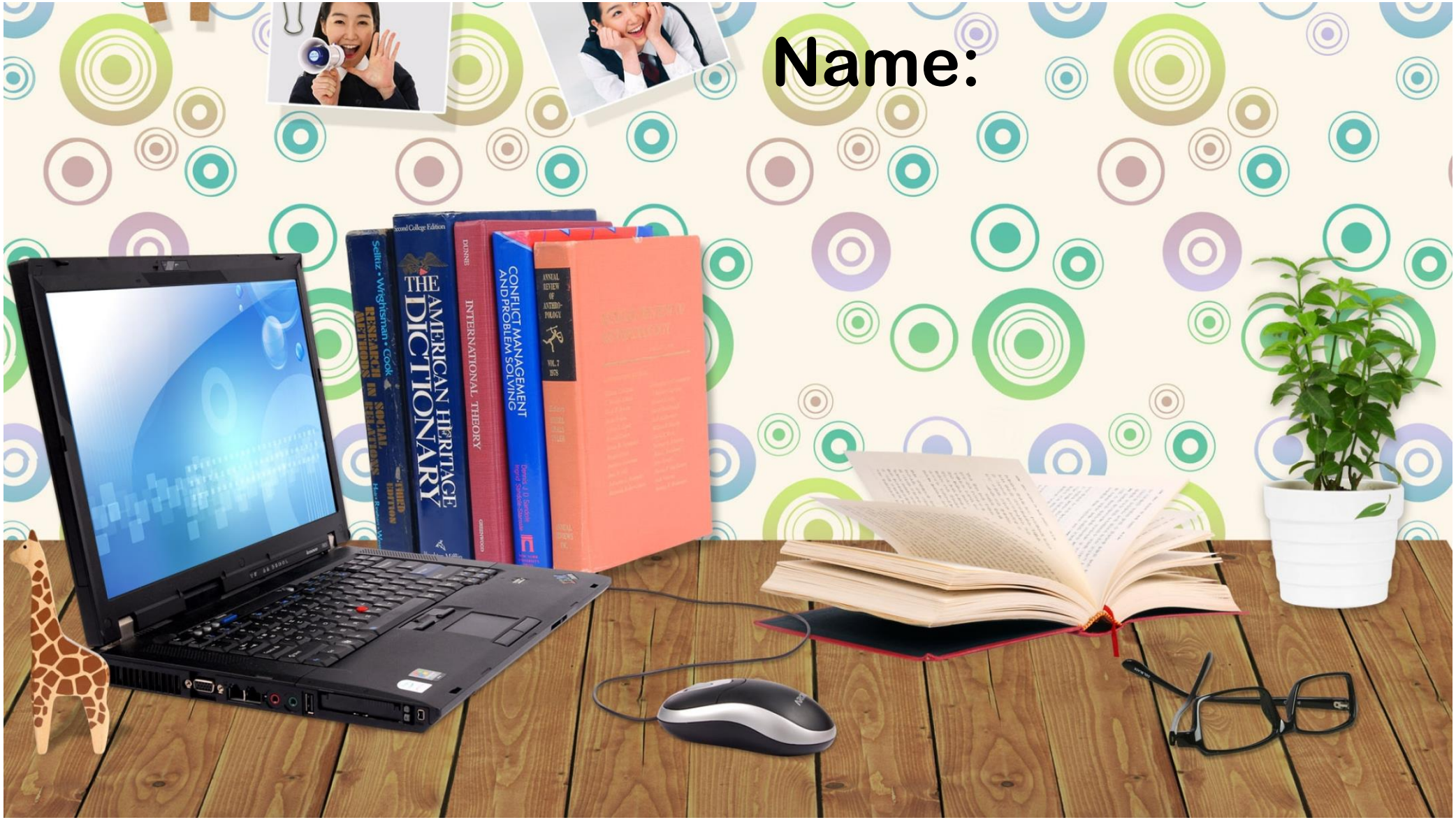
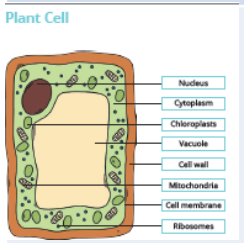
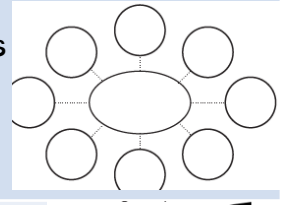
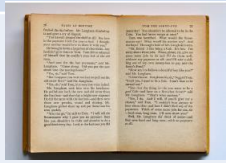


Year 7 Knowledge Organiser - Autumn 1

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.

Idea	Explanation
Make some flash cards or PowerPoint slides. Make top trumps. 	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.
 Make a poster.	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!
Draw spider diagrams, or for the adventurous mind maps. 	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.
Write a song or a rap. 	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.
 Plan a lesson	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.
Write a story or comic strip. 	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.
Write a quiz. Design a game. 	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.

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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

Core Values

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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=nBE4v8lVlfs&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=DO0kAtg9dRw&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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'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 unhopeful.
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

- 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 .

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

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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=QIfEiLvxCOY&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=upox9NO0D2c 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

The Open University

1. Can I read aloud to a friend or relative?

2. Can I hide a story or poem to be found?

3. Can I deliver a speech from a character or public figure?

4. Can I share my reading journey over the last week?

5. Can I learn about a book from someone's past?

6. Can I…

7. Can I discover what books mean to someone else?

8. Can I…

9. Can I create a paper chain of poetry?

10. Can I gain a '7-day streak' of reading?

11. Can I design my own reading den?

12. Can I recreate a scene/poem using various materials?

13. Can I read in an unusual & unexpected place?

14. Can I set up a news desk & give a report?

18. Can I make my own mini book?

15. Can I recreate a favourite book or comic cover?

16. Can I find an online video of an illustrator drawing and draw along?

17. Can I make an A-Z of authors, book titles or favourite characters?

MAYFLOWER COMMUNITY ACADEMY & NURSERY

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?

Accelerated Reader™

To improve my Book Level:

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

100%	This book was comfortable for you, perhaps try a book higher up in your ZPD range next time.
90%	This book was perfect for you. Perhaps try one or two book levels higher next time.
80%	This book was a little difficult for you. Perhaps choose one or two book levels lower next time.
70%	This book was quite challenging for you. Perhaps try a book at the lower end of your ZPD range next time.
60% or below	This book was too challenging. Perhaps try a book at the low end of your ZPD or speak to your teacher for help.

To improve my Average Percent Correct:

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

I will make sure my book within my **ZPD range**

I will take my time when quizzing

I will make **notes** when reading

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

I will read **fewer long** books

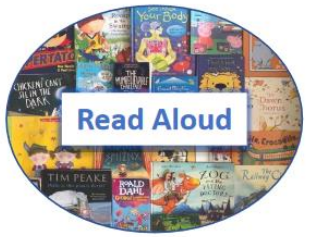
I will stick with a book and **finish it**

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.

Supporting Readers at Home

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



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.

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.

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.

I wonder if…why…what…who…

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.)

Adapted from Open University 'Supporting Reading at Home': https://researchrichpedagogies.org/_downloads/Supporting_Readers_at_Home_Poster_.pdf
For more ideas see: https://www/researchrichpedadgogies.org

Practical Science at Home

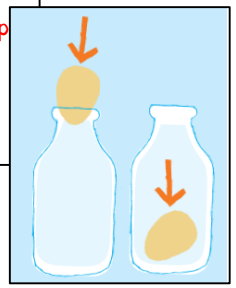
CHANGES OF STATE

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



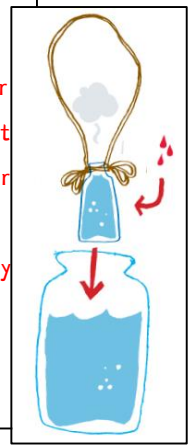
HEAT TRANSFER

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



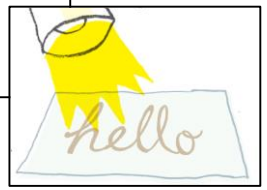
INVISIBLE INK

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?



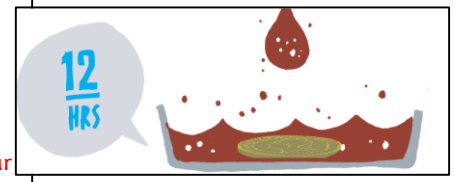
ACIDS & ALKALIS

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?



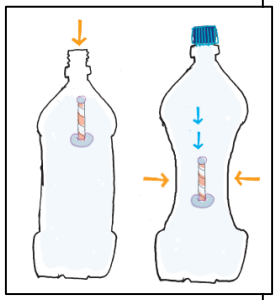
THE DENSITY DIVER

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?



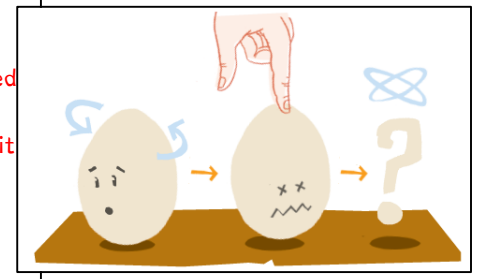
MOMENTUM

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?



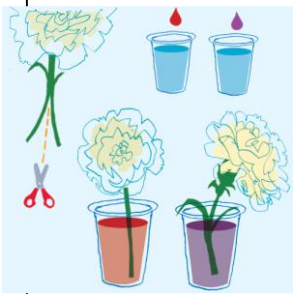
COLOURED CARNATIONS

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 het to the petals? What is xylem and phloem?



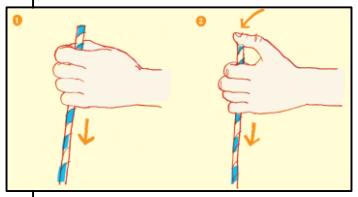
STRONG AS A DRINKING STRAW

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?



Multi-disciplinary learning. Key Stage 3.

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.

Bigfoot lives in the Northwest Pacific area of North America

There is a Plesiosaur (The Loch Ness Monster) living Loch Ness in Scotland

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 Lock 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.

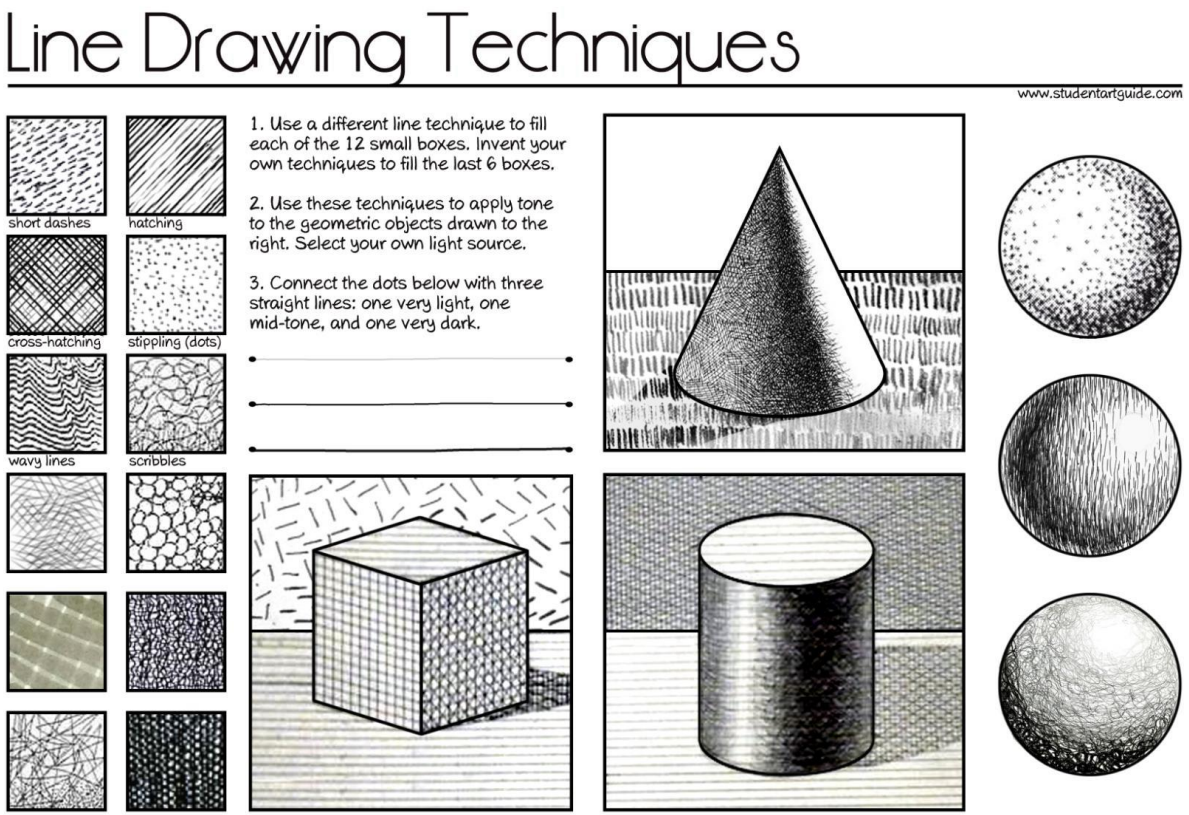
https://www.iflscience.com/health-and-medicine/one-map-sums-damage-caused-anti-vaccination-movement/

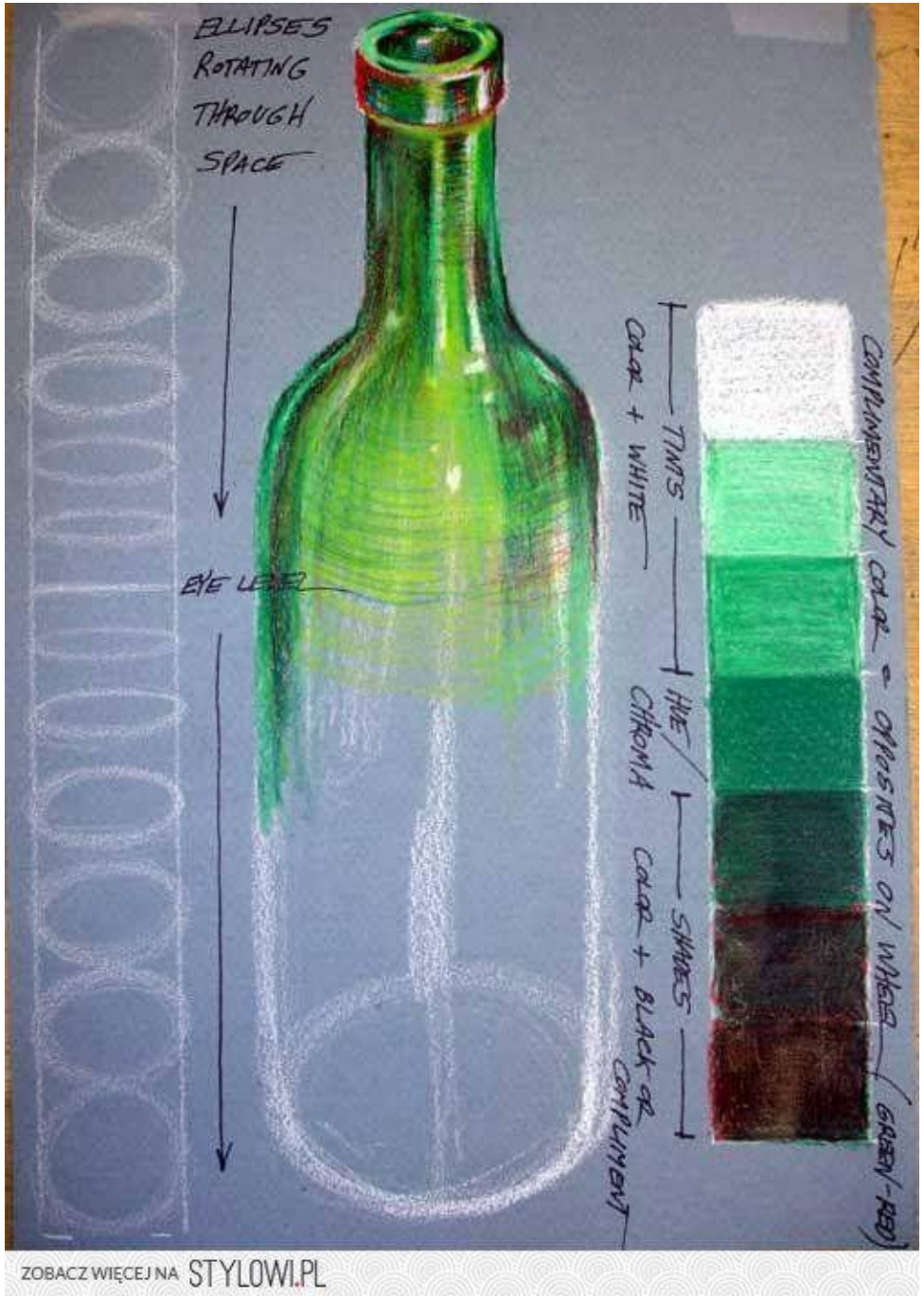
Activity 7: Challenge activity. Research one of the more popular myths and present a clear and referenced case to debunk it.

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

Year 7 Art Knowledge Organiser:

- At the start of Year 7 we introduce you to the formal elements in Art such as **TONE**, **FORM**, **LINE**….etc… See next page for full breakdown of the art elements.
- You learn about how to ***look*** properly when drawing and how to shade effectively. See the diagram below.





Elements of Art

These are the basic elements that are used by Artists in creating Art; they are what you use to create an aesthetically pleasing work. When we make Art, we need to understand and apply these seven Elements of Art.

Line

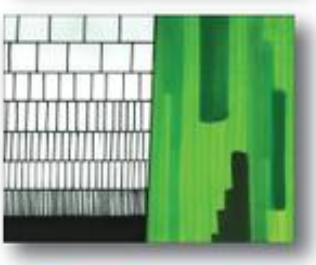
A mark made by a pointed tool such as a brush, pen or stick; a moving point.

Shape

A flat, enclosed area that has two dimensions, length and width. Artists use both geometric and organic shapes.

Color

Is one of the most dominant elements. It is created by light. There are three properties of color; Hue (name,) Value (shades and tints,) and Intensity (brightness.)

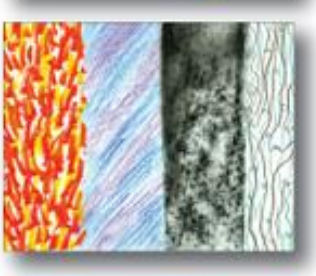


Value

Degrees of lightness or darkness. The difference between values is called value contrast.

Form

Objects that are three-dimensional having length, width and height. They can be viewed from many sides. Forms take up space and volume.



Texture

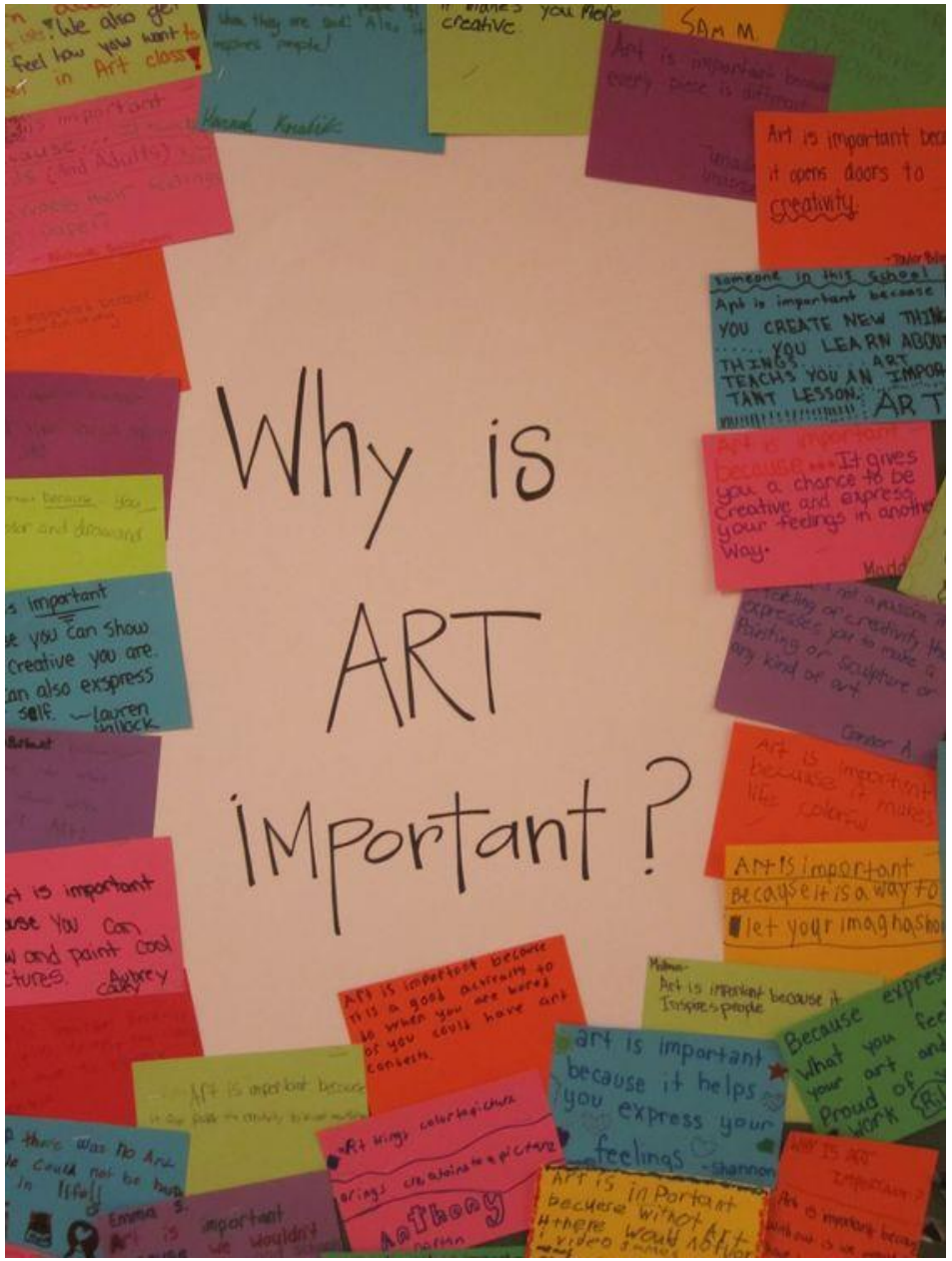
Describes the feel of an actual surface. The surface quality of an object; can be real or implied.

Space

Is used to create the illusion of depth. Space can be two-dimensional, three-dimensional, negative and/or positive.

- You learn a little about why Art is important and why we learn about it in school.
- You learn about the colour wheel and the relationship colours have to one another.
- You learn how to use Art tools and materials in the correct way, e.g. brushes, paint, ink, clay and oil pastels.

You learn about effective ***Composition*** (where to place something in a picture). See Fish picture below for good example of this:



Health and Safety

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)
• Cooking food above 75°C kills bacteria • Re-heat food properly, only once. Reheat food so 75°C for at least 3 minutes • Check the food is 75°C with a temperature probe	• Bacteria can grow and multiply quickly between 5°C to 63°C. • This is called the danger zone • The optimum temperature for bacterial growth is 37°C
Chilling (0°C – 5°C)	**Freezing (-18°C)**
• Keeping food between 0°C and 5°C slows down the growth of bacteria • This extends the shelf life of food • Chilling food doesn't change the properties much – food looks and tastes the same	• Freezing food below -18°C stops bacteria growing – they become dormant • Freezing generally extends shelf life and the nutrients aren't lost • It doesn't kill the bacteria though. They become active again once the food defrosts.

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

Pizza Toast

Ingredients

2 slices of bread

2tbsp tomato passata

1/2 pepper

2 mushrooms

1 tomato

25g of cheese

Pinch of mixed herbs

Equipment

Chopping board

Knife

Grater

baking tray

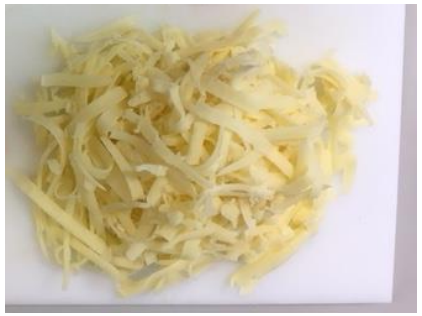
Skills

Slicing

Grating

baking

1. Pre-heat the oven to 180°C. Slice your vegetables.



2. Grate the cheese.

3. Spread the tomato sauce evenly on the bread.

4. Evenly sprinkle the cheese on the bread.

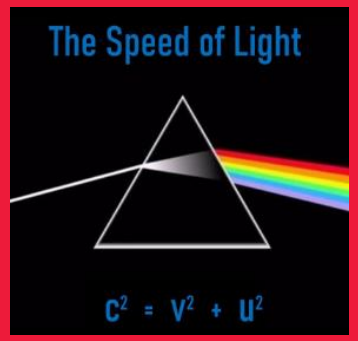
5. Evenly distribute the vegetables and then sprinkle with mixed herbs.

Bake in the oven for 20 minutes till golden and bubbly. ☺

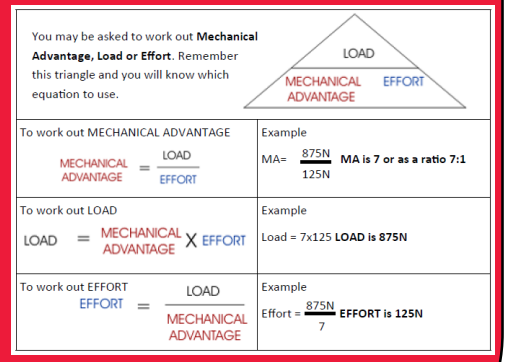
Year 7 STEM – Autumn Term Part 1

Science

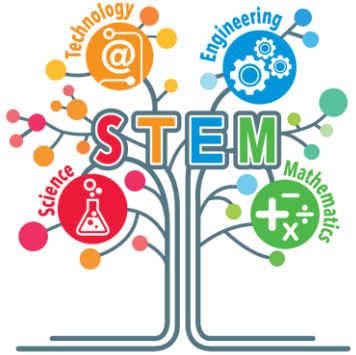
SI units (Système International d'Unités)
Mass kg, (kilogram), g, (gramme), mg, (milligramme)
Length km, (kilometre), m, (metre), mm, (millimetre)
Energy kJ (kilojoule), J, Joule
Power W, (Watt)
Force N, (Newton)



Science plays a very important part of the STEM curriculum. Whether it is the understanding of forces within a lever, how a building can remain upright, how you can sit on a chair without it collapsing or how sound and light travels through the atmosphere, you will learn the theory and how to apply the knowledge via 'hand on' lessons



Stem will encourage you to use your knowledge of Science, technology, engineering and maths to explore ideas, materials and themes.



In addition to subject-specific learning, STEM aims to foster inquiring minds, logical reasoning, and team building skills.

Technology

Gear Ratio
Velocity Ratio—also known as gear ratio
Low gear ratio = more speed with less force Driver has 60 teeth the driven has 30 teeth The gear ratio is 1:2.
High Gear ratio= less speed with more force Driver has 25 teeth the driven has 75 teeth The gear ratio is 3:1.

Technology will allow you to understand how products are designed, manufactured and fabricated. You will learn about materials. Their properties and the suitability for the tasks that we are undertaking this term You will also learn how to use the workshop and its equipment in a safe and efficient manner.

Conversion			
↓	1m	0.1m	0.01m
	100cm	10cm	1cm
	1000mm	100mm	10mm

Year 7 STEM – Autumn Term Part 1

Engineering

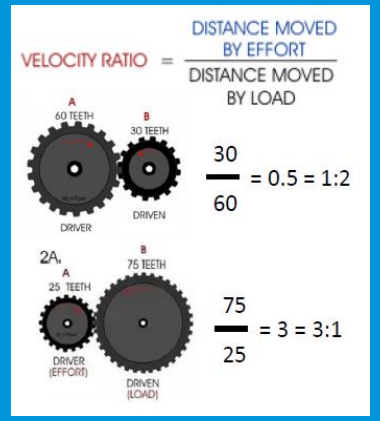
Engineering

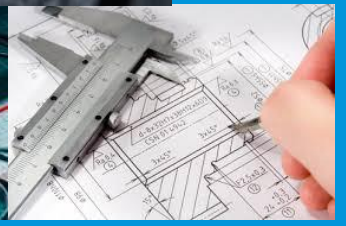
There are many different types of engineering such as electrical, design and materials. Engineers are problem solvers – they design and make testable prototypes to make our lives better. Engineering skills you will learn are:

How to build something for strength – when a product needs strength it needs reinforcing or stiffening.

What anthropometrics and ergonomics are

The difference between modelling and prototyping and their importance





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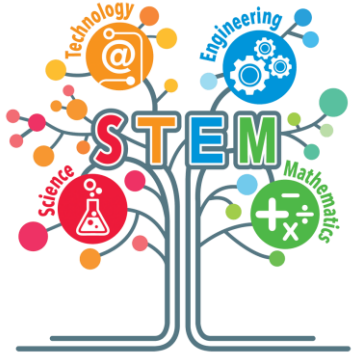
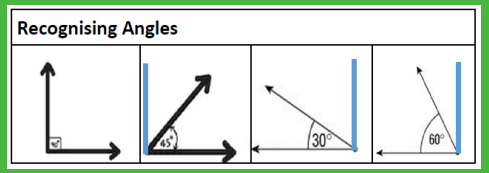


In addition to subject-specific learning, STEM aims to foster inquiring minds, logical reasoning, and team building skills.

Maths/ Computing



Maths knowledge is needed in STEM for many reasons. The maths skills taught this term are:

Arithmetic – needed to work out how much material is required, for cost and size.

Data handling – constructing and reading graphs and charts to present information

Abstraction– How to break down problems into 'manageable chunks' to facilitate solutions

Vocabulary

- **Algorithm** a set of rules for solving a problem
- **Flowchart** sequences of instructions set within symbols that lead to a real-life simulation
- **Simulation** A model that produces an output, either visual or physical, as it runs
- **Sequencing** creating a set of instructions to complete a task
- **Loop** repeat an action until a certain condition is met
- **Subroutine** a set of instructions designed to perform a frequently used operation within a program
- **Variable** a memory location to store data for use in decision making
- **Sensor** an object whose purpose is to detect events or changes in its environment, and then provide a corresponding output
- **Programming** the process of writing computer software

Bits to Bytes	
Bit	The smallest amount of data (stands for *binary digit*) (0 or 1).
Byte (B)	8 bits
Kilobyte (KB)	1024 bytes
Megabyte (MB)	1024 kilobytes
Gigabyte (GB)	1024 megabytes
Terabyte	1024 gigabytes

Units of Data	
Bit	A single binary digit. A 0 or a 1.
Nibble	4 bits
Byte	8 bits
Kilobyte	1000 bytes
Megabyte	1000 kilobytes
Gigabyte	1000 megabytes
Terabyte	1000 gigabytes
Petabyte	1000 terabytes

Self-Study Tasks

How do you calculate percentage increase?	
Increase 50 mm by 8%	
How do you calculate volume of a cube?	
How do you calculate volume of a cone?	
Calculate the volume of a cone - R 45mm H- 65mm	
How do you calculate RPM?	
How do you calculate volume of a cylinder?	
Calculate the volume of a cylinder - R 45mm H- 65mm	

How do you work out the circumference of a circle?	
Decrease 72 kg by 40%.	
What is equilibrium?	
What is a production aid?	
What is tolerance?	
What is measured in kilojoules?	
What is force measured in?	
How do you calculate the area of a triangle?	

Warming up and cooling down

Warming up

Cooling down

Components of a warm up:

- Pulse raiser
- Stretches
- Skill related

5 reasons why we must warm-up

1.) Increases the temperature of the muscles, tendons and ligaments, which reduces the chances of injury.
2.) Increases heart rate and body temperature safely, which reduces chances of injury.
3.) Increases flexibility, which aids flexibility.
4.) Mentally prepares you for exercise, which can help improve performance.
5.) Increases oxygen delivery to the working muscles, which supports performance

6 reasons why we must cool down

1.) Gradually returns body temperature, breathing and heart back to their resting rate.
2.) To mentally unwind.
3.) To remove lactic acid, helping to prevent DOMS (Delayed Onset Muscle Soreness)
4.) To remove carbon dioxide and waste products.
5.) Improves flexibility
6.) Avoids blood from gathering in muscles (pooling), which can cause dizziness

Why should we exercise?

Sport England posted an infographic on Twitter to give reasons why walking for 30 minutes each day was important. Scan this QR code to see the benefits.

Tasks to consider

1. Warming up and cooling down quiz – https://platform.samlearning.com/version2/set-task#/
2. Create your own 10 minute warm up and 10 minute cool down using what you have learned in PE this half-term.

How do I warm up and cool down?

Warming up (scan the QR code for a good stretching routine)

5-10 minute jog at a slow pace with dynamic (moving) stretches such as lunges or high knees for example.

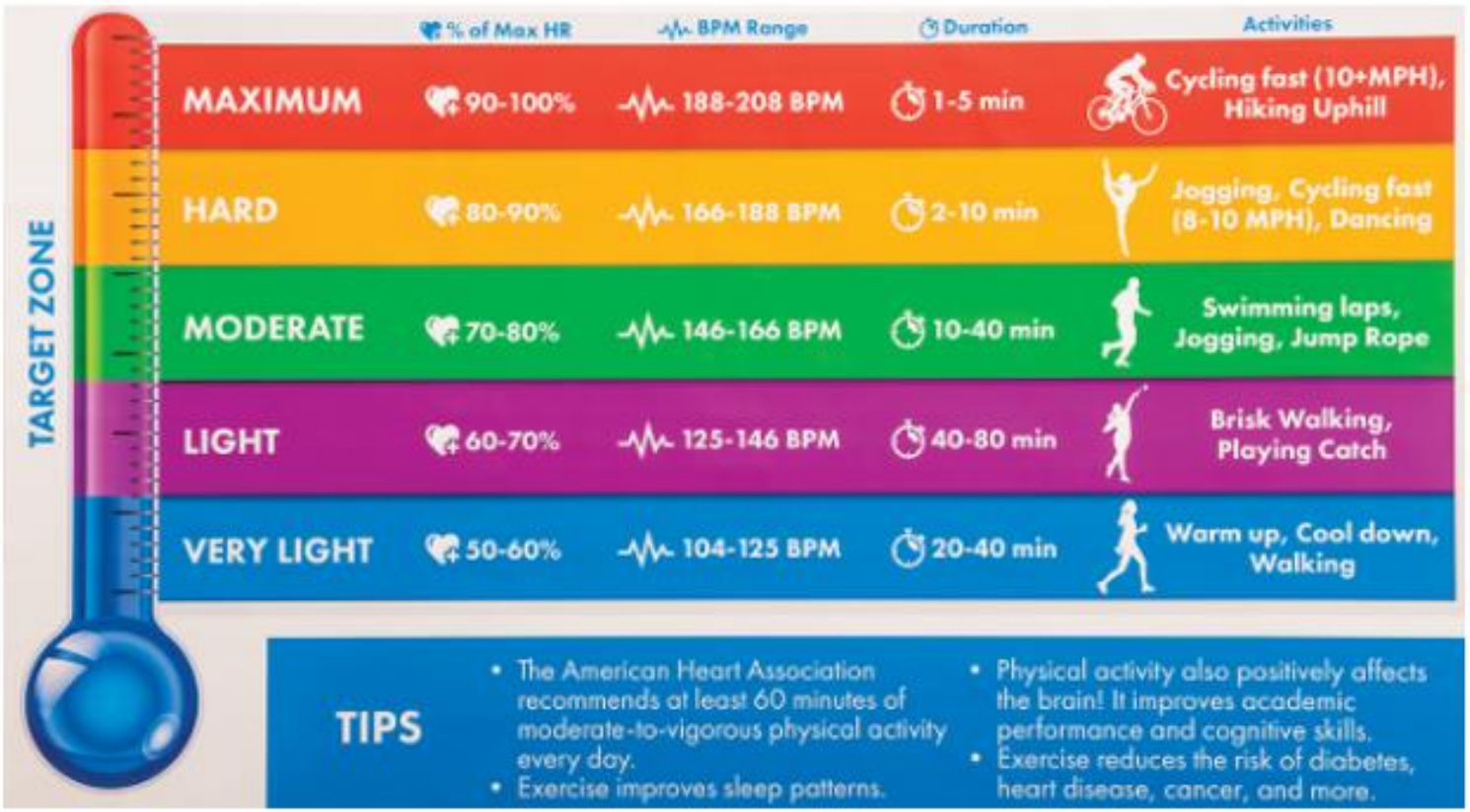
Cooling down

5 minute slow jog with a 1 minute walk to reduce heart rate. Static (holding in one place) stretch for 15 seconds.

Heart Rates

DID YOU KNOW…?

The recommended safe heart rate for an individual during exercise is called your **Maximum Heart Rate (HR max)**. To estimate your HR max you need the following formula: **MAXIMUM HEART RATE = 220 – Your AGE**. For example, if you are 20 Years old your HR max would be 220 – 20 = 200 beats per minute (bpm)



Scan the **QR** above and watch the video from the British Heart Foundation (BHF). Here they talk about what happens to our body after exercise.

Using this website, read the inspiring stories or useful information regarding how to keep your heart healthy.

Remember that attending extra-curricular clubs will not only help improve your understanding in that sport but it will also help improve your fitness levels, communication, teamwork, leadership and many other key values found in sport.

Diet and Nutrition for Sport	
Nutrient	**Function and Examples**
Protein	 Important for growth and development of muscle and tissue as well as making and repairing cells inside the body. Poultry, Fish, Nuts, Dairy and Soy are examples.
Carbohydrates	 Provide energy for the body over a longer period of time and helps fight disease. Potatoes, Pasta, Pulses and Fruit are sources.
Fibre	 Important for preventing constipation 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.
Calcium	 Important for strong bones and teeth. It also helps with muscle function, blood clotting and nerve transmission. Dairy products, leafy green vegetables, orange juice are sources.
Vitamin A, C and D	Vitamin A is important for eyesight, growth and the functioning of the immune system as well as healthy skin. Dark green vegetables e.g. spinach. Sweet potatoes, papayas, milk and eggs. Vitamin C is important for decreasing the amounts of colds you get, fights infections, wound healing, healthy gums and skin and also acts as an antioxidant. Citrus fruits, broccoli, strawberries, tomatoes, peppers and kale are the sources Vitamin D is important for strong bones and teeth as it absorbs calcium. It is also good for immune function. Milk, oily fish, egg yolk and even the sunlight are sources.

Diet and Nutrition activities

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

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

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

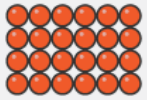
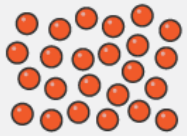
ANTIOXIDANT
BONES
CALCIUM
CARBOHYDRATES
DEVELOPMENT
DIET
ENERGY
FATS
FIBRE
GROWTH
HEALTHY
HYDRATION
IMMUNE
MINERALS
MUSCLES
PROTEIN
REPAIR
TEETH
VITAMINS
WATER

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:

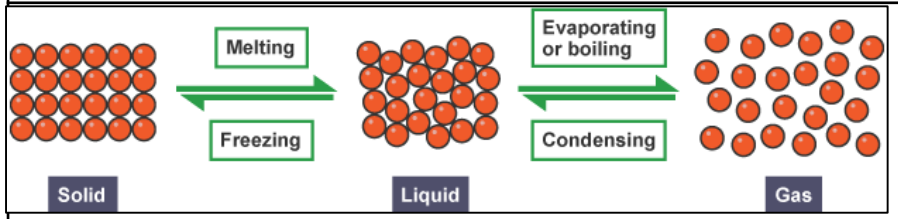
	Breakfast	Lunch	Dinner
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			
Sunday			

PARTICLES

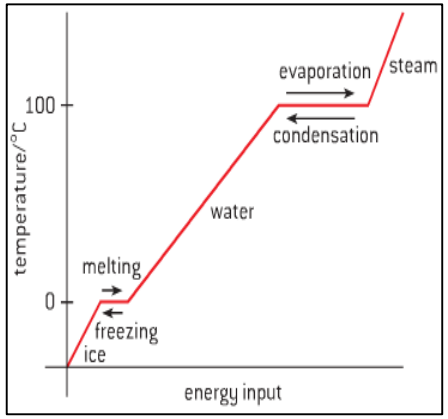
Key knowledge – Particle theory, states of matter, changes of state, diffusion, density

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.

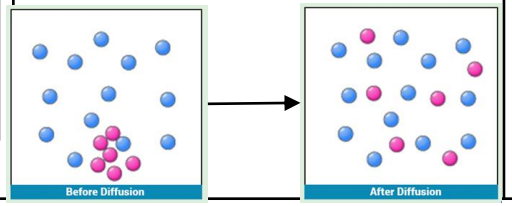
Density = Mass / Volume

... 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

Knowledge Organiser: Year 7 Summer Term Part 2 Understanding computers *and binary*

Summary

Binary, is a number system that is made of two numbers. 1 and 0. Also known as base two.

Computers are made up of **switches**. If you turn on a light switch at home, a computer scientist would say that the light is **1**. If you turned it off, a computer scientist would say that the light is **0**. A typical computer has **billions of switches**. That's a million million switches. Another name for a switch is **transistor**.

Computer scientists love **binary**. Why? In simple terms, a computer is just switches. If we understand Yes/No questions we can **code** a computer to do what we want it to do. This is a form of

'Computational thinking'.

Imagine a billion people standing by their own light switch and working as a team to make a mobile phone respond to text message. To get close to modern computer/smart phone speeds each person would have to turn the switch at the same time and have to do this 4,000,000,000 in one second . All of actions in life are based on a number of binary decisions.

What is a **computer?** A computer can be instructed to accept, process, store and output data . That could be a phone, a washing machine, a tablet , a TV or even the humble PC (personal computer).

Storage- stores programs and files long term, even when they are not in use. Devices such as hard drives, USB memory sticks or SD cards are used to store files such as photos, music and software applications long term.

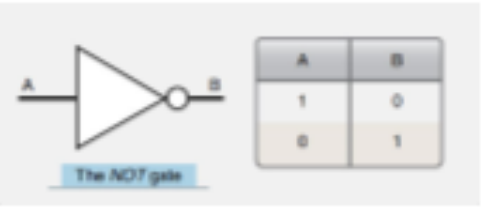
An **input device** is any piece of computer hardware used to **provide data** to a computer system.

An **output device** is any piece of computer hardware used to **communicate** the results of data to **audience**.

Key Vocabulary

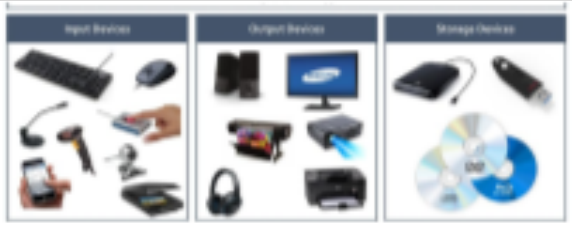
Binary	1 or 0.Also known as base 2.
Computer	A hardware device made up of switches. A switch can have a state of 1 or 0.
Computational thinking	Methods that involve expressing problems and their solutions in ways that a computer could solve.
Switch	a device for making and breaking the connection in an electric circuit
Decimal	Base 10 also known as denary. Symbols include up of 0 1 2 3 4 5 6 7 8 and 9.
Hardware	The **physical** parts of a computer. Eg the touchscreen,
Input Device	Hardware that sends data to a computer, allowing you to interact with and control it.
Output Device	Hardware which converts information into human-readable form. It can be **text, graphics, tactile, audio, and video.**
Storage Device	Hardware on which information can be stored
Software	Software is the programs that run on a computer., referenced as apps.
Transistor	Another name for a switch.

A Switch



Input / Ouput and storge devices

Binary and Decimal



http://bit.ly/2CTk1IV

KEEP CALM AND GO PRACTICE

BBC Bitesize

Activity: Try to play a game online with a family member unsure of technology e.g. do a quiz with Grandma.

Year 7 Knowledge Organiser: What is Geography?/Geographical Skills

Topics covered

- ✓ Types of Geography
- ✓ Describing a Landscape
- ✓ My Local area
- ✓ Using an Atlas/maps
- ✓ Global places
- ✓ UK, Great Britain and England
- ✓ Using Digital maps (GIS)
- ✓ Distance and Scale
- ✓ Directions and navigation
- ✓ OS Map symbols
- ✓ Describing a journey
- ✓ Grid References
- ✓ Contours and height

Key Ideas:

1. I can use geographical skills (topics on left) to help to understand my local surroundings.
2. I can recognise common 'geographical features' in un-familiar landscapes (places I have not seen before).
3. I can locate places from a local to a global scale using Atlas or Digital Mapping (GIS).

Skills

- ❑ Describing geographical features from images
- ❑ Navigating my local area
- ❑ Locating places and features, changing scale in digital mapping
- ❑ Measuring a distance using a scale bar
- ❑ Navigation/directions using compass points
- ❑ Calculate a grid reference to find a location
- ❑ Describing the shape of a landscape

Places and Environments

- ❖ Local area (where I live)
- ❖ Norwich
- ❖ England, Great Britain and UK
- ❖ 7 Continents and 6 Oceans

Key Terms Used in this Unit

- ❑ Physical Geography
- ❑ Human Geography
- ❑ Environmental
- ❑ Geographical features
- ❑ Continents
- ❑ Equator
- ❑ Arctic circle
- ❑ Tropics
- ❑ Longitude
- ❑ Latitude
- ❑ Landmarks
- ❑ Land Use
- ❑ 4 figure Grid Reference
- ❑ 6 figure Grid Reference
- ❑ Scale
- ❑ Relief
- ❑ Plateau
- ❑ Valley

German Autumn 1

Module 1: Meine Welt und ich (Me and My World)

Here is the vocabulary you will need for Module 1. Click on the hyperlinks near the speakers to hear the German pronunciation. You will need to copy & paste the code first.
The full address is: https://www.activeteachonline.com/view

In this Module you will learn how to:

- introduce yourself in German
- pronounce German words
- count to 19
- say where you live
- describe your character
- ask & answer questions about your belongings.

Hallo! • Meeting and greeting

Wie heißt du?	*What's your name?*
Ich heiße ...	*My name is ...*
Hallo!	*Hello! / Hi!*
Guten Tag!	*Hello!*
Wie geht's?	*How are you?*
Gut, danke. Und dir?	*Fine, thanks. And you?*
Nicht schlecht.	*Not bad.*
Tschüs!	*Bye!*
Auf Wiedersehen!	*Goodbye!*

rLDHjNSS

Die Zahlen 1–19 • Numbers 1–19

eins	*1*
zwei	*2*
drei	*3*
vier	*4*
fünf	*5*
sechs	*6*
sieben	*7*
acht	*8*
neun	*9*
zehn	*10*
elf	*11*
zwölf	*12*
dreizehn	*13*
vierzehn	*14*
fünfzehn	*15*
sechzehn	*16*
siebzehn	*17*
achtzehn	*18*
neunzehn	*19*
Wie alt bist du?	*How old are you?*
Ich bin ... Jahre alt.	*I am ... years old.*
Wie alt ist (Julia)?	*How old is (Julia)?*
(Julia) ist ... Jahre alt.	*(Julia) is ... years old.*

cjj1TQJ7

German

Wo wohnst du? • Where do you live?

Ich wohne in ...	*I live in ...*
Er/Sie/Es wohnt in ...	*He/She/It lives in ...*
... England	*England*
... Irland	*Ireland*
... Nordirland	*Northern Ireland*
... Schottland	*Scotland*
... Wales	*Wales*
... Deutschland	*Germany*
... Österreich	*Austria*
... der Schweiz	*Switzerland*

2nIPMbuu

Wie bist du? • What are you like?

Ich bin ...	*I am ...*
Er/Sie ist ...	*He/She is ...*
faul	*lazy*
freundlich	*friendly*
intelligent	*intelligent*
kreativ	*creative*
launisch	*moody*
laut	*loud*
lustig	*funny*
musikalisch	*musical*
sportlich	*sporty*

PYX0ie7M

Lieblingssachen • Favourite things

Mein Lieblingssport ist ...	*My favourite sport is ...*
Mein Lieblingsmonat ist ...	*My favourite month is ...*
Meine Lieblingsmusik ist ...	*My favourite music is ...*
Meine Lieblingszahl ist ...	*My favourite number is ...*
Meine Lieblingssendung ist ...	*My favourite programme is ...*
Meine Lieblingsfußballmannschaft ist ...	*My favourite football team is ...*
Mein Lieblingsspiel ist ...	*My favourite game is ...*
Mein Lieblingsland ist ...	*My favourite country is ...*
Mein Lieblingsauto ist ...	*My favourite car is ...*
Was ist dein Lieblingssport?	*What's your favourite sport?*
Was ist deine Lieblingszahl?	*What's your favourite number?*
Was ist dein Lieblingsland?	*What's your favourite country?*

lMi7Vl85

Hast du einen Computer? • Have you got a computer?

Ich habe ...	*I have ...*
einen Computer	*a computer*
einen iPod	*an iPod*
einen Fußball	*a football*
eine Gitarre	*a guitar*
eine Wii	*a Wii*
eine Schlange	*a snake*
ein Handy	*a mobile phone*
ein Keyboard	*a keyboard*
ein Skateboard	*a skateboard*

SBwhhtvv

German

Oft benutzte Wörter
• High-frequency words

und	*and*
(und) auch	*(and) also*
aber	*but*
sehr	*very*
ziemlich	*quite*
nicht	*not*
Was denkst du?	*What do you think?*
Ich denke, ...	*I think ...*
Ich auch!	*Me too!*
Ich nicht!	*Not me!/That's not what I think!*
Was? Du spinnst!	*What? You're joking!*

8U2E2wCX

Read the Strategy Box for ideas on learning new vocabulary.

Strategie 1

How do you know if you really know a word? Ask yourself:

1 Do I know what it means when I see it?
2 Can I pronounce it?
3 Can I spell it correctly?
4 Can I use it in a sentence?

Look, Say, Cover, Write, Check

Use these five steps to learn the meaning, pronunciation and spelling of new words.

1 **Look** carefully at the word. Close your eyes and try to picture the word in your mind. This uses your visual memory.
2 **Say** the word out loud to yourself. This uses your auditory memory.
3 **Cover** the word – say it and 'see' the word in your mind.
4 **Write** the word out from memory.
5 **Check** your word against the original. Did you get it right? Combining seeing, listening and doing strategies makes memorising more effective.

Extra: If you find these steps easy, try to create sentences with the new words you learn.

Fragewörter • Question words

Wie?	*How?*
Was?	*What?*
Wo?	*Where?*
Woher?	*Where ... from?*
Wer?	*Who?*

bl2BXgGu

Practise your German vocabulary on www.quizlet.com

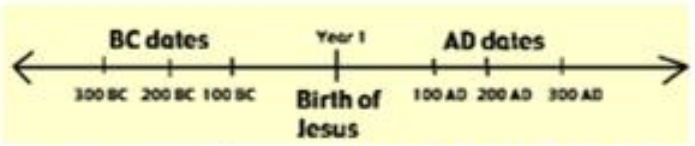
Click on your class name below to go directly to your Quizlet class.

7H 7O 7P 7E

www.textivate.com
Username: openacademy
Password: firstsecond123
Go to 'my resourses' to find your work.

Year 7 History: Medieval life, kings and castles

Key words	
Chronology	The order in which things happen. The earliest event comes first.
BC	'Before Christ' – the number of years before the birth of Jesus Christ
AD	'Anno Domini' – the number of years after the birth of Jesus Christ
Decade	10 years
Century	100 years
Millennium	1000 years
Primary source	A source created in the time being studied
Secondary source	A source created after the time being studied
Evidence	Facts, statistics, or knowledge used to prove a particular point



100 - 199	2nd century
200 - 299	3rd century
300 - 399	4th century

Have you spotted the pattern yet? Have a close look at the numbers that are underlined - what do you notice?

REMEMBER! Look at the first number(s) of the year and **ADD ONE** to get the century (c) e.g.

2018 = 21st c 968 = 10th c 1815 = 19th c 1905 = 20th c 56 = 1st c

English, with experience of ruling Wessex

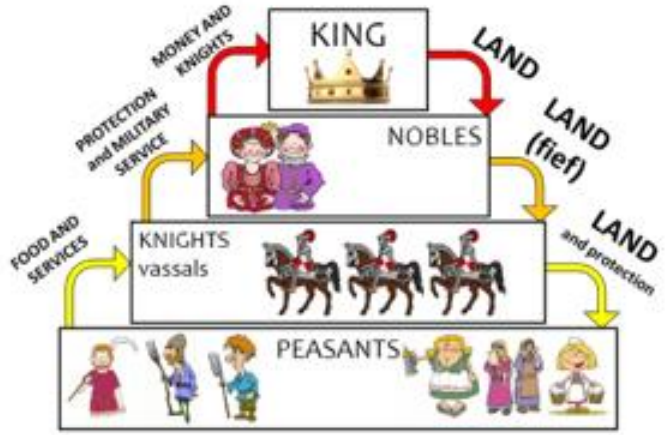
Betrayed the old King and tried to overthrow him

Protected the old King against Harold Godwinson

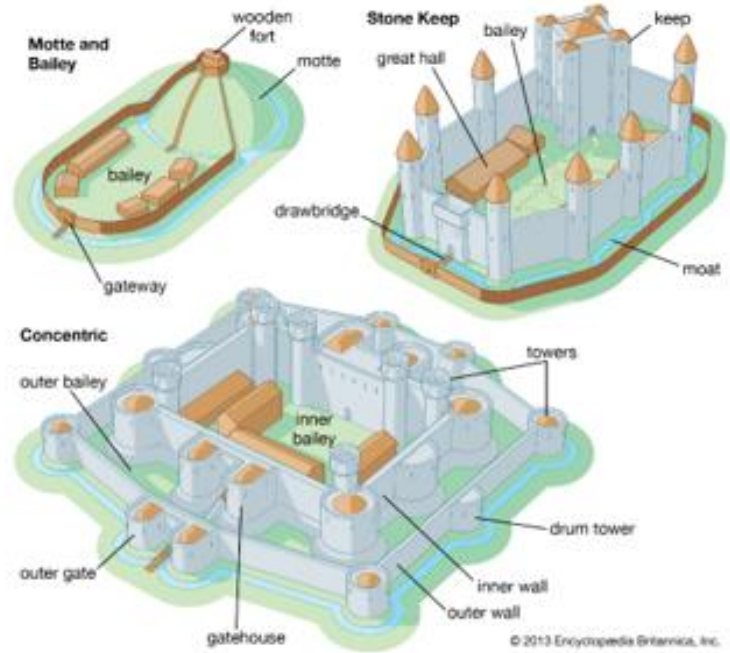
Already the ruler of a foreign land!

Has experience of being a King

A foreigner who uses force to get what he wants



The Feudal system, introduced by William the Conqueror to keep order in medieval society. Each layer receives something from those above them, and gives something in return.



The Battle of Hastings, 14th October 1066

- Harold's Saxon forces assembled at the top of Senlac Hill
- William's archers fire but the Saxon shield wall holds
- William's footmen charge but the shield wall still holds
- William's cavalry charge and even they can't break the shield wall!
- The Normans believe William is dead – they retreat and some Saxons follow. Once William declared that he was still alive, his men turned and killed the pursuing Saxons
- The Normans carried out another false retreat and killed more gullible Saxons
- The shield wall now weakened, William's archers fired again and killed Harold Godwinson. The Saxons surrendered.

Castles

In order to protect himself and his barons from Saxon attacks William also built castles around the country. These became more advanced over time. As well as being defensive structures they were also places for lords, barons and nobles to live.

The Domesday Book

William wanted to know who owned what so he could tax them efficiently, so he sent inspectors around the country and they compiled their findings in the Domesday Book.

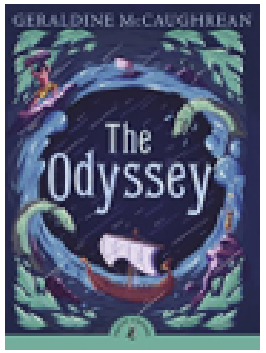
Find where you live on the Domesday Book! Search at https://opendomesday.org/

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

Odyssey
Penultimate
Mythology
Adjective
Siren
Mythical
Narrative hook
Hero
Persuasive
Journey



After 10 years of war, Odysseus turns his back on Troy and sets sail for home. But his voyage takes another 10 years and he must face many dangers.

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

Sentence Form	Definition	Example
Fragment sentence	An incomplete idea.	*Rolling thunder.*
Simple sentence	Contains one complete idea in an independent clause.	*The lightning flashed.*
Compound sentence	Contains two independent clauses linked by a conjunction or a semi-colon.	*The lightning flashed **and** the rain fell.* *The lightning flashed; the rain fell.*
Complex sentence	Contains an independent clause and at least one dependent clause.	*Despite the thunder and lightning, there was no rain.*

TIPTOP

PARAGRAPHS

Time – change in TIME

Place – change in PLACE

Topic – change in TOPIC

Person – change in SPEAKER

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*
- 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

Hikey Sprites Y6—Y7 Knowledge Organiser

Sprites/Spirits/Fairies

In Tudor and Elizabethan times fairies and/or sprites were thought of as bad spirits who played tricks on people. Fairies were also thought to bring illness, misfortune and disease

In the 16th Century people did not know much about the world around them, so sprites and spirits were easy to blame for problems.

Travellers worried that sprites would lead them into the woods, and they would never be seen again…

Books and plays, such as the Faerie Queene, and A Midsummer's Night Dream were written about fairies, sprites and spirits- Elizabeth 1 was even known as "The Fairy Queen".

Literary devices

- **Sensory language:** Language that connects to the five senses (sight, sound, smell, taste, touch) to create an image or description. *Tom felt cold, and goose bumps rippled across his arms.*
- **Foreshadowing:** A warning or indication of something that might happen later in the story. *Gran had only one rule. Be home before dark.*
- **Simile:** Used to compare one thing to another by using like or as. *Tom stumbled on, and burst onto the road like a rocket.*
- **Metaphor:** Used to compare one thing to another by saying it *is* that thing. *The blanket of darkness became thicker.*
- **Personification:** Giving human characteristics to something non-human. *Deep shadows held a grip on the path.*
- **Pathetic Fallacy:** a kind of **personification** that gives human emotions to nature; for example, referring to weather features reflecting a mood. *Night was creeping in all around him, and the breeze made the limbs of trees clash together.*
- **Bookending:** Linking the opening to the ending using a similar phrase or description. *'Gran replied, "I told you to be home before dark".*

Tudor/Elizabethan beliefs about magic

Witches: In Shakespeare's time people believed that witches were people who had made a pact with the Devil in exchange of supernatural powers. They blamed witchcraft for many things, such as a plague in your village, or animals getting ill.

Superstitions: Tudors and Elizabethans were very superstitious.

Some superstitions include: An eclipse was an omen of the devil; it was unlucky for a black cat to cross your path; the feathers on a peacock were seen as 'the evil eye'; you had to touch wood to avoid bad luck (this superstition dates back to the dark ages when trees were believed to have magical powers); and the seventh son of the seventh son was believed to possess supernatural powers

Tudor/Elizabethan woodlands

In 1600 about a third of England was covered in forest.

The forest carried deeply symbolic meanings.

It was seen as a place of wildness and magic—the opposite of 'civilised' life.

Many of Shakespeare plays include scenes in woodlands, which are portrayed as offering temporary relief from a rigid order to which the characters must return.

Forest Law meant that the forest was a hunting ground for kings

Travellers could walk for days and not see anyone else.

Tasks

1. Copy out the vocabulary in the purple box and write the definitions of the word/terms next to each. Practise their spellings using look, cover, copy.
2. Research another Greek myth (other than Homer's Odyssey). You could do this using books or online. Write a summary (a brief overview) of what the myth is about. Try to use some of the vocabulary in the purple box to do this.
3. Create a character profile for a mythological character. Draw/paint the character and then write adjectives and verbs (see the blue box) around your picture to describe its appearance and movements. As a challenge, you could write a back-story for your character; how did she or he come to be and what are his or her motives?
4. Read the extract from The Odyssey on the next page. Highlight or colour-code and annotate (label) any of the word classes and techniques from the blue box.
5. Now that you have read the extract, who do you think the main character of the story is? Explain how you know this in full sentences.
6. Who is Penelope? How does she feel in this part of the story? How do you know? Choose words from the extract that show how she feels and explain why they tell us about how she is feeling. This is called quote finding and inference.
7. Write a diary entry for Penelope or Odysseus, focusing on their thoughts and feelings, based on what you have read of the text.
8. Read the extract entitled 'The Sea God's One-eyed Son' on the 5th page. How does the author make The Cyclops sound revolting and frightening? List the words and phrases. As a challenge, you could develop this by turning it into a paragraph, explaining how these words and phrases make you, the reader, feel about The Cyclops and the men's predicament.
9. Draw or paint a picture of The Cyclops as you see him in your mind's eye.
10. Use your predictions and imagination to continue the story of The Cyclops. You could write about what he does next and how the men escape (if you decide they do!). Try to use as many sentence types (see the box on the first page) and techniques from the blue box as you can.

The Odyssey: Chapter 1 – Yearning for Home

The war lasted so very, very long. Then suddenly it was over in a flash of fire, a splash of blood and a trampling of horses. Men whose ships had rolled idly over a thousand tides in the bay of Troy mustered by the water's edge in groups. There were many faces missing, many oars lacked a rower after ten years of war. But those who unfurled their sails, latched their oars over the oar-pins and set the tillers, were cheerful. Their masts were hung with tokens of victory and their holds were full of Trojan gold and wine. Best of all, they were going home.

Home! To wives they had not seen for ten years, to sons who had grown from boys into young men, to daughters who had grown from babies into beauties, to farms that had lain tangled and untended under ten hot summers. A few strokes of the oar and they would be home –all those men who had answered the call to war and mustered from every island and shore of the O-round ocean.

The long fast-ships were heaved off the sand and gravel and into deep water. Friends stood waist-deep in the sea, waving and waving and waving.

"Till we meet again, Nestor!"

"Until we meet again, Menelaus!"

"Until we meet again, all you brave Myrmidons!"

"Safe journey, Odysseus!"

Odysseus felt the sand and gravel grate against the bottom of his ship. Then, with a rush of white water past the bow and the crack of his sail as it filled, he leaned on the tiller and turned his eyes away from the shoreline and the still-smoking ruins of Troy. He was going home to his three-island kingdom of Ithaca. His cockerel mascot crowed triumphantly on the stern rail.

Mustered behind his own fast, black ship, like cygnets behind their swan, were eleven others all manned by men of Ithaca, Cephalonia, and wooded Zanthe. At first their rowing was ragged. Their oars beat out of time for lack of practice and their shoulders burned under the Trojan sun. But gradually they settled into a rhythm –a splash, a grunt and a sigh.

"Your son will be a big lad now, captain," said Polites.

"Eleven! Almost eleven! He was only a baby when I left Ithaca. A fine help I've been to his mother, leaving her all alone."

"Ah, but such a lady, captain! Such a lady as never knew the meaning of impatience!"

Odysseus looked into the distance with unfocused eyes. "Indeed, yes, Polites. Such a woman."

High in the window of Pelicata Palace, Penelope, Queen of Ithaca and wife of Odysseus, looked out across the wave-stripped ocean. A dark shape caught her eye, far, far out across the sea. At once she was leaning out of the window and her hands were plunged into the unpruned vine which cloaked the palace wall. “Odysseus! Odysseus!” Her voice rang through the empty courtyards and tumbled over the cliff edge. Her son, Telemachus, stopped his game of archery and ran towards the house. But it was only an approaching storm and a waterspout, and not a ship at all. Penelope pressed her cheek against the cold stone of the window frame and steadied her breathing.

Chapter 2: The Sea God’s One-eyed Son

The sheep were delicate alongside their shepherd –a monstrous landmass of flesh and bone whose knuckles trailed in the dirt and whose mouth was a cave in itself. In the centre of his forehead, rimmed with rheumy (watery mucous) lashes, gaped a single massive eye.

The Cyclops drove his sheep into the cave, rolled a boulder across the entrance to seal it, then revived the fire smouldering in the centre of the cave. As it flared up, it lit the oval staring faces of the astounded Greeks. The single eye gleamed as it fixed on each man in turn, and the Cyclops grinned.

“Hello, peoplings. Aren’t you little?”

“Indeed, indeed. Poor miserable specimens come to admire the famous race of one-eyed giants,” said Odysseus (who was not just a hero and a king, but a diplomat).

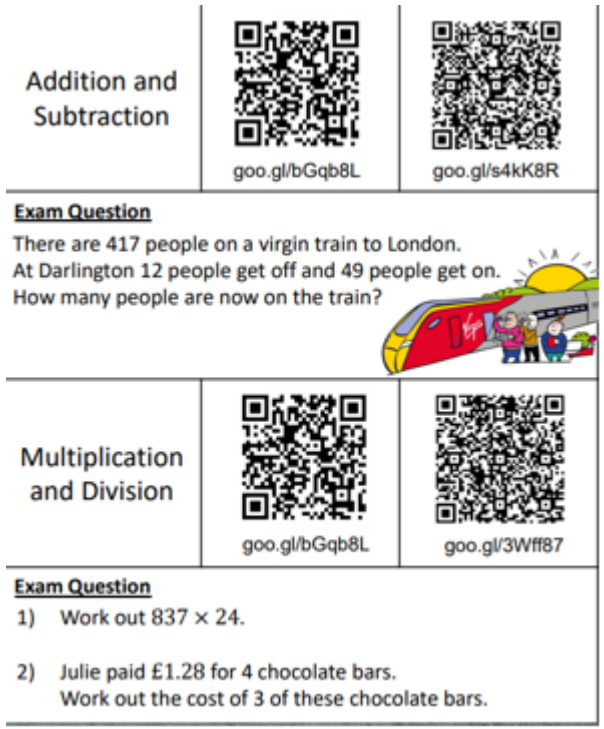
The Cyclops had difficulty in hearing the small, piping voice. He cleaned one ear with his finger.

“Mmm. Two eyes. Almost repulsive. But I won’t let it put me off. Me, Polyphemus, I’ll try anything once.”

Reaching out, he picked up the fattest member of the crew and crammed him into that cavernous mouth.

Topic/Skill	Definition/Tips	Example
1. Integer	A **whole number** that can be positive, negative or zero.	$-3, 0, 92$
2. Decimal	A number with a **decimal point** in it. Can be positive or negative.	$3.7, 0.94, -24.07$
3. Negative Number	A number that is **less than zero**. Can be decimals.	$-8, -2.5$
4. Addition	To find the **total**, or **sum**, of two or more numbers. 'add', 'plus', 'sum'	$3 + 2 + 7 = 12$
5. Subtraction	To find the **difference** between two numbers. To find out how many are left when some are taken away. 'minus', 'take away', 'subtract'	$10 - 3 = 7$
6. Multiplication	Can be thought of as **repeated addition**. 'multiply', 'times', 'product'	$3 \times 6 = 6 + 6 + 6 = 18$
7. Division	Splitting into equal parts or groups. The process of calculating the **number of times one number is contained within another one**. 'divide', 'share'	$20 \div 4 = 5$ $\frac{20}{4} = 5$
8. Remainder	The amount '**left over**' after dividing one integer by another.	The remainder of $20 \div 6$ is 2, because 6 divides into 20 exactly 3 times, with 2 left over.
9. BIDMAS	An acronym for the **order** you should do calculations in. BIDMAS stands for '**Brackets, Indices, Division, Multiplication, Addition and Subtraction**'. Indices are also known as 'powers' or 'orders'. With strings of division and multiplication, or strings of addition and subtraction, and no brackets, work from left to right.	$6 + 3 \times 5 = 21$, *not* 45 $5^2 = 25$, where the 2 is the index/power. $12 \div 4 \div 2 = 1.5$, *not* 6
10. Recurring Decimal	A decimal number that has **digits that repeat forever**. The part that repeats is usually shown by placing a dot above the digit that repeats, or dots over the first and last digit of the repeating pattern.	$\frac{1}{3} = 0.333\ldots = 0.\dot{3}$ $\frac{1}{7} = 0.142857142857\ldots = 0.\dot{1}42857\dot{}$ $\frac{77}{600} = 0.128333\ldots = 0.128\dot{3}$

Challenge: How do you convert a recurring decimal to a fraction?



Year 7 RS: How is identity influenced by religious belief and culture?

Key words	
Identity	A fact of being who a person is.
Beliefs	A firmly held opinion, something one accepts as being true or real.
Customs	A traditional or widely accepted way of behaving in a traditional society or culture.
Traditions	a long-established custom or belief that has been passed on from one generation to another.
Culture	The ideas, customs and social behaviour of a particular society or people.
Spiritual	relating to or affecting the human spirit or soul as opposed to material or physical things.
Morals	standards of behaviour; principles of right and wrong.
Belonging	an affinity for a place or situation.
Values	They are basic and fundamental beliefs that guide or motivate attitudes or actions. They help us to determine what is important to us.

Believer's Baptism– Christians who practise believer's Baptism accept that a person needs to be able to claim Jesus as their personal saviour. The celebration of baptism is a way of showing that this belief exists and the person wishes to be totally committed to the will of God. The Baptist and Pentecostal churches, and some Anglican churches, practise Believer's Baptism.

Bar Mitzvah and Bat Mitzvah in Judaism.

Bar and Bat Mitzvah ceremonies mark the transition into adulthood for young Jews. At age 13 a boy becomes Bar Mitzvah and at age 13 a girl becomes a Bat Mitzvah. After these ceremonies Jewish boys or girls become responsible for living according to Jewish Law. At this point, each young person has to accept the law and its obligations, participate fully in services at the synagogue and set a good example for others. After the ceremony, a Jewish boy can be counted as part of a minyan, and in Reform synagogues girls who are Bat Mitzvah can also be counted.

A Bar Mitzvah happens around a boy's 13th birthday and is part of a service in the synagogue. The boy, who has prepared for the ceremony by spending a lot of time studying it, reads from the Torah. The boy puts on the tefillin for the first time.

The rabbi gives a talk, speaking to both the boy and his family and to the rest of the community. The boy might also give a talk to the people gathered.

It is traditional for the boy's father to recite a prayer of thanks to God for bringing his son to maturity. The boy receives gifts and there is a celebratory meal.

The Bat Mitzvah is only practised by Reform and Liberal Jewish communities. The ceremony follows a similar pattern to the Bar Mitzvah and happens around a girl's 12th birthday.

During her Bat Mitzvah, a girl may read from the Torah or she may instead read a prayer from the Siddur. Traditionally, within Judaism, males and females are not thought to have the same responsibilities. As a result, in some Jewish communities, some rules (such as the requirement to read from the Torah) are less strict for girls than they are for boys.

Infant baptism in Christianity

Many denominations baptise infants. Although ceremonies are similar, there are some important differences between them.

During the infant baptism ceremony:

- the baby, parents and the godparents are welcomed
- there are readings from the Bible
- the parents and godparents take vows, renounce Satan and evil and profess their faith and the faith they want the baby to be brought up in
- the Apostles' Creed might be said as a statement of faith
- water is poured over the baby's head as the minister says: I baptise you in the name of the Father and of the Son and of the Holy Spirit (in Orthodox Churches, the baby is briefly put completely under the water)
- godparents are sometimes given a lighted candle to represent the light of Jesus that has come into the baby's life
- for the ceremony, parents may dress their baby in a special white garment

Christians believe that baptism welcomes the child into the Church, and some believe it removes from the baby original sin that was brought into the world when Adam and Eve disobeyed God in the Garden of Eden.

A pilgrimage is a journey with a religious or spiritual significance. For Muslims it is a duty to go on pilgrimage to Makkah (Mecca) at least once in their lifetime, if they have the means. For Muslims it is a duty to go on pilgrimage to **Makkah** (Mecca) at least once in their lifetime, as long as they are physically able and can afford it.

The pilgrimage to Makkah is called **Hajj** and is the fifth Pillar of Islam. Muslims try to go to Makkah during **Dhu al-Hijjah**, the twelfth month of the Islamic calendar.

Muslims must follow a number of important rituals whilst on **Hajj**:

Ihram

Ihram relates to the state of purity and equality before God (Allah) which Muslims enter before going on Hajj. To symbolise this state, male pilgrims wear two lengths of white cloth whilst on Hajj; female pilgrims wear ordinary clothes, but must keep their faces uncovered. These clothes may be kept by the pilgrim and at their death used to wrap their body for burial.

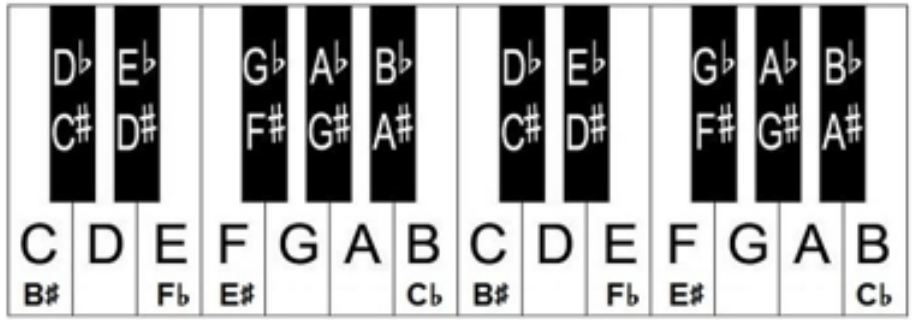
Ka'bah

On the first day of the Hajj, pilgrims walk around the Ka'bah seven times in an anti-clockwise direction while repeating prayers. This is called Tawaf. Thousands of people do this at the same time and only a few are able to touch or kiss the Black Stone, embedded in one corner of the Ka'bah. If a pilgrim isn't able to touch the Black Stone, they hold up their hand to it as they pass. Walking around the Ka'bah with thousands of others represents the Muslim belief in the equality of all Muslims. Muslims are recommended to complete a second Tawaf at the end of their pilgrimage. At the end of the pilgrimage, Muslims celebrate the festival of Eid ul-Adha. This festival reminds them of Ibrahim's obedience when he was told by Allah to sacrifice his son, Ismail. Muslims may sacrifice a sheep or a goat to symbolise the lamb provided by Allah for Ibrahim to sacrifice in place of Ismail.

Year 7 Autumn Term Knowledge Organiser

Musical Elements

Duration	How long a note lasts for
Pitch	How high or low a note is
Tempo	How fast or slow a note is
Dynamics	How loud or quiet the music is
Timbre	The quality of sound
Texture	How thick or thin the music is
Structure	How the sections of music are laid out e.g. chorus, verse etc.
Silence	When the instruments stop playing

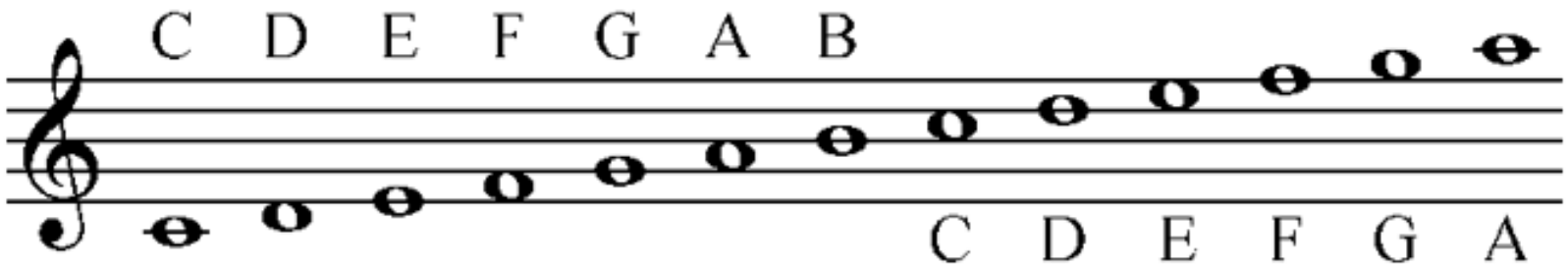


Rhymes for the treble clef

If the note is on the line: **E**very **G**ood **B**oy **D**eserves **F**ootball

If the notes is in a space: **F A C E**

If you combine the two, you get the alphabet from A – G and then it repeats!
Look at the diagram below!



Year 7 Autumn Term Knowledge Organiser

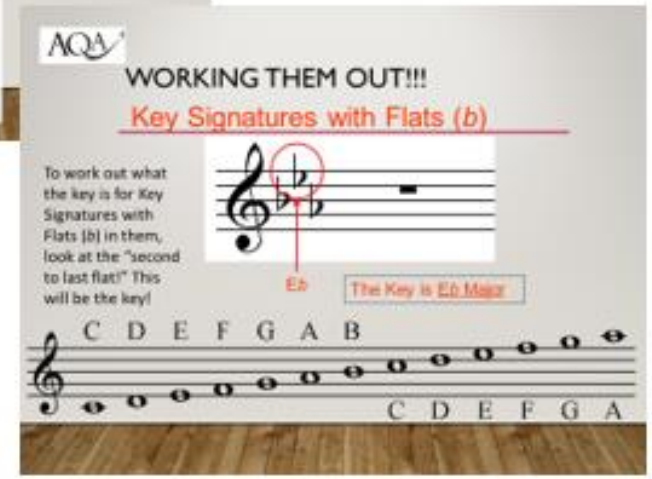
Note, dotted notes and rest durations

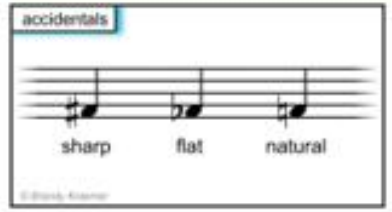
Name	Note	Rest	Beats
Semibreve	𝅝	𝄻	4
Minim	𝅗𝅥	𝄼	2
Crochet	♩	𝄽	1
Quaver	♪	𝄾	½
Semiquaver	𝅘𝅥𝅯	𝄿	¼

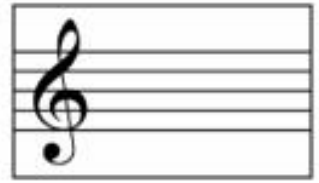
1. ♩ + ♩ = ____
2. ♫ + ♩ = ____
3. 𝅝 + ♫ = ____
11. 𝄽 + 𝄽 = ____
12. 𝄼 + 𝄽 = ____
13. 𝄼 + 𝄼 = ____

1. 𝅗𝅥. + ♩ = ____
2. ♫ + ♩. = ____
3. 𝅝 + 𝅗𝅥. = ____
11. 𝄽 + 𝄾 = ____
12. 𝄼. + 𝄽 = ____
13. 𝄼 + 𝄼. = ____
14. 𝄾 + 𝄼 = ____

Key Signatures, Sharps and Flats







Exceptions to the rule: C major & F major

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
What different birds can you see? Can you make a diary with observational drawings.	Research what the difference between hard and soft woods is. What trees grow them and what do carpenters use them for?	Watch one of the briefings by the government. What makes a good information giving speech?	How is living in Norfolk special? Compare your lifestyle with others in Lima, Kazakhstan and Calcutta.	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.	Try the home experiments.
Take one part of the knowledge organiser and make a piece of performance poetry about it.	How can you save money shopping for food (under normal circumstances)? Create a handy guide for a novice shopper.	Story Board a film that hinges on one of the key facts that you have just learned.	England was divided up into 7 Saxon kingdoms. Create a podcast describing what life would have been like at this time if you had lived then.	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!	https://www.youtube.com/watch?v=adwvwrTnF48
Podcast your feelings on a good day and a bad day.	Can you make a model of a Norwich landmark? Use any material to hand.	Write a newspaper article about a spy e.g. James Bond. Try to write their obituary.	What happened to the Colony of Roanoke? Create a presentation to explain as an archaeologist what would you expect to find and where.	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.	Can you find some epic science failures yourself? Science is the process of trial and error. It leads to mistakes that we learn from.
Create a playlist that takes you through a particular mood.	Invent a new recipe and test it. Send in photos of it to Ms Luter.	Watch a film. Be a film critic. You are being interviewed to review the film on radio 1. What would you say?	Imagine how Europe's history would have been different if there had been no monarchy. Write a new constitution.	Think about what exercise or activity you completed, how long did you exercise for and how you felt during and after the activity.	Play out a Roast Battle between Pascal's Triangle and The Bermuda triangle.	Find out how smoking effects young people.