupts from the shaker into the cold water.

Explain this using the idea of convection currents



## INVISIBLE INK

The brief: Write your own secret message in an invisible ink solution.

### The method

1. Squeeze lemon juice into the bowl and add a few drops of water. Stir with the spoon.
2. Dip the paint brush into the juice mixture and write a message on the paper.
3. Allow the paper to dry completely. Your message should become invisible.
4. Hold the paper very close to the light bulb to heat up the message area (adult supervision required). Watch your message appear.

Why does heat uncover the message? What is a reversible reaction?



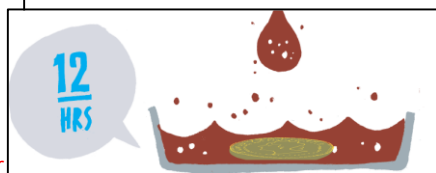
## ACIDS & ALKALIS

The brief: Clean a penny using cola.

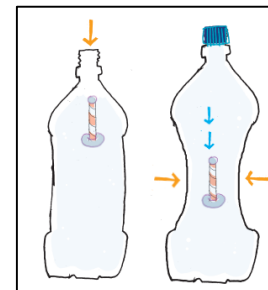
### The method

1. Place the penny in the container.
2. Add enough cola so the penny is covered.
3. Leave overnight.
4. In the morning, you should find that your penny is clean.

What makes something acidic? What chemical reaction is happening to the penny?



# Practical Science at Home



## THE DENSITY DIVER

The brief: Build a Cartesian diver.

### The method

1. Put a small ball of plasticine on the top of the straw to seal it.
2. Roll a sausage of plasticine and wrap it around the bottom of the straw, leaving the bottom open. This is your diver.
3. Now attempt to balance the diver so that it stays upright.
4. Place the diver vertically in the drinking glass. Add or remove weight from the base or top so that when you push it down, it just about bobs back up to the surface (and stays upright).
5. Once you are happy, place the completed diver in the two litre bottle filled to the top with water. Screw on the lid. Squeeze the bottle, and the diver will drop down to the bottom of the bottle. Release it and it floats back to the surface.

What is density? What makes something high or low density? Why might this be useful?

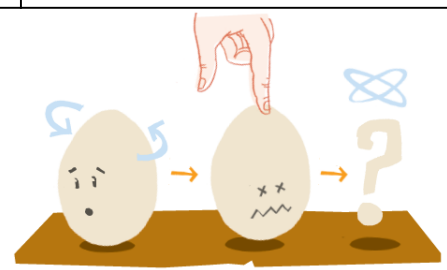
## MOMENTUM

The brief: Use eggs to find out about momentum and changing direction.

### The method

1. Spin each egg, one hard boiled and one fresh, on a table.
2. Leave it to spin for a few seconds then momentarily stop it by placing your finger on top.
3. Release the egg and observe what happens next.

What is happening to the inside of the egg? How do you calculate momentum?



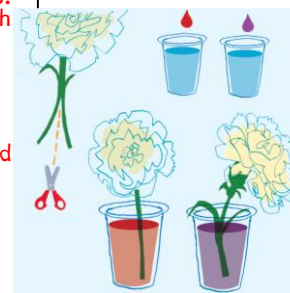
## COLOURED CARNATIONS

The brief: Create multi-coloured flowers.

### The method

1. Use the scissors to cut the stem of the carnation in half lengthways.
2. Take two cups and fill them with water. Add a different coloured food dye to each cup.
3. Put the split stems of the carnation into the cups and leave overnight.
4. The next morning you should find that your flower has changed colour.
5. What do you notice about the petals?

How does the food dye get to the petals? What is xylem and phloem?



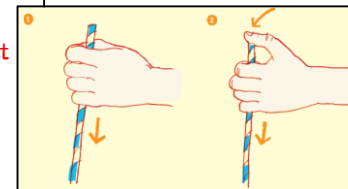
## STRONG AS A DRINKING STRAW

The brief: Use a drinking straw to pierce through a raw potato.

### The method

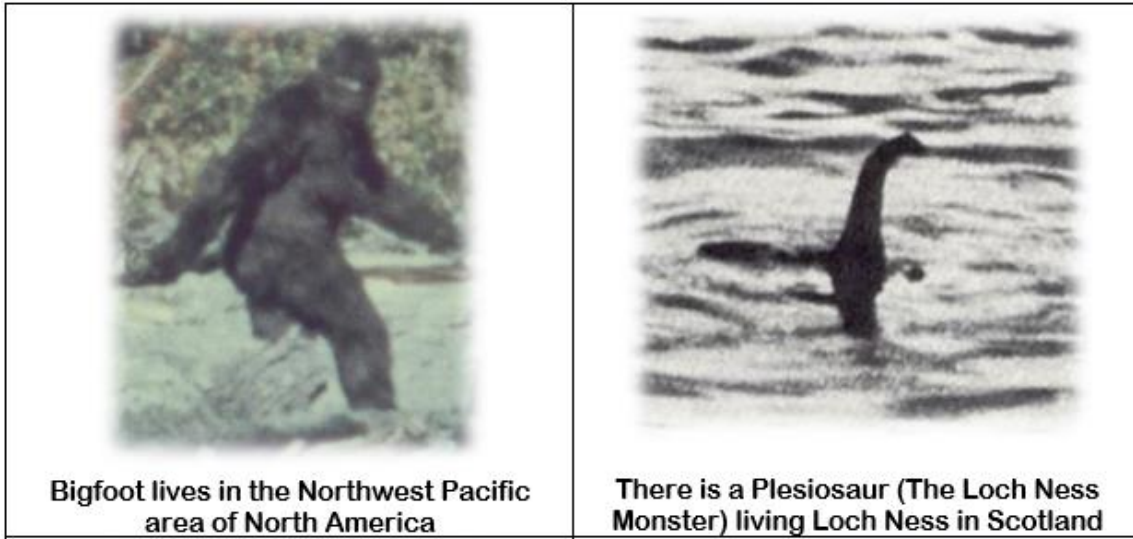
1. Hold the straw by its sides, without covering the hole at the top and try quickly stabbing the potato.
2. Repeat the experiment with a new straw but this time place your thumb over the top, covering the hole.

What forces are increasing or decreasing to allow this to happen?



## What is a conspiracy theory?

Some people believe in things that other people do not. Here are a couple of examples for which there is little evidence.



However, some people then believe that other people are covering it all up. This can lead to some surprising places.

**Activity 1:** If there was Bigfoot or a Plesiosaur as shown above then how difficult would it be to keep it a secret? Look up how big Loch Ness is and how many people visit it every year.

**Activity 2:** Think about these questions / discuss them in a video chat with friends: What happens to you when you believe that the entire sections of society are keeping secrets? How could all scientists or the entire government keep a secret? How difficult would it be for 1000s of people to keep a secret? Why do film makers like conspiracy theories for their movies?

**Activity 3:** Listen to this radio programme. It is available on BBC Sounds. <https://www.bbc.co.uk/sounds/play/m000dfqn>

How many conspiracy theories are mentioned? Which ones have you heard about?

**Activity 4:** Mr Ford once, for a joke spread the rumour that the canteen at his college was serving Weetabix that were so cheap, the box they came in had more nutritional value as at least it contained roughage in the cardboard box. he got into a lot of trouble and had to write an apology to be displayed at the college canteen till. Write a letter for Mr Ford, to try to explain that he now understands how serious disinformation can be, highlighting what might have gone wrong.

**Activity 5:** Craft a conspiracy theory about Mr Ford. Email him with it. How would you get people to believe it? How far could you stretch it? How could you stop it once people started believing it – even if it was you who made it up?

For those of you with access to Disney watch Lion Guard “Beware of the Zimwi” episode. How can belief cause panic?

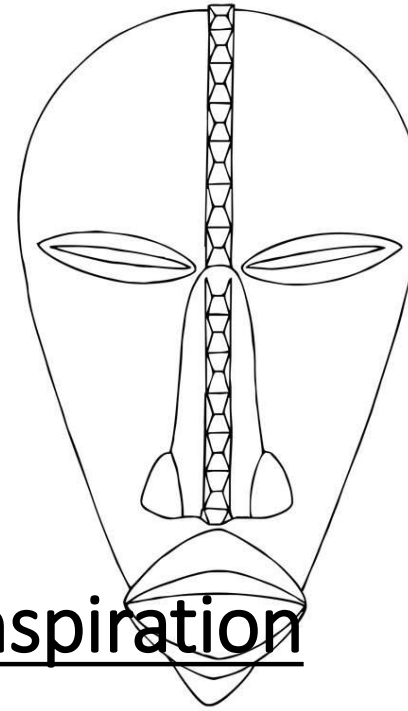
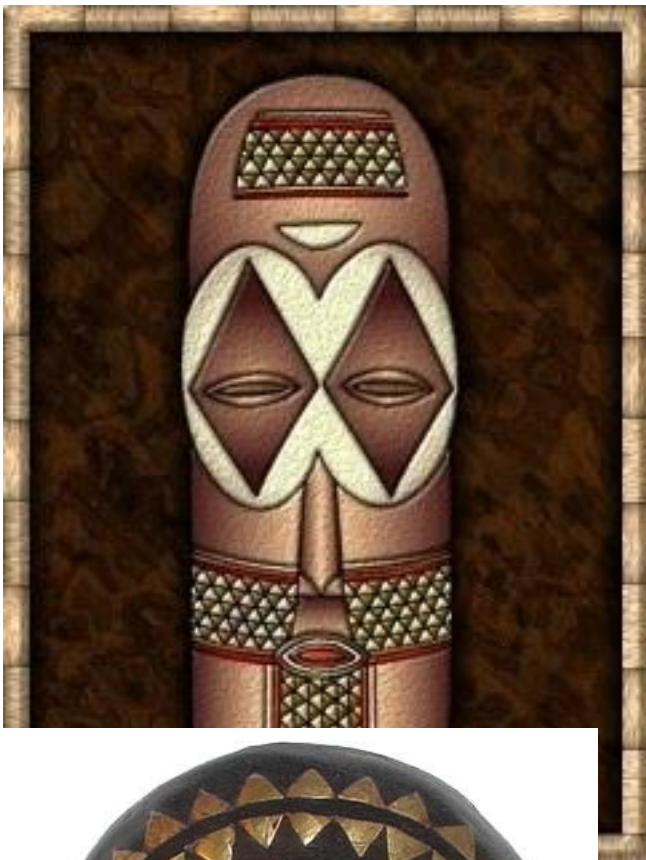
**Activity 6:** Find out how anti-vaccination conspiracy theory has killed people.

<https://www.iflscience.com/health-and-medicine/one-map-sums-damage-caused-anti-vaccination-movement/>

**Activity 7:** Challenge activity. Research one of the more popular myths and present a clear and referenced case to debunk it.

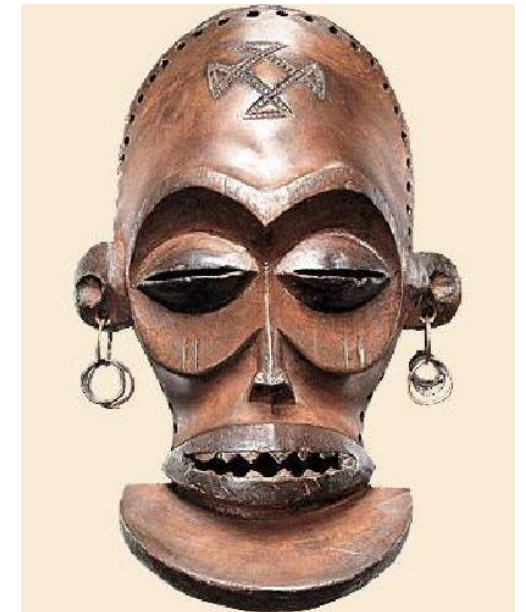
<https://www.osce.org/odihr/441101?download=true>





## Year 8 African mask inspiration

- This term we will be mostly looking at African masks and the Art work involved in them. We will be designing our own masks taking inspiration from past examples like the ones on this page.
- Masks have inspired many modern Artists and film makers as they are full of character and mood.
- Pay particular attention to the colours used. They are often Earth type colours that fit with the origins and style of the masks.
- The masks have emotions such as anger, surprise, tranquillity etc... Try to give your mask an emotion or mood.





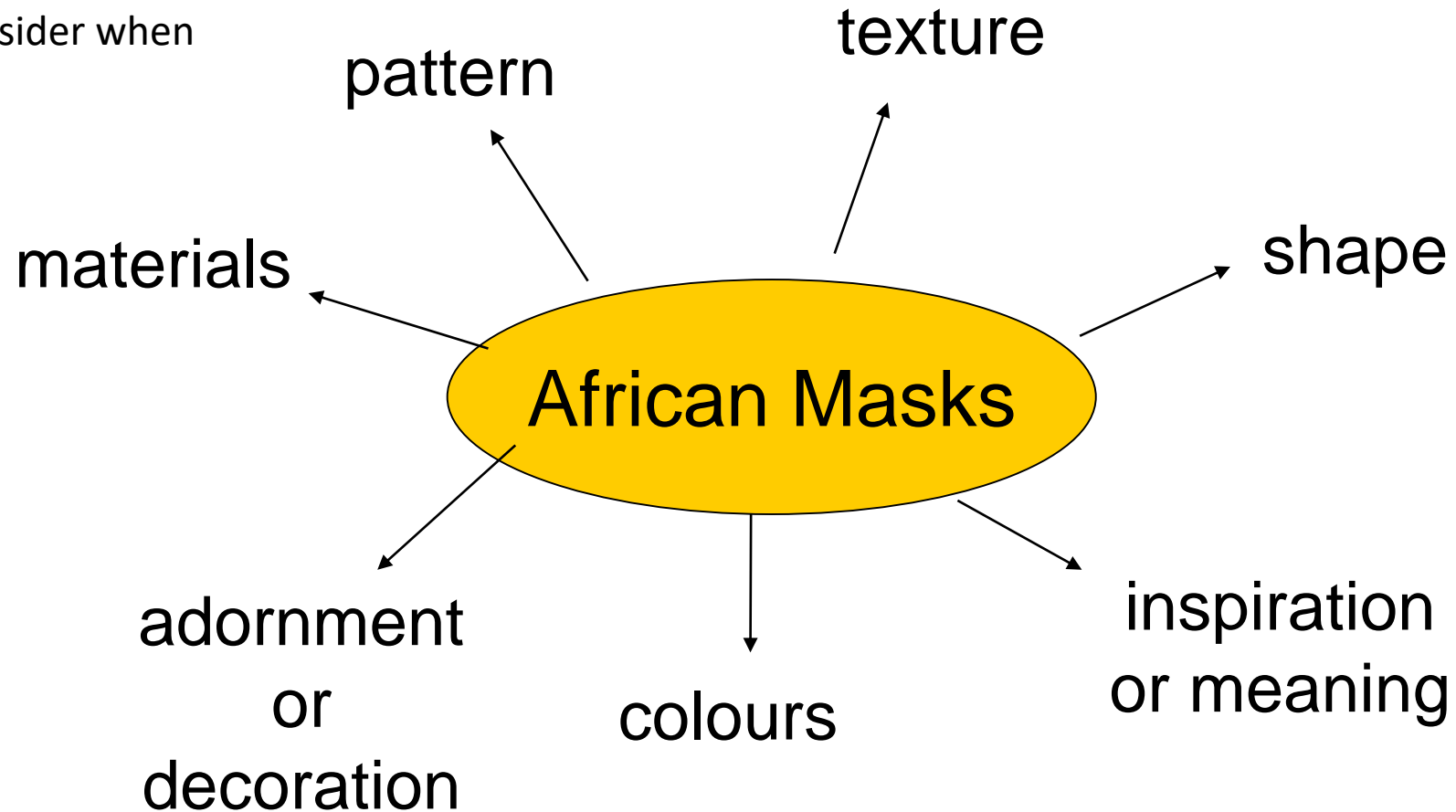
# Some ideas for different shapes....





# Key Characteristics of African Masks

These are different aspects  
You need to consider when  
designing  
Your own mask:



1


## Methods of Recording

Observational drawing	Drawing from looking at images or objects
First hand observation	Drawing directly from looking at objects in front of you
Second hand observation	Drawing from looking at images of objects
Photographs	Using a camera or smartphone to record images will class as first hand observation
Sketches	Basic sketches and doodles can act as a starting point for development

### Stages of Drawing


Basic shapes → Accurate shapes → Detail → Shade

2




**Tonal shade**  
Produce a range of tones by varying the pressure and layering consider using softer pencils for darker shades


Alternative shade techniques




Cross hatching



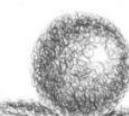
Hatching




Contour lines



Stippling



Scribble



Pattern

3

## Annotation

Describes writing notes, using images and explaining your thoughts to show the development of your work.

**Step 1 Describe**  
What is this an image of?  
What have you done here?  
What was this stage of the project for?

**Step 2 Explain**  
How was this work made?  
How did you produce particular effects? How did you decide on the composition?

**Step 3 Reflect**  
Why did you use these specific methods? Why do particular parts work better than others? Why might you do things differently next time?

- 1- Formal elements are taught e.g. how to sketch and use tone to create a 3D effect. You will explore the colour wheel and how to use the basic materials in Art.
- 2-“The Greenman” – This project introduces you to facial proportions and how to blend oil pastels effectively. We also learn about clay and create small 3D Greenman faces. Examples of world renowned pieces of art are discussed.
- 3-“Perspective Landscapes”- This project introduces students to the concept of perspective and distance in Art. You learn about the technique of one-point perspective to create a feeling of depth in a landscape.

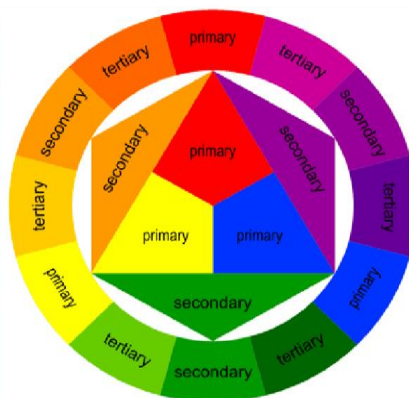


1

<b>Media</b>	The substance that an artist use to make art
<b>Materials</b>	The same as media but can also refer to the basis of the art work eg, canvas, paper, clay
<b>Techniques</b>	The method used to complete the art work, can be generic such as painting or more focus such as blending
<b>Processes</b>	The method used to create artwork that usually follows a range of steps rather than just one skill

3

Colour Theory	
Primary= RED, YELLOW, BLUE	Complimentary; Colours opposite on the colour wheel
Secondary= Primary+Primary	Harmonious; Colours next to each other on the wheel
Tertiary= Secondary+Primary	Monochromatic; shades, tones & tints of one colour
Shades – add black	Hue – the pigment
Tint – add white	Warm; RED, ORANGE YELLOW. Cold; BLUE, GREEN, PURPLE



2

<b>Pencil</b>		The basic tool for drawing, can be used for linear work or for shading
<b>Biro</b>		Drawings can be completed in biro and shaded using hatching or cross hatching
<b>Pastel (chalk/oil)</b>		Oil and chalk pastels can be used to blend colours smoothly, chalk pastels give a lighter effect
<b>Coloured pencil</b>		Coloured pencil can be layered to blend colours, some are water soluble
<b>Acrylic paint</b>		A thick heavy paint that can be used smoothly or to create texture
<b>Watercolour</b>		A solid or liquid paint that is to be used watered down and layered
<b>Gouache</b>		A pure pigment paint that can be used like watercolours or more thickly for an opaque effect
<b>Pressprint</b>		A polystyrene sheet that can be drawn into to print white lines – can be used as more than 1 layer
<b>Monoprint</b>		Where ink is transferred onto paper by drawing over a prepared surface
<b>Collograph</b>		A printing plate constructed of collaged materials
<b>Card construction</b>		Sculptures created by building up layers of card or fitting together
<b>Wire</b>		Thick or thin wire manipulated to create 2d or 3d forms
<b>Clay</b>		A soft substance used for sculpting, when fired can be glazed to create shiny colourful surfaces
<b>Batik</b>		A fabric technique using hot wax to resist coloured inks
<b>Silk painting</b>		Fabric inks painted onto silk, Gutta can be used as an outliner to prevent colours mixing

# 1 Formal Elements of Art

LINE	the path left by a moving point, e.g. a pencil or a brush dipped in paint. It can take many forms. e.g. horizontal, diagonal or curved.
TONE	means the lightness or darkness of something. This could be a <u>shade</u> or how <u>dark</u> or <u>light</u> a <u>colour</u> appears
TEXTURE	the surface quality of something, the way something feels or looks like it feels. There are two types : <u>Actual</u> and <u>Visual</u>
SHAPE	an area enclosed by a <u>line</u> . It could be just an outline or it could be <u>shaded</u> in.
PATTERN	a design that is created by repeating <u>lines</u> , <u>shapes</u> , <u>tones</u> or <u>colours</u> . can be <u>manmade</u> , like a <u>design</u> on fabric, or <u>natural</u> , such as the markings on animal fur.
COLOUR	There are 2 types including Primary and Secondary . By mixing any two <u>Primary</u> together we get a <u>Secondary</u>

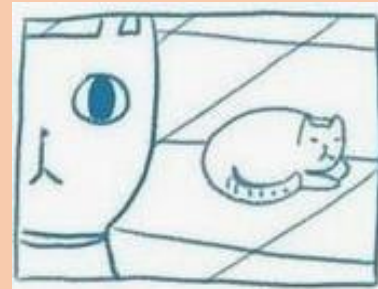
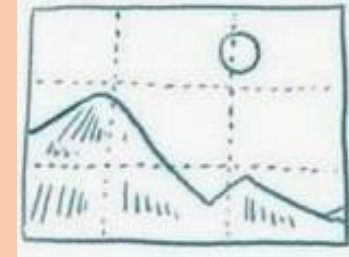
3

A Rough	A Visual/ Maquette	Final Piece
A basic sketch of a final idea	A small image or model created in selected materials	An image or sculpture pulling all preparatory work together

2

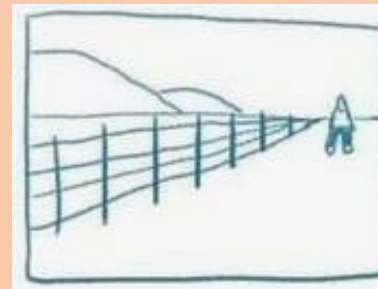
## Composition Layouts

Rule of thirds – Place focal objects at 1/3 or 2/3 of the image horizontally or vertically. Not in the middle



Balance elements. If there is an emphasis on one side balance it out with smaller objects on the other

Simplify and fill. Enlarge or crop the image to fill the space



Use lines. Lines will draw the viewer in, they don't have to be straight, consider S or C



## Micro-organisms

Micro-organisms are tiny forms of life. They can only be seen under a microscope and are sometimes called microbes.

They spoil food and make it unsafe to eat because they contaminate it with their waste products, their physical presence and the toxins they produce.

### What micro-organisms can spoil food and make it unsafe to eat?

There are three groups of micro-organisms that you need to know about that spoil food and cause food poisoning. These are..

- Bacteria
- Moulds
- Yeasts

### Micro organisms need 5 conditions to grow and multiply:

1. A warm temperature
2. Plenty of moisture (water)
3. Plenty of food
4. The right PH level (not too acidic or alkaline)
5. Enough time (bacteria split every 10-20 minutes)

## High risk foods

- High risk food have ideal conditions for bacteria
- High risk foods are ready to eat foods that could grow harmful bacteria
- They are moist and high in protein which is food for bacteria.
- High risk foods have a short shelf life - you can't keep them for long or the bacteria might multiply to dangerous levels.

### Examples of high risk foods:

Cooked meat, fish and poultry, dairy products (eggs, cheese etc.), gravies, stocks and sauces, shellfish, cooked rice.

### Example exam questions:

What five conditions to bacteria need to grow and multiply? (5 marks)

What is a high risk food? (5 marks)

## Storing food safely

Cooking (75°C)	The danger zone (5°C-63°C)
<ul style="list-style-type: none"> <li>• Cooking food above 75°C kills bacteria</li> <li>• Re-heat food properly, only once. Reheat food so 75°C for at least 3 minutes</li> <li>• Check the food is 75°C with a temperature probe</li> </ul>	<ul style="list-style-type: none"> <li>• Bacteria can grow and multiply quickly between 5°C to 63°C.</li> <li>• This is called the danger zone</li> <li>• The optimum temperature for bacterial growth is 37°C</li> </ul>
Chilling (0°C - 5°C)	Freezing (-18°C)
<ul style="list-style-type: none"> <li>• Keeping food between 0°C and 5°C slows down the growth of bacteria</li> <li>• This extends the shelf life of food</li> <li>• Chilling food doesn't change the properties much - food looks and tastes the same</li> </ul>	<ul style="list-style-type: none"> <li>• Freezing food below -18°C stops bacteria growing - they become dormant</li> <li>• Freezing generally extends shelf life and the nutrients aren't lost</li> <li>• It doesn't kill the bacteria though. They become active again once the food defrosts.</li> </ul>

### Preparing self for cooking

- Tie hair back to prevent hair and dandruff falling in food
- Take off coats and blazers
- Wear an apron to prevent bacteria transferring from our clothes to our food
- Wash hands with hot soapy water to kill bacteria

### Preparing the room for cooking

- Sanitise all work surfaces
- Check equipment is clean and dry
- Tuck all stools in as they can be a trip hazard
- Put all high risk foods in the fridge to slow bacteria growth

### Wash your hands after:

- Coughing
- Sneezing
- Blowing your nose
- Tying shoe laces
- Going to the toilet
- Touching hair or face
- Touching raw meat
- Touching eggs

## Nutrients

Macro nutrients - needed in large quantities in the diet. The three macro nutrients are: PROTEIN, CARBOHYDRATES, FAT

Micro nutrients - needed in small quantities in the diet. The two micro nutrients are: VITAMINS, MINERALS

## Protein

Proteins are made up of amino acids, often referred to as the 'building blocks' of the body. Non-essential amino acids can be made by the body, however, essential amino acids can't be made by the body and we must get from the food we eat.

High biological Value (HBV) proteins contain all the essential amino acids we need and generally come from animal sources. Low biological value (LBV) proteins are missing one or more essential amino acids and generally come from plant sources.

### Food sources

HBV - beef, pork, lamb, poultry (chicken, turkey, duck), fish, cheese, butter milk

LBV - beans, chickpeas, lentils, peas, nuts, seeds, found in smaller amounts in some vegetables such as spinach and broccoli.

### Function

Needed for growth from childhood to adulthood and the growth of nails, hair and muscle mass, repair of muscles, tissues and organs after illness or injury and to make enzymes for digestion and antibodies to stop us getting ill.

### Example exam questions:

What are the two types of fat? (2 marks)

Explain the difference between a HBV and LBV protein (6 marks)

## Carbohydrates

There are two types of carbohydrates, complex and simple. They are also known as starchy (complex) and sugary (simple).

### Food sources

Starchy - bread, rice, pasta, potatoes, bagels, oats, flour, cereal and some vegetables.

Simple - fruit, some vegetables, chocolate, sweets, biscuits, cakes

### Function

Starchy/complex carbohydrates are digested slowly and provide long term energy.

Sugary/simple carbohydrates are digested slowly and provide short term energy

## Fat

There are two types of fat, saturated and non saturated.

Saturated fats are classed as 'unhealthy fats', they are solid at room temperature and are generally animal based.

Unsaturated fats are classed as 'healthier fats' and are liquid or soft at room temperature and come from plant based sources.

### Food sources

Animal - beef, chicken skin, processed meat (sausages, salami, pepperoni), bacon, butter, cheese, full fat milk

Plant - vegetable oils (sunflower, olive, rapeseed), avocado, nuts, seeds

### Function

Keeps us warm (provides insulation), secondary source of energy, protects vital organs and bones.

## Dietary related health problems

### Too much sugar can cause:

1. Weight gain (which can lead to obesity)
2. Tooth decay
3. Diabetes (your body cannot produce enough/any insulin to regulate your blood sugar levels)

### Too much salt can cause:

1. High blood pressure (this can increase your risk of heart disease and a stroke).

### Too much saturated fat can cause:

1. Weight gain (which can lead to obesity)
2. High cholesterol (this narrows arteries making it harder for the blood to travel around, putting you at risk of heart disease).



# Stir Fry

## Ingredients (serves 2)

1 chicken breast  
1 pepper  
 $\frac{1}{2}$  onion  
1 garlic clove  
1 small carrot  
Small piece of ginger  
Tsp mixed spice  
Splash of soy sauce  
 $\frac{1}{2}$  chilli  
Tbsp oil

## Equipment

Knife  
Chopping board  
Wooden spoon  
Wok

## Skills

Slicing  
Frying  
Seasoning



1. Cut the onion and the pepper into thin slices. Chop your carrot into thin match stick style slices.



2. Cut the skin from the ginger and cut into small pieces. Cut the garlic into small pieces.



3. Cut your chicken in long strips.



4. Heat the oil and add the chicken, cook until the outside has turned white. Then add the ginger, garlic and chilli



5. Add your vegetables and cook for a couple of minutes.



6. Add your soy sauce, salt and pepper. Fry for another few minutes.

Tip:  
Don't over cook  
the dish as stir  
fry should be  
slightly crunchy.

Serve with egg noodles or rice.

### Components of Physical Fitness

#### **Aerobic Endurance**

The ability of the heart and lungs to work hard to supply nutrients and oxygen to the muscles during exercise.

#### **Muscular Endurance**

The ability of the muscles to work efficiently for long periods of time

#### **Speed**

The ability to cover a distance quickly. There are 3 types of speed (Accelerative speed, Pure speed and Speed Endurance.

#### **Muscular Strength**

The maximum force, measured in kilograms (Kg) or newtons (N) that can be generated by a muscle or group of muscles.

#### **Flexibility**

The range of motion in all joints of the body and the ability to move a joint fluidly through its complete range of movement.

#### **Body Composition**

The amount of fat to fat-free muscle mass.

What sports would you usually see these components being used? E.g. Flexibility is needed in .....

Watch this!



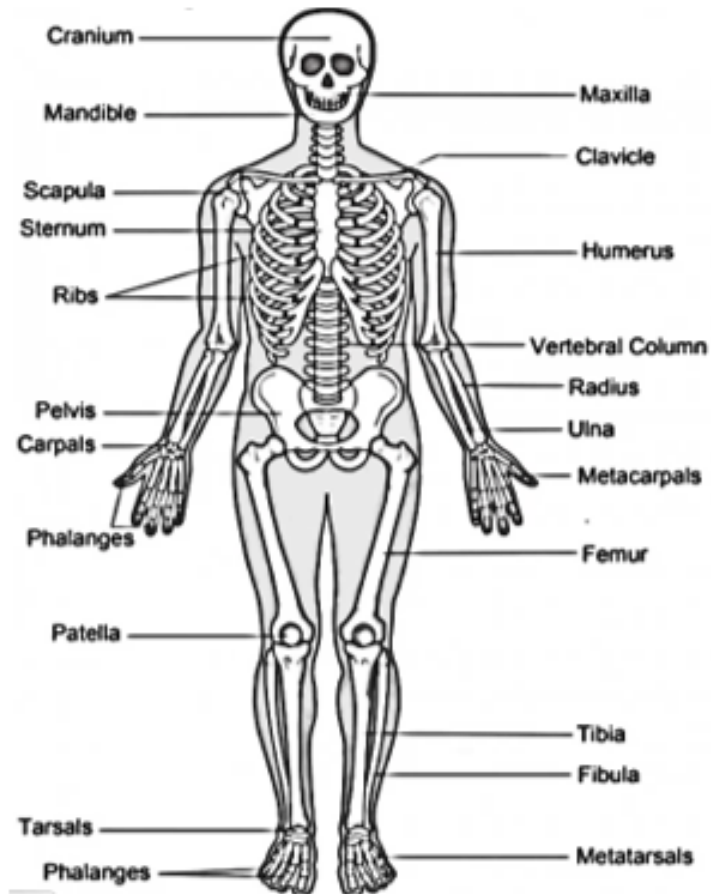
### Structure of the Muscular system



Watch this 5 minute video on the muscular system



## Structure of the Skeletal system



Using this QR code, learn and remember the 5 key functions of the skeletal system.

## Components of Skill-related Fitness

**Agility** – The ability of a sports performer to quickly change direction without losing balance or time

**Balance** – The ability to maintain your centre of mass over a base of support. There are two forms of balance (static which is maintaining balance in a stationary position and Dynamic which is maintaining balance while in motion)

**Co-ordination** – The ability of the body to work together to move smoothly and accurately

**Power** – The ability to use strength and speed. It is the work done in a unit of time and is calculated in the following way  $\text{Power} = \frac{\text{Force (Kg)} \times \text{Distance (m)}}{\text{time (mins or seconds)}}$

**Reaction time** – The time taken for a sports performer to respond to a stimulus, for example, the time taken for a sprinter to react to the starter gun.



## Diet and Nutrition for Sport

Nutrient	Function and Examples
<b>Protein</b>	 <p>Important for <b>growth and development</b> of muscle and tissue as well as making and <b>repairing cells</b> inside the body. Poultry, Fish, Nuts, Dairy and Soy are examples.</p>
<b>Carbohydrates</b>	 <p>Provide <b>energy</b> for the body over a longer period of time and helps <b>fight disease</b>. Potatoes, Pasta, Pulses and Fruit are sources.</p>
<b>Fibre</b>	 <p>Important for <b>preventing constipation</b> and also helps decrease the risk of Type 2 diabetes, heart disease and high cholesterol in later life. Fresh fruits (skin on) Dried fruit, Vegetables, Wholegrains such as brown rice and wheat bread are sources.</p>
<b>Calcium</b>	 <p>Important for <b>strong bones and teeth</b>. It also helps with <b>muscle function, blood clotting</b> and <b>nerve transmission</b>. Dairy products, leafy green vegetables, orange juice are sources.</p>
<b>Vitamin A, C and D</b>	<p>Vitamin A is important for <b>eyesight, growth</b> and the functioning of the <b>immune system</b> as well as <b>healthy skin</b>. Dark green vegetables e.g. spinach. Sweet potatoes, papayas, milk and eggs.</p> <p>Vitamin C is important for decreasing the amounts of colds you get, <b>fight infections, wound healing, healthy gums and skin and also acts as an antioxidant</b>. Citrus fruits, broccoli, strawberries, tomatoes, peppers and kale are the sources</p> <p>Vitamin D is important for <b>strong bones and teeth</b> as it absorbs calcium. It is also good for <b>immune function</b>. Milk, oily fish, egg yolk and even the sunlight are sources.</p>



## Diet and Nutrition activities

<https://www.nhs.uk/live-well/eat-well/food-and-drinks-for-sport/>

Y F E X S E N E R G Y T B T R T B Y I X  
O H B R Y E B A H G N O K N E M S H X F  
J O B P B S L Y S A N O H E T A J T J W  
S E H A S I I C D E V Z L M A K S L Z Q  
S O Q Q T F F I S W P B R P W I Q A T Q  
Y E S V D W X Z L U Q O Y O Y H I E N Q  
F C T Y I O L T S K M J I L D W C H E T  
I A Z A I T N V R H Y Q E E O F D E I W  
M P S T R H A D O D I P U V L L U O T W  
M T N E T D R M X R R R O E N H M G G Z  
U A C W T B Y P I O N H Y D R A T I O N  
N F O F A T S H T N U J L M V E T I K N  
E R J U D H O E O A S I I I U I P P D V  
G I S T K L I Y O B N Q Y N D O N A L H  
A N T R E N L A E J R G W E Y C A Q I N  
W I H H T O B W R X Z A J R P G B T F R  
D K G T M U B S K Y H H C A M U E T B W  
U S P Z J H Z R X C T M O L D I X G O F  
N A V G F W Q Y D O R U Y S D X G J N R  
M U I C L A C X Q F Q E Q H T E E T A X

ANTIOXIDANT  
DEVELOPMENT  
FIBRE  
IMMUNE  
REPAIR

BONES  
DIET  
GROWTH  
MINERALS  
TEETH

CALCIUM  
ENERGY  
HEALTHY  
MUSCLES  
VITAMINS

CARBOHYDRATES  
FATS  
HYDRATION  
PROTEIN  
WATER

Click the link above or scan  
the code to see how diet and  
nutrition can affect sports  
performance

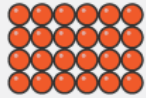




Create a one week diet plan for an athlete of your choice. Your athlete will be competing in the Olympic Games next week and needs some help with their nutrition. Create a 7-day diet plan for breakfast, lunch and dinner. For example:

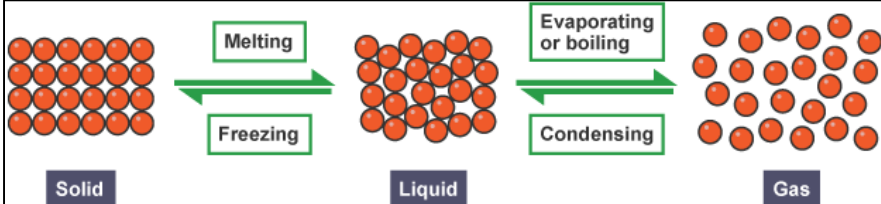
	Breakfast	Lunch	Dinner
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			
Sunday			

# PARTICLES

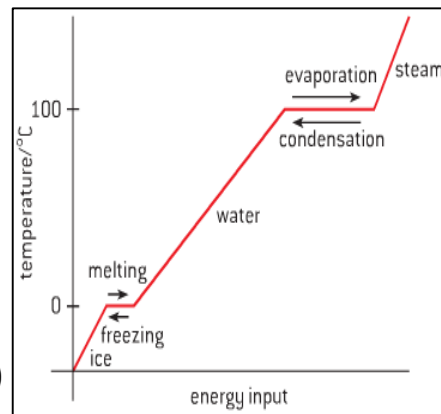
**Key knowledge** – Particle theory, states of matter, changes of state, diffusion, density

State	Solid	Liquid	Gas
Diagram			
Arrangement of particles	Regular arrangement	Randomly arranged	Randomly arranged
Movement of particles	Vibrate about a fixed position	Move around each other	Move quickly in all directions
Closeness of particles	Very close	Close	Far apart

The particles should be the same in all 3 diagrams.



As a substance is heated it gains **energy**.  
When the particles gain enough energy They overcome the forces between them.  
Whilst a **change of state** is happening the temperature of the substance does not change. (flat line on graph)



## Density

1 kg of a gas has a larger volume than 1 kg of a solid.  
There is empty space between particles in a gas, but in a solid, they are tightly packed together.

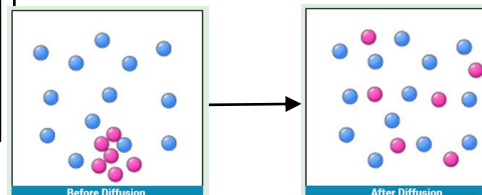
$$\text{Density} = \text{Mass} / \text{Volume}$$

... so the density of the gas is much smaller than the density of the solid.

## Diffusion

Particles in a liquid or a gas **spread out** from an area of **high concentration** to an area of **low concentration** until the concentrations are equal.

The **higher** the concentration **gradient** the **faster** the net diffusion.  
The **higher** the temperature the **faster** the net diffusion.  
If the particles that are spreading are water molecules we call this process **osmosis**.



## How Science works

### Risk Assessment

Hazard	Risk	Level of risk	Control measure
What could cause harm? e.g. electricity	What harm could it cause? e.g. electrical shock, burns to the skin	How likely is it to happen and how bad would it be? Low, medium or high risk?	What safety precautions will be taken? e.g. wear safety goggles, ensure all wires and equipment is tested, fused, earthed and insulated. Do not use near water.

**The independent variable** – The one factor that can be changed in an investigation

**The dependent variable** – The one thing that needs to be measured in an investigation

**Control variable** – all the factors that need to be kept the same to ensure the investigation is fair

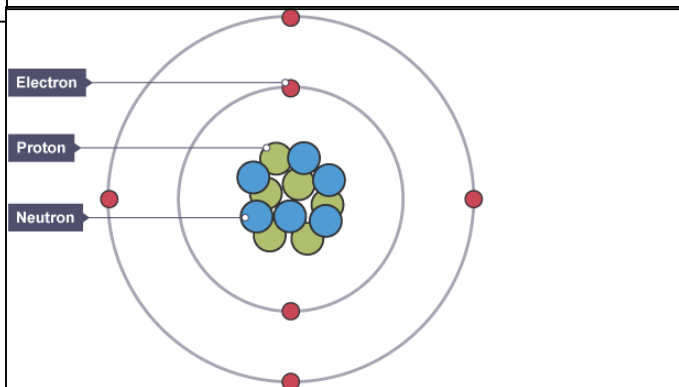


# Mendeleev's beard 1

All the different elements are arranged in a chart called the periodic table. A Russian scientist called Dmitri Mendeleev produced one of the first practical periodic tables in the 19th century. The modern periodic table is based closely on the ideas he used:

## Structure of the Atom

An atom is made up of three subatomic particles: protons, electrons and neutrons. Protons and neutrons are found in the nucleus of the atom (in the centre). Electrons are found orbiting the nucleus in shells (also known as *energy levels*). Protons have a positive charge. Electrons have a negative charge. Neutrons have a no charge.

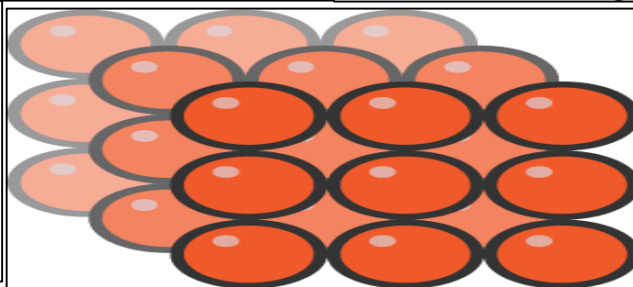


1	2		3	4	5	6	7	0
								He
Li	Be							
Na	Mg							
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh
Cs	Ba	La	Hf	Ta	W	Re	Os	Ir
Fr	Ra	Ac						

Metals Non-metals

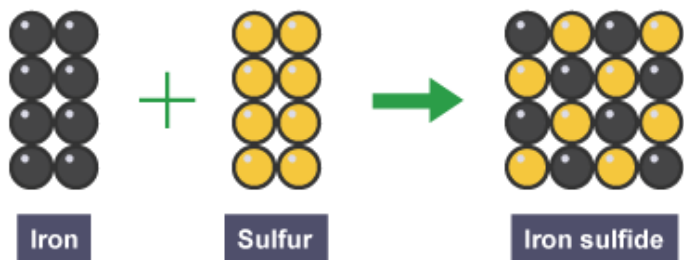
## Atoms

Everything is made from atoms, including you. Atoms are tiny particles that are far too small to see, even with a microscope. If people were the same size as atoms, the entire population of the world would fit into a box about a thousandth of a millimetre across.



## Chemical reactions

Atoms are rearranged in a chemical reaction. The substances that react together are called the reactants are formed in the reaction are called the products. No atoms are created or destroyed in a chemical reaction. This means that the total mass of the reactants is the same as the total mass of the products. We say that **mass is conserved** in a chemical reaction.



## Chemical equations

The changes in chemical reactions can be modelled using equations. In general, you write:

**reactants → products**

The reactants are shown on the left of the arrow, and the products are shown on the right of the arrow. Do not write an equals sign instead of an arrow. If there is more than one reactant or product, they are separated by a plus sign.

## Word equations

A word equation shows the names of each substance involved in a reaction, and must not include any chemical symbols or formulae. For example:

iron + sulphur → iron sulphide

In this reaction, iron and sulphur are the reactants, and iron sulphide is the product.

Iron sulfide, the compound formed in the reaction, has different properties to the elements from what it is made.

## Compounds

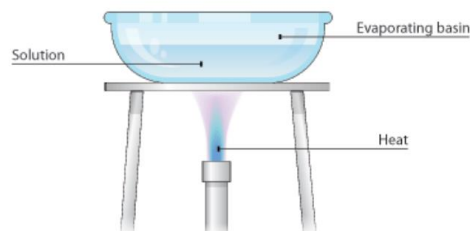
A compound is a substance that contains atoms of two or more different elements, and these atoms are chemically joined together. For example, water is a compound of hydrogen and oxygen. Each of its molecules contains two hydrogen atoms and one oxygen atom. There are very many different compounds.

# Mendeleev's beard

## 2

### Evaporation

This is good for separating a soluble solid from a liquid (a soluble substance dissolves, to form a solution). For example copper sulphate crystals can be separated from copper sulphate solution using evaporation. Remember that it is the water that evaporates away, not the solution



### Method

### Description

### Example

#### Filtration

*Separating an insoluble solid from a liquid*

To get sand from a mixture of sand, salt and water.

#### Crystallisation

*To separate a solid from a solution*

To obtain pure crystals of sodium chloride from salt water.

#### Simple distillation

*To separate a solvent from a solution*

To get pure water from salt water.

#### Fractional distillation

*Separating a mixture of liquids each with different boiling points*

To separate the different compounds in crude oil.

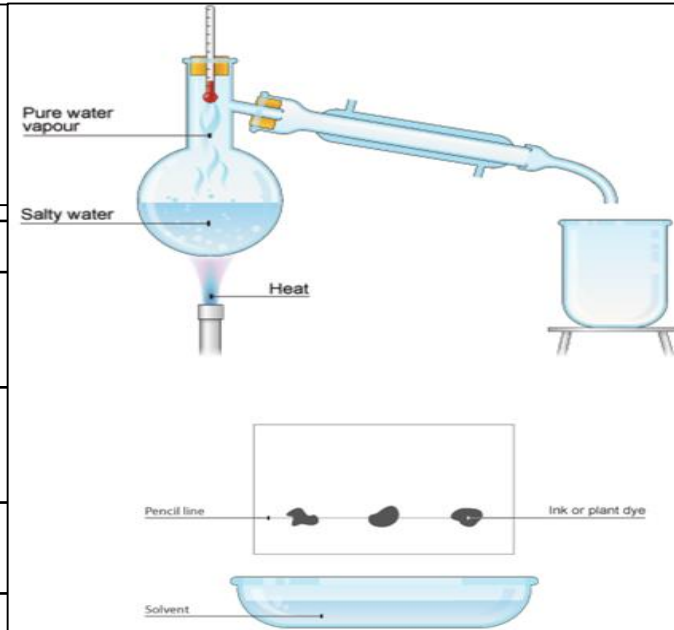
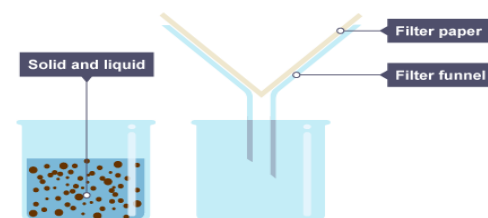
#### Chromatography

*Separating substances that move at different rates through a medium*

To separate out the dyes in food colouring.

### Filtration

This is good for separating an insoluble solid from a liquid. (An insoluble substance is one that does not dissolve). Sand, for example, can be separated from a mixture of sand and water using filtration. That's because sand does not dissolve in water.

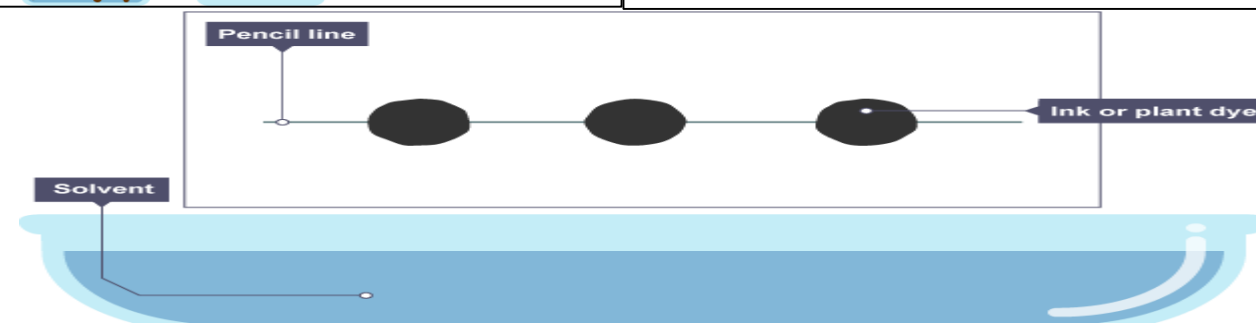


### Distillation

This is good for separating a liquid from a solution. For example, water can be separated from salty water by simple distillation. This method works because the water evaporates from the solution, but is then cooled and condensed into a separate container. The salt does not evaporate and so it stays behind. Distillation can also be used to separate two liquids that have different boiling points.

### Chromatography

Simple chromatography is carried out on paper. A spot of the mixture is placed near the bottom of a piece of chromatography paper and the paper is then placed upright in a suitable solvent, e.g. water. As the solvent soaks up the paper, it carries the mixtures with it. Different components of the mixture will move at different rates. This separates the mixture out





# Pandemic – Communicable diseases

## FIRST LINE OF DEFENCE

The human body has several non specific ways of defending itself from pathogens getting in

Nose	Nasal hairs, sticky mucus and cilia prevent pathogens entering through the nostrils.
Trachea and bronchus (respiratory system)	Lined with mucus to trap dust and pathogens. Cilia move the mucus upwards to be swallowed.
Stomach acid	Stomach acid (pH1) kills most ingested pathogens.
Skin	Hard to penetrate waterproof barrier. Glands secrete oil which kill microbes

Bacteria may produce toxins that damage tissues and make us feel ill

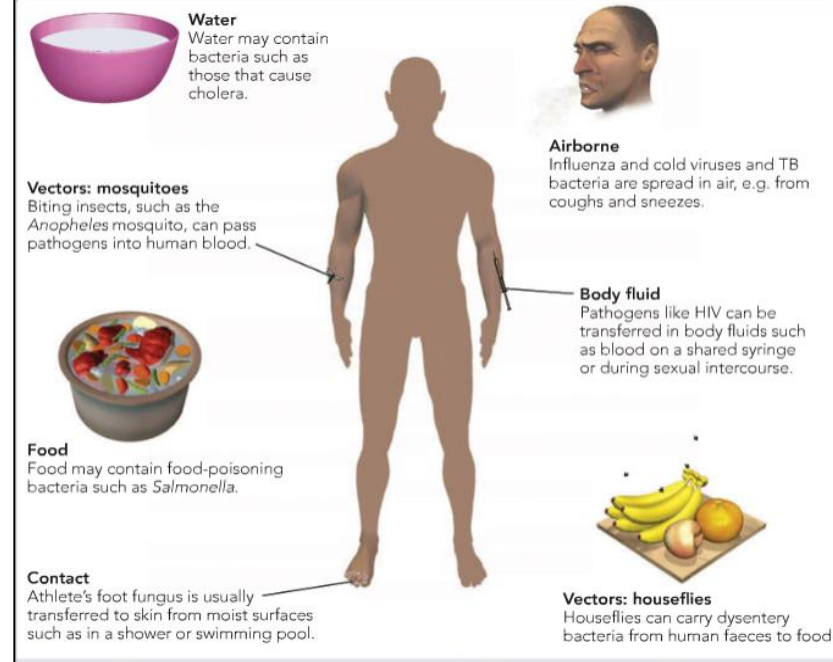
Viruses live and reproduce inside cells causing damage

White blood cells are part of the immune system

## Pathogens are microorganisms that cause infectious disease

Viruses	Bacteria (prokaryotes)	Protists (eukaryotes)	Fungi (eukaryotes)
e.g. cold, influenza, measles, HIV, tobacco mosaic virus	e.g. tuberculosis (TB), Salmonella, Gonorrhoea	e.g. dysentery, sleeping sickness, malaria	e.g. athlete's foot, thrush, rose black spot
DNA or RNA surrounded by a protein coat	No membrane bound organelles (no chloroplasts, mitochondria or nucleus). Cell wall. Single celled organisms	Membrane bound organelles. Usually single celled.	Membrane bound organelles, cell wall made of chitin. Single celled or multi-cellular

## HOW COMMUNICABLE DISEASES ARE SPREAD



Phagocytes

*Phagocytosis*

Phagocytes engulf the pathogens and digest them.

Lymphocytes

*Antibody production*

Specific antibodies destroy the pathogen. This takes time so an infection can occur. If a person is infected again by the same pathogen, the lymphocytes make antibodies much faster.

*Antitoxin production*

Antitoxin is a type of antibody produced to counteract the toxins produced by bacteria.

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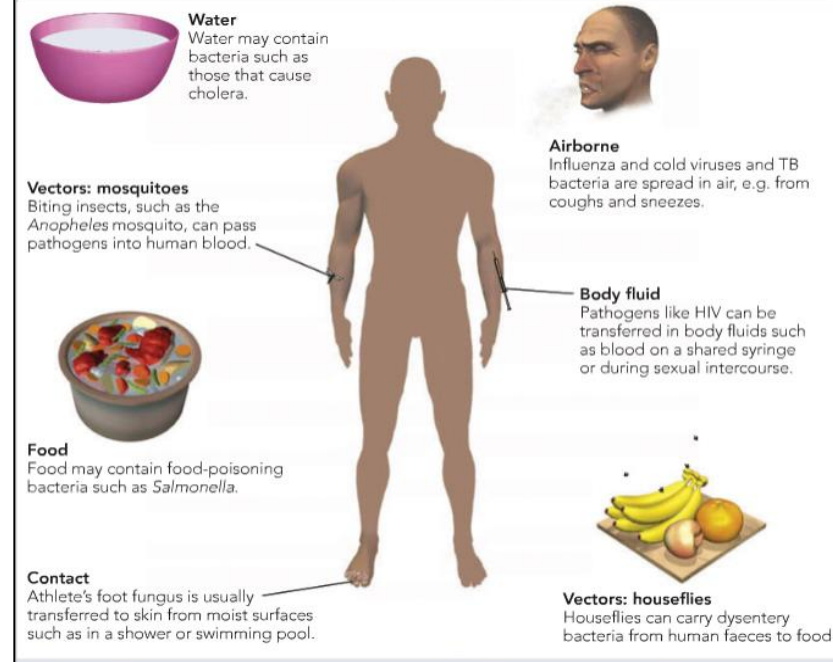
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## Summary

In the simplest terms, cloud computing means storing and accessing data and programs over the Internet instead of your computer's hard drive. The cloud is just a metaphor for the Internet.. When you store data on or run programs from the hard drive, that's called local storage and computing.

When you sit at your PC and type a query into Google, the computer on your desk isn't playing much part in finding the answers you need. The words you type are swiftly shuttled over the Net to one of Google's hundreds of thousands of clustered PCs, which dig out your results and send them promptly back to you. When you do a Google search, the real work in finding your answers might be done by a computer sitting in California, Dublin, Tokyo, or Beijing; you don't know—and most likely you don't care!

Preparing documents over the web is a newer example of cloud computing. Simply log on to a web-based service such as Google Documents or Office365 and you can create a document, spreadsheet, presentation, or whatever you like using Web-based software.

## Staying safe online

### Never disclose

your name telephone number address or school

Never accept someone as a 'friend' on social media simply because they claim to know another friend of yours. Always be cautious about what you say online.

Never agree to meet anyone in person that you've only known online. If somebody does start sending you messages that offend or upset you, tell an adult that you trust.

## Visit these websites for advice



## Cyber Security



## Cloud Productivity

Word-processing - Create and edit documents using Microsoft Word

Spreadsheet - Create and perform data calculations with Microsoft Excel spreadsheets.

Create and display professional presentations using Microsoft PowerPoint

Manage your email and calendar in Microsoft Outlook.

## Key Vocabulary

Attachment	A file that is sent with an email.
Anti-virus	Anti-virus software scans all forms of storage devices for viruses and, if found, attempts to remove them.
Cloud computing	Delivering different types of services over the Internet. This could be productivity software such as Microsoft Office 365.
Cyberbullying	Cyberbullying involves sending offensive texts or emails, posting lies or insults on social networking sites and sharing embarrassing videos or photos online.
Cyber Security	The practice of protecting systems, networks, and programs from digital attacks
Hack	Gaining unauthorised access to a computer.
Malware	Malicious software created to damage or gain illegal access to computer systems.
Phishing	Trying to trick someone into giving out information over email is called 'phishing'.
Troll	A derogatory name used as a term for a person who posts offensive messages online.



<http://bit.ly/336Fnqy>





# Year 8 Knowledge Organiser: Coasts



## Topics covered

- ✓ What we already know
- ✓ Coastal places
- ✓ Coastal processes
- ✓ Waves types
- ✓ Causes of erosion
- ✓ Erosional landforms
- ✓ Depositional landforms
- ✓ Impacts of erosion
- ✓ Methods of sea defence
- ✓ Future of our coasts

## Key Ideas:

1. I can describe the location of coastal places
2. I can describe wave types and how they link to erosion
3. I can describe how erosional landforms are created
4. I can explain how erosion can affect people and the environment
5. I can assess sea defence types and decide upon best options

## Skills

- ❑ To locate coastal places on UK maps
- ❑ To measure rates of erosion using GIS (Digital Mapping)
- ❑ To understand different opinions and viewpoints
- ❑ To write a detailed piece of extended writing
- ❑ To construct a timeline of an erosion event

## Places and Environments

- ❖ Norfolk Coast
- ❖ Happisburgh
- ❖ Hemsby
- ❖ Dunwich
- ❖ Greenwich
- ❖ Holderness
- ❖ Isle of Wight
- ❖ Cornwall
- ❖ Blackpool

## Key Terms Used in this Unit

- ❑ Erosion
- ❑ Hydraulic Action
- ❑ Abrasion
- ❑ Weathering
- ❑ Geology
- ❑ Destructive Waves
- ❑ Constructive Waves
- ❑ Stacks
- ❑ Longshore Drift
- ❑ Insurance
- ❑ Compensation
- ❑ Homelessness
- ❑ Tourism
- ❑ Revetments
- ❑ Nourishment
- ❑ Managed Retreat
- ❑ Gabions
- ❑ Breakwater
- ❑ Tidal Barrage



## Module 3: Freizeit – juhu! (Free time – yippy!)

Here is the vocabulary you will need for Module 3.

Remember to listen to the German by copying and pasting the blue codes next to the speaker icons [here](#). The full address is: <https://www.activeteachonline.com/view>



QkIQP7f4

### Bist du sportlich? • Are you sporty?

Ich bin (sehr/ziemlich/  
nicht sehr) sportlich. I am (very/quite/not very)  
sporty.

Was spielst du? What do you play?

Ich spiele ... I play ...

Ich spiele gern ... I like playing ...

Ich spiele ziemlich gern ... I quite like playing ...

Ich spiele nicht gern ... I don't like playing ...

Badminton badminton

Basketball basketball

Eishockey ice hockey

Fußball football

Handball handball

Tennis tennis

Tischtennis table tennis

Volleyball volleyball

Wasserball water polo

In this Module you will learn how to:

- talk about which sports you play
- talk about leisure activities
- talk about how often you do activities
- talk about mobiles and computers
- develop prediction strategies.

[www.textivate.com](http://www.textivate.com)

Username: openacademy

Password: firstsecond123

Go to 'my resources' to find your work.

Keep practising your German vocabulary on [www.quizlet.com](http://www.quizlet.com)

• Either:

click on this link: [https://quizlet.com/\\_8ievl8?x=1qqt&i=25q2il](https://quizlet.com/_8ievl8?x=1qqt&i=25q2il)

• Or:

use your class link to go directly to your Quizlet class.

## Was machst du gern?

### • What do you like doing?

Was machst du gern?	What do you like doing?
Ich fahre Rad.	I ride my bike.
Ich fahre Skateboard.	I go skateboarding.
Ich fahre Ski.	I ski.
Ich fahre Snowboard.	I snowboard.
Ich lese.	I read.
Ich mache Judo.	I do judo.
Ich mache Karate.	I do karate.
Ich reite.	I go horse riding.
Ich schwimme.	I swim.
Ich sehe fern.	I watch TV.
Ich spiele Gitarre.	I play the guitar.
Ich tanze.	I dance.



6i81yZmF

Read the Strategy Box for ideas on learning German vocabulary.

## Strategie 3

### Oft benutzte Wörter

High-frequency words are words that come up again and again, no matter what you are talking about. All of the Wörter pages have a list of these words, but there are many more. Look back through Chapter 3 and see how many you can find. Here are a few to get you started:

**der, die, das, ein, eine, einen, und, aber, in, ich, es gibt, gern, ...** You will find that some of these words appear in every chapter in *Stimmt! 1*. Can you predict which they are? Look through the book. Were you right?

## Wie findest du das?

### • What do you think of it?

Ich finde es ...	I think it's ...
Es ist ...	It's ...
irre	amazing
super	super
toll	great
cool	cool
gut	good
nicht schlecht	not bad
okay	okay
langweilig	boring
nervig	annoying
stinklangweilig	deadly boring
furchtbar	awful



kxLBHBM

## Was machst du in deiner Freizeit?

### • What do you do in your free time?

Ich chill.	I chill out.
Ich esse Pizza oder Hamburger.	I eat pizza or hamburgers.
Ich gehe einkaufen.	I go shopping.
Ich gehe ins Kino.	I go to the cinema.
Ich gehe in den Park.	I go to the park.
Ich gehe in die Stadt.	I go into town.
Ich höre Musik.	I listen to music.
Ich mache Sport.	I do sport.
Ich spiele Xbox oder Wii.	I play Xbox or on the Wii.



9xycnf0u



## Ich bin online • I'm online

Was machst du am Computer?	<i>What do you do on the computer?</i>
Was machst du auf deinem Handy?	<i>What do you do on your mobile?</i>
Ich chatte mit Freunden auf Facebook.	<i>I chat with friends on Facebook.</i>
Ich lade Musik herunter.	<i>I download music.</i>
Ich mache Fotos oder Filme.	<i>I take photos or make films.</i>
Ich sehe Videos.	<i>I watch videos.</i>
Ich simse.	<i>I text.</i>
Ich spiele Computerspiele.	<i>I play computer games.</i>
Ich suche und lese Infos für die Hausaufgaben.	<i>I look for and read information for my homework.</i>
Ich surfe im Internet.	<i>I surf the internet.</i>
Ich telefoniere mit Freunden.	<i>I call my friends.</i>
Ich mache ziemlich viel auf meinem Handy.	<i>I do quite a lot of things on my mobile.</i>



SVO8IKVZ

## Oft benutzte Wörter

### • High-frequency words

Wie oft?	<i>How often?</i>
(sehr/ziemlich/nicht so) oft	<i>(very/quite/not so) often</i>
einmal/zweimal/dreimal pro Woche/pro Monat	<i>once/twice/three times a week/a month</i>
jeden Tag	<i>every day</i>
jeden Morgen	<i>every morning</i>
manchmal	<i>sometimes</i>
immer	<i>always</i>
nie	<i>never</i>
Wann?	<i>When?</i>
am Wochenende	<i>at the weekend</i>
am Abend	<i>in the evening</i>
heute	<i>today</i>
morgen	<i>tomorrow</i>
am Montag	<i>on Monday</i>
nächste Woche	<i>next week</i>
in zwei Wochen	<i>in two weeks</i>



gIViTgXQ

# Year 8 History: Poverty and Scientific developments in the 16<sup>th</sup> and 17<sup>th</sup> centuries

Key words	
<b>Reformation</b>	The action or process of changing something
<b>The English reformation</b>	the Church of England breaks away from the authority of the Pope and the Roman Catholic Church
<b>The 'middle way'</b>	1559 Elizabeth I's religious settlement which decided on a 'middle way': Protestant but tolerant of Catholicism
<b>Vagabond/sturdy beggar</b>	A person who wanders from place to place without a home or job
<b>1601 Poor Law</b>	Placed paupers into four groups, each group was treated differently
<b>Class</b>	A group of people with the same economic or social status
<b>Familiar</b>	A demon, in the form of an animal that accompanies a witch
<b>Superstitious</b>	Someone who believes in omens and ghosts
<b>Age of Reason</b>	Also known as the Enlightenment, the period during the 1600s and 1700s when people began to explore the world and make new discoveries

The Elizabethans passed Poor Laws to give help to the sick and the old but there were harsh punishments for 'sturdy beggars'; Physical mutilation and execution by hanging!

## Factfile



**Name:** Matthew Hopkins **Address:** Lives in Essex  
**Work details:** Began career as a witch finder in 1645.

### Methods used:

- Strip search of accused to look for devil's marks.
- Keeps accused awake till they confess.
- The water test: ties the accused up and lowers into a river or pond. If she lives, she is guilty.
- Encourages local people to make accusations of witchcraft.
- Payment:**
  - Fee paid for survey of possible witches.
  - Fee to be paid for each witch found.

Many people, mainly women, were accused and executed for witchcraft in the 16<sup>th</sup> and 17<sup>th</sup> centuries. People struggled to understand the world around them. Religious and superstitious beliefs influenced ideas that "witches" were to blame for bad things that happened to them

During the 16<sup>th</sup> century the living standards of many people improved. Many farmers were able to sell their produce at higher prices than before and could afford to rebuild their farmhouse and even amongst those less well off, the fear of famine was less. By 1600 this had changed and there were more poor people than ever before:

- Population: This went up quickly and there was less food
- Inflation: Prices started to go up
- Unemployment: There were less jobs as the farming industry changed from crop to sheep farming
- Henry VIII had shut the monasteries so there was less help for the poor

This led to increased begging and a divide between the 'impotent poor' (deserving poor; wanted to work but couldn't as too old or sick) and those who were poor and were turning to crime (the Tudors nicknamed these people Vagabonds)

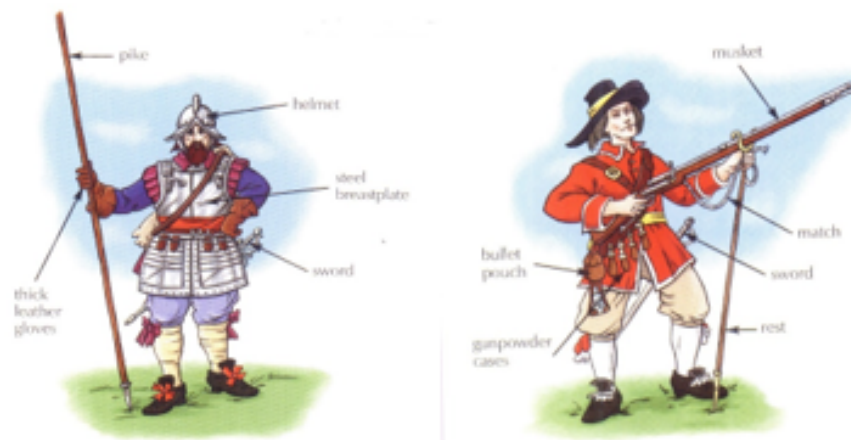
**Key Scientists:** William Harvey, Robert Hooke, Isaac Newton, Christopher Wren, Robert Boyle

## Did Science change views about witches?

Yes	No
New discoveries & Inventions Less trouble between religious groups Information and news spread more easily People are less superstitious	People still superstitious Religion was still very important People still believed in witchcraft

Key words	
Roundhead	Nickname for the parliamentary soldiers (from their haircut)
Cavalier	Nickname for the soldiers in the royalist army
New Model Army	New and improved parliamentary army with excellent training and character
Treason	The crime of betraying your country
Puritan	Protestants who wanted to 'purify' the Church of England from its Catholic ways
Catholic	Christians who believed that the Pope, in Rome, was the head of the church
Protestant	Christians who refused to accept the Pope as the head
Ship Tax	A sum of money, introduced by Charles I paid for people living by the sea
Royalist	A supporter of the King during the civil war
Parliamentarian	A supporter of parliament during the civil war

Pikeman and Musketeer



Key battles: Edgehill (1642) Marston Moor (1644), Naseby (1645)

Between 1642 and 1646 King Charles I fought a civil war against his enemies in Parliament. He lost in 1646 and was executed by beheading in 1649. Cromwell led England as a Republic between 1653 and 1658. The Monarchy was restored in 1660.

Causes of the English Civil War:

- His marriage to the French Princess, Henrietta Maria, worried Protestants about another Civil War (France was a huge Catholic superpower)
- Soon there were religious changes such as to the prayer book which angered Protestants
- Charles spent money on wars with Scotland and Irish rebels. Taxes were raised unfairly and the wars were lost
- Wealthier members of society (Lords and Rich Gentlemen) had more political rights than others
- Charles showed little respect for Parliament; shutting it down when it would not approve his requests for money or laws which were not in the favour of the people (Ship Tax)

Oliver Cromwell as Lord Protector

**A Harsh & Unpopular Ruler (Villain)**

Cromwell's actions in Ireland, particularly at Drogheda, are still remembered for their cruelty and bloodshed

Popular entertainment and hobbies such as gambling, the theatre and even makeup were banned

Most popular aspects of Christmas were banned!

**A Tolerant Defender of Democracy (Hero)**

Cromwell was surprisingly tolerant of other religions and was the first ruler to allow Jews to re-settle

Prevented the King from destroying Parliament (although he eventually got rid of it himself!)

Built England into a formidable military power



The aim of a knowledge organiser is to do what it says on the tin – to help you organise and consolidate your knowledge! Of course, there are an infinite number of ways in which this can be done, and will depend very much on the choices of the individual. Below you will find some suggestions of possible tasks that could be completed with the use of your knowledge organiser.

Re-write this information for a primary school child. This is harder than it sounds! What key words will you need to define for them?

Re-write a page using 10 key facts or illustrations.

Produce a timeline of all the main events – either on one particular topic or, for a challenge, everything you have studied so far!

Design a museum; what artefacts would you include to represent the facts in the knowledge organiser?

Design a time capsule; what would you put in it to represent History learned so far in each knowledge organiser?

Write a 20 question quiz (with answers). You could send this to a friend in your year, a member of your family or test yourself in 2 weeks' time.

Write a creative story – pick one of the historical figures and do it from their point of view.

Write a role play from a moment in History using the knowledge organiser. Involve other people from your family!

Make a poster titled “Keep Calm and learn about History”. Use the knowledge organiser to illustrate.

Write a monologue from one of the historical figures. How would they feel about the events going on around them?

Teach a History lesson to someone else in your house using the knowledge organiser.

Pick an event in History and produce a cartoon strip or storyboard from it.

Pick an event in History and draw the scene.

Pick an event or person from the knowledge organiser and explain why they are the most important event or theme to learn about in History.

Pick an event and write a creative news article about it.

Imagine you can have a tea party with someone from History from the KO. Who would you invite and why? What would you talk about and what would you eat/drink?

## Vocabulary to learn

Dystopian  
Dystopia  
Utopia  
Identify  
Explain  
Chronology  
Chronological  
Non-chronological  
Sequence  
Wasteland  
Militant  
Council  
Government  
Poverty

## Structure analysis - methods:

- Zoom in/out
- Repetition of an image/idea
- Links and connections between paragraphs
- Shifts:
  - inside to outside (and vice versa)
  - focus
  - time
  - topic
  - setting/place
  - mood/atmosphere
  - description to dialogue (and vice versa)

## Language analysis Checklist:

- Link to task
- Relevant quote
- Meaning of quote
- Method named
- Effects explained
- Word zoomed in on
- Meaning of word
- Implied meanings
- Aim higher: layers of meaning

## Evaluate

weigh up, form a judgement

This question asks you to **evaluate** the **extent** to which you agree with a given statement about a text.

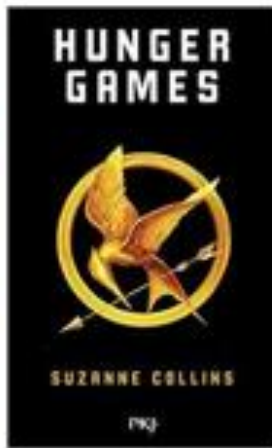
how much

You will need to consider:

- The impressions (**opinions**) you have of the text in relation to the statement
- The methods the writer has used to create these impressions
- How the particular methods create these impressions

Words/phrases  
Linguistic devices  
Structural features  
Sentence forms

# Suggested reading



## Literary devices and word class

- Metaphor – a literal comparison – *she was a monster*
- Personification – human qualities – *the grass danced in the wind*
- Simile – as/like/as if – *he was like a man possessed*
- Onomatopoeia – the sound words – *bang, pop, sizzle*
- Alliteration – same starting sounds – *really rather raucous*
- Lists – to emphasise many reasons
- Verbs – doing words
- Adjectives – describing words
- Nouns – objects or abstract things e.g. love
- Adverbs – describe doing words e.g. wrote neatly
- connotations of words – associations – night-time = mystery

1. Look up and note down the meaning of the vocabulary in the vocabulary list.
2. Use at least two of the words from the list in a sentence.
3. Learn how to spell the words in the vocabulary list using the learn/cover/check method.
4. Read the extract from *Machination* by Shira Hereld, explain how the author has used narrative hooks to engage the reader in the beginning of the text.
5. Look back at the four paragraphs from the story extract and explain how they are linked.
6. List down the things we learn about the Grubbs in this extract.
7. Note down the features that make this a dystopian short story.
8. Complete the story.
9. Respond to this question using Point Evidence Explain. Having read this introduction one student said that he thought Mrs Grubb is materialistic. Explain how far you agree with this statement.
10. Read the poem *To One In Paradise*. Make a list of the language devices used and note them down.
11. Explain how one of the language devices creates an effect for the reader.
12. Read the poem by Edgar Allen Poe. List the things you think make this a dystopian poem.
13. Explain what you think has happened in the poem.
14. After reading this poem one student said that it is not dystopian but simply a poem about a dream. Using quotations from the text explain how far you agree with this statement.
15. Write a diary entry as the narrative voice of the poem using language devices to explain your feelings.



Machination by Shira Hereld

For Mrs. Grubb's thirty-eighth birthday, Mr. Grubb bought her her third android. This brought the total number of family androids to five, which was rather a pleasing number for a couple only baby steps away from middle-age.

This Android was also one of the newest models – a curvaceous beauty with fiercely curling hair (Nextra Institute bragged: "Our Androids' synthetic hair feels realer than the stuff on your head!"). Of course, the requisite flaws had been engineered into her design, so as to not engender jealousy – eyebrows a tad too thick, chin jutting, and teeth inexpertly arranged. But all in all, the overall effect of her presence was exceedingly pleasing both to Nextra and the Grubbs.

"You shouldn't have!" Mrs. Grubb squealed, searching around the Android's back for the hidden 'on' switch. But of course, he should have, *had* to have – the Gryzowskis next door bought a pair of twin Andros only last week, and the sight of them cultivating the garden was nearly enough to throw Mrs. Grubb into a fit.

"It's the newest model," Mr. Grubb replied, smiling at the innocent eagerness on his wife's face, the excitement of a child given a chocolate bar (back in the days when real chocolate existed.) "This season features designs from all countries – I thought she'd appeal to you the most. And do you know what this means?"

"We have an Android from every continent!" Mrs. Grubb breathed as the trillion circuits inside the Android fired, bringing her to life. *A complete set*, she thought, while the Android blinked, flexed her fingers, arched her back, shook herself awake. *We've made it at last.*



## To One in Paradise

by EDGAR ALLAN POE


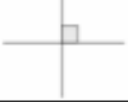


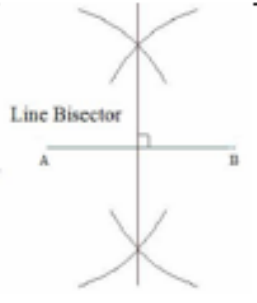
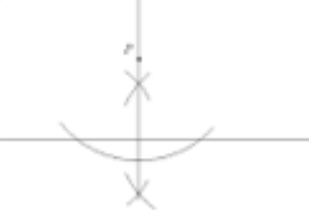
Thou wast that all to me, love,  
For which my soul did pine—  
A green isle in the sea, love,  
A fountain and a shrine,  
All wreathed with fairy fruits and flowers,  
And all the flowers were mine.


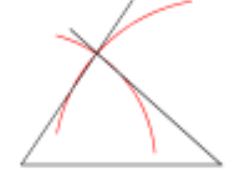

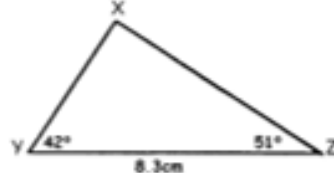
Ah, dream too bright to last!  
Ah, starry Hope! that didst arise  
But to be overcast!  
A voice from out the Future cries,  
"On! on!"—but o'er the Past  
(Dim gulf!) my spirit hovering lies  
Mute, motionless, aghast!

For, alas! alas! with me  
The light of Life is o'er!  
No more—no more—no more—  
(Such language holds the solemn sea  
To the sands upon the shore)  
Shall bloom the thunder-blasted tree,  
Or the stricken eagle soar!

And all my days are trances,  
And all my nightly dreams  
Are where thy grey eye glances,  
And where thy footstep gleams—  
In what ethereal dances,  
By what eternal streams.

## Topic: Loci and Constructions

Topic/Skill	Definition/Tips	Example
1. Parallel	Parallel lines never meet.	
2. Perpendicular	Perpendicular lines are at right angles. There is a $90^\circ$ angle between them.	
3. Vertex	A corner or a point where two lines meet.	
4. Angle Bisector	<b>Angle Bisector: Cuts the angle in half.</b>  1. Place the sharp end of a pair of compasses on the vertex. 2. Draw an arc, marking a point on each line. 3. Without changing the compass put the compass on each point and mark a centre point where two arcs cross over. 4. Use a ruler to draw a line through the vertex and centre point.	
5. Perpendicular Bisector	<b>Perpendicular Bisector: Cuts a line in half and at right angles.</b>  1. Put the sharp point of a pair of compasses on A. 2. Open the compass over half way on the line. 3. Draw an arc above and below the line. 4. Without changing the compass, repeat from point B. 5. Draw a straight line through the two intersecting arcs.	
6. Perpendicular from an External Point	The <b>perpendicular distance</b> from a point to a line is the <b>shortest distance</b> to that line.  1. Put the sharp point of a pair of compasses on the point. 2. Draw an arc that crosses the line twice. 3. Place the sharp point of the compass on one of these points, open over half way and draw an arc above and below the line. 4. Repeat from the other point on the line.	

	5. Draw a straight line through the two intersecting arcs.	
7. Perpendicular from a Point on a Line	Given line PQ and point R on the line:  1. Put the sharp point of a pair of compasses on point R. 2. Draw two arcs either side of the point of equal width (giving points S and T) 3. Place the compass on point S, open over halfway and draw an arc above the line. 4. Repeat from the other arc on the line (point T). 5. Draw a straight line from the intersecting arcs to the original point on the line.	
8. Constructing Triangles (Side, Side, Side)	1. Draw the base of the triangle using a ruler. 2. Open a pair of compasses to the width of one side of the triangle. 3. Place the point on one end of the line and draw an arc. 4. Repeat for the other side of the triangle at the other end of the line. 5. Using a ruler, draw lines connecting the ends of the base of the triangle to the point where the arcs intersect.	
9. Constructing Triangles (Side, Angle, Side)	1. Draw the base of the triangle using a ruler. 2. Measure the angle required using a protractor and mark this angle. 3. Remove the protractor and draw a line of the exact length required in line with the angle mark drawn. 4. Connect the end of this line to the other end of the base of the triangle.	
10. Constructing Triangles (Angle, Side, Angle)	1. Draw the base of the triangle using a ruler. 2. Measure one of the angles required using a protractor and mark this angle. 3. Draw a straight line through this point from the same point on the base of the triangle. 4. Repeat this for the other angle on the other end of the base of the triangle.	

11. Constructing an Equilateral Triangle (also makes a $60^\circ$ angle)	<ol style="list-style-type: none"> <li>1. Draw the base of the triangle using a ruler.</li> <li>2. Open the pair of compasses to the exact length of the side of the triangle.</li> <li>3. Place the sharp point on one end of the line and draw an arc.</li> <li>4. Repeat this from the other end of the line.</li> <li>5. Using a ruler, draw lines connecting the ends of the base of the triangle to the point where the arcs intersect.</li> </ol>	
12. Loci and Regions	<p>A locus is a <b>path of points that follow a rule</b>.</p> <p>For the locus of points <b>closer to B than A</b>, create a <b>perpendicular bisector</b> between A and B and shade the side closer to B.</p> <p>For the locus of points <b>equidistant from A</b>, use a compass to draw a circle, centre A.</p> <p>For the locus of points <b>equidistant to line X and line Y</b>, create an <b>angle bisector</b>.</p> <p>For the locus of points a set distance from a line, create two semi-circles at either end joined by two parallel lines.</p>	   
13. Equidistant	A point is equidistant from a set of objects if the distances between that point and each of the objects is the same.	



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Topic/Skill	Definition/Tips	Example
1. Multiple	The result of multiplying a number by an integer. The <b>times tables</b> of a number.	The first five multiples of 7 are:  7, 14, 21, 28, 35
2. Factor	A number that <b>divides exactly</b> into another number without a remainder.  It is useful to write factors in pairs	The factors of 18 are: 1, 2, 3, 6, 9, 18  The factor pairs of 18 are: 1, 18 2, 9 3, 6
3. Lowest Common Multiple (LCM)	The <b>smallest</b> number that is in the <b>times tables</b> of each of the numbers given.	The LCM of 3, 4 and 5 is 60 because it is the smallest number in the 3, 4 and 5 times tables.
4. Highest Common Factor (HCF)	The <b>biggest</b> number that <b>divides exactly</b> into two or more numbers.	The HCF of 6 and 9 is 3 because it is the biggest number that divides into 6 and 9 exactly.
5. Prime Number	A number with <b>exactly two factors</b> .  A number that can only be divided by itself and one.  The number 1 is <b>not prime</b> , as it only has one factor, not two.	The first ten prime numbers are:  2, 3, 5, 7, 11, 13, 17, 19, 23, 29
6. Prime Factor	A factor which is a prime number.	The prime factors of 18 are:  2, 3
7. Product of Prime Factors	Finding out which <b>prime numbers multiply together</b> to make the <b>original number</b> .  Use a <b>prime factor tree</b> .  Also known as 'prime factorisation'.	 $36 = 2 \times 2 \times 3 \times 3$ or $2^2 \times 3^2$



## Year 8 RS: How do Jewish people respond to suffering?

Key words	
Empathy	the ability to understand and share the feelings of another.
Free will	The idea that humans are free to make their own moral choices.
Commandment	A law or instruction believed to be given by God.
Tree of Knowledge	A tree in the Garden of Eden that Adam and Eve ate from despite being forbidden by God.
Moral Evil	the acts of humans which are considered to be morally wrong
Natural Evil	natural disasters, such as earthquakes or tsunamis

What is evil and suffering?

Evil

Evil is a cause of human suffering. There are two types of evil:

- moral evil – the acts of humans which are considered to be morally wrong
- natural evil – natural disasters, such as earthquakes or tsunamis

These two types of evil can work together, e.g. human evil can make natural evil worse. If natural evil, e.g. a drought brought on by lack of rainfall, causes crops to fail, the policies of a government can make the food shortages for the poorest people worse (moral evil).

Religions differ in what they teach about the origins of evil:

- Some consider it to have been present in the world from the beginning as the work of evil forces.

### Jewish views to evil and suffering

Every religion has its own way of explaining human suffering and the concept of evil. Many Jews believe evil originates from the first sin of Adam and Eve in the Garden of Eden.

What does Judaism say about the origin of evil?

Many Jews believe that evil originates from the first sin of Adam and Eve. The serpent tempted Eve to eat from the Tree of Knowledge against God's wishes. Evil then became a part of them and they no longer needed an external temptation to sin. Humans suffered because they were disobedient and so became separated from God.

Jews believe that Satan is not a separate being. Satan is a tendency existing in every human being which tempts them to do wrong.

What does Judaism teach about evil and suffering?

God created everything, so God must have created evil. God is omnipotent, merciful and just, therefore evil and suffering must be part of God's plan for humanity.

God gave human beings free will. With this free will comes the ability to choose between good and evil. Therefore, humans are free to make their own moral choices. Sometimes these choices are evil and cause suffering. Human beings can choose whether or not to obey God's commandments. People will be punished for the sins they commit, and rewarded for their good actions. It is important to Jews that they make good choices in their lives and try to relieve suffering.

In times of suffering, Jews may turn to the Book of Job where God allows Satan to test Job. Satan suggests that Job would not worship God if God did not protect him.

- Some consider it to have been present in the world from the beginning as the work of evil forces.
- Some believe it is part of God's creation which may have a purpose that humans cannot understand.
- Some consider it to be the outcome of ignorance and to have no beginning.
- Most religions teach that moral evil should be opposed. Attempts should be made to minimise the impact of natural evil.

#### Suffering

Suffering is the bearing or undergoing of pain or distress. Suffering is often a result of evil.

Most people experience suffering at some time in their life. Religions attempt to explain suffering, help people to cope with it and learn from it. For some religious people, the fact that people suffer can raise difficult questions about why God allows this to happen.

Some people say that God allows humans to make decisions for themselves and that suffering is caused by the choices that people make.

Questions raised by the existence of evil and suffering in the world

- What does the presence of evil and suffering say about God's love, power and purpose?
- Is there a purpose to suffering?
- Is suffering the price humans pay for free will?
- How do different religions respond to evil and suffering?
- How do individuals respond to evil and suffering?

God gives Satan the power to make Job suffer. His servants are attacked, his animals stolen, lightning kills all of his sheep and shepherds and a storm blows his eldest son's house down, killing all his children. Regardless, Job's faith in God remains strong. He is willing to accept whatever fate may bring and acknowledges the ultimate sovereignty of God:

How do Jews respond to evil and suffering?

Most Jews believe that everything God does is for good. From a human perspective, some actions might seem evil, but they trust that whatever happens on Earth is ultimately according to God's plan, which is good.

There are many Jewish responses to the problem of evil and suffering.

- The Tenakh teaches that suffering can be a punishment for sins.
- The Tenakh teaches that suffering can be part of a test from God of a person's faith and to see if they will freely follow God's commandments. Passing the test means they will be rewarded in this life or after death.
- Jews believe suffering can bring people closer to God. In times of trouble many people turn to religion for comfort and support.
- Some Jews believe suffering helps people to empathise with others and to assist them when necessary.
- Suffering cannot be understood by humans; this particularly relates to the suffering Jewish people endured during the Holocaust or Shoah. However, Jews believe they must do all they can to overcome and relieve suffering.
- Judaism teaches free will. God created humans with Free Will, the ability to choose the actions in their life.
- God is absolutely good and Free Will is given so people can freely choose to worship God.
- Times of suffering are seen as a learning experience for their conscience as they decide what are the right decisions to make.
- Jews look for comfort in the scriptures, the Torah and Talmud.

## Year 8 Autumn Term Knowledge Organiser



### Baroque Music 1600 – 1750

- ✓ Melody - a single melodic idea
- ✓ Rhythm – a continuous rhythmic drive
- ✓ Texture - a mixture of homophonic and polyphonic textures (thick and thin)
- ✓ Timbre - orchestral – strings, woodwind and harpsichord with very little percussion
- ✓ Dynamics - sudden shifts from loud to soft and vice versa – achieved by adding or subtracting instruments
- ✓ An overall characteristic of Baroque Music is that each piece has a single mood or expression of feeling – one purpose
  - ✓ Famous composers: Bach, Handel, Purcell, Pachelbel, Vivaldi

We will have studied Pachelbel's Canon and Vivaldi's Four Seasons



### Classical Music 1750 – 1840

- ✓ Melody – short and clearly defined musical phrases with two or more contrasting themes
  - ✓ Rhythm – very defined and regular
- ✓ Texture – mainly homophonic (main melody and accompaniment)
  - ✓ Structure – rondo and sonata forms
- ✓ Timbre – the symphony orchestra was organised into four sections – strings, woodwind, brass and percussion. The harpsichord was seldom used.
  - ✓ Famous composers: Mozart, Beethoven, Haydn and Grieg

We will have studied Beethoven's Fur Elise and Mozart's Eine Kleine Nachtmusik





## Fur Elise

Measures 1-5 of Fur Elise. Treble staff: C4 (Finger 1), D4 (Finger 2), Eb4 (Finger 3), C4 (Finger 1). Bass staff: C3 (Finger 1), Eb3 (Finger 2), G3 (Finger 3), Eb3 (Finger 4), G3 (Finger 5), C3 (Finger 1), B2 (Finger 2), F2 (Finger 3), G2 (Finger 4), F2 (Finger 3), G2 (Finger 4), D3 (Finger 1), C3 (Finger 1), Eb3 (Finger 2), G3 (Finger 3), C3 (Finger 1).

## Spring

Measures 1-5 of Spring. Treble staff: G4 (Finger 1), F4 (Finger 2), E4 (Finger 3), F4 (Finger 2), G4 (Finger 1), F4 (Finger 2), E4 (Finger 3), G4 (Finger 1). Bass staff: C/G (Finger 1), C/G (Finger 2), C/G (Finger 3), C/G (Finger 4), C/G (Finger 5), C/G (Finger 1), C/G (Finger 2), C (Finger 1), F (Finger 2), G (Finger 3).

Here are three of the pieces we will have studied – can you write in the missing note names? Rhymes for the bass clef are:

If the note is on the line, Good Bike Don't Fall Apart

If the note is in a space, All Cows Eat Grass

Measures 6-17 of Spring. Treble staff: G4 (Finger 1), F4 (Finger 2), E4 (Finger 3), F4 (Finger 2), G4 (Finger 1), F4 (Finger 2), E4 (Finger 3), G4 (Finger 1). Bass staff: C/G (Finger 1), C/G (Finger 2), C/G (Finger 3), C/G (Finger 4), C/G (Finger 5), C/G (Finger 1), C/G (Finger 2), C (Finger 1), F (Finger 2), G (Finger 3).

**Going the extra mile activities.**  
**Here are some great ideas to do with family to avoid boredom that go above and beyond during the next half term.**

The Arts	DT	English and Drama	Humanities	PE	Maths	Science
Create a Christmas play for you and your friends to work on over the internet. Make it hilarious.	Research what different kinds of materials plumbers use. Why is copper used for some pipes and plastic for others? What sort of plastic is used?	Watch one of the briefings by the government. What makes a good information giving speech? How is it being delivered?	Create a detailed plan to make the world more economically equal when we are all back to normal. Share it with anyone you can get to listen.	Create a new lockdown Olympic Sport. With the cancellation of Tokyo, your sport needs a name, at least 3 rules and a list of equipment needed.	Explain what a square root is to someone really not mathematical.	Use equipment in your home to demonstrate the principle of moments.
Develop an observational humour stand up show. Watch how comedians tell a story. Think about their delivery and how they make it look like they have just had that thought. Try it.	Design a meme.  One that is informative but also can make someone laugh.	Use one of the excellent library apps to listen to or read "Of Mice and Men."  How can we be like Lenny?	In 1917 Russia had a great revolution. What would a great revolution look like in 2027? What would be the similarities and differences if Year 9 were in charge?	Get family members to play even by TEAMS or Zoom! Send it to the organisers of the Quarantine Olympics to include it in the next games!	Where can we find the Fibonacci sequence in nature? Do some research!	Help something grow.
Watch a performance by an artist you love – many are on Instagram or YouTube. Evaluate the difference between a live performance and a studio edit.	Make an interesting paper model. Do some origami research to find something fascinating to attempt.	Describe the American dream. How has this driven culture in the Western world? Have a discussion with as many adults as you can.	Why are we fascinated by crime? What makes Jack the Ripper such an interesting topic? Find out why if you can!	Create a diary of your physical activity each week. This could be a simple grid or list of activities.	Make some mathematical art using materials at home like packets and boxes.	Research the health issues regarding vaping. Vaping is new. Is there enough mature research to definitely describe how safe or otherwise it is?
Make a playlist that means something to you. Share it with friends and explain why it matters to you.	Invent a new recipe and test it. Evaluate it compared to commercial products.	Watch a film. Be a film critic. You are being interviewed to review the film on radio 4. What would you say?	How can we be greener as a society using technology? Create an infomercial advertising a product.	Think about what exercise or activity you completed, how long did you exercise for and how you felt during and after the activity.	Use your maths skills on page 49 to produce the report on page 35. This is the challenge from Mr Ford. How good can this be?	Find out how fans in ovens influence cooking times. What has this to do with convection?