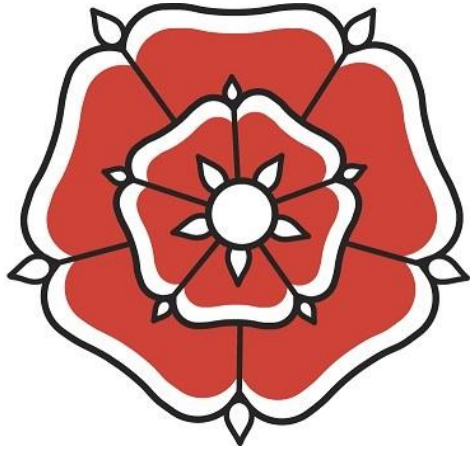
Maidenhill School Knowledge Organiser

Year 9 – Term 5



Be kind, Aspire, Persevere, Achieve

Name: Tutor:

Planner - Term 5

Week 1	Notes
Monday 28th April	
Tuesday 29th April	
Wednesday 30th April	Parents' Evening 4-6.30pm
Thursday 1st May	
Friday 2nd May	

Week 2	Notes
Monday 5th May	No school – Bank Holiday
Tuesday 6th May	
Wednesday 7th May	
Thursday 8th May	
Friday 9th May	

Week 1	Notes
Monday 12th May	Decisions form opens – see homework on CC
Tuesday 13th May	
Wednesday 14th May	District athletics
Thursday 15th May	
Friday 16th May	

Week 2	Notes
Monday 19th May	Decisions deadline
Tuesday 20th May	
Wednesday 21st May	
Thursday 22nd May	
Friday 23rd May	

Planner – Term 5

Self-certification / Out of lessons

Self-certification

Every student is entitled to self-certify to go to the toilet on 2 occasions each term, when they do not have a medical exemption (issued by school only, in conjunction with parents). This will equate to 12 opportunities a year.

Sign below and show to your teacher. If you have a reason that requires this page to be refreshed before the end of term, please speak to your Head of Year.

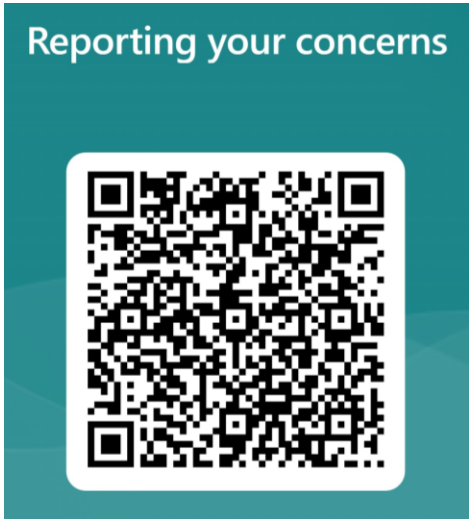
Date	Time	Student signature

Insert medical exemption here (Head of Year)
Review/end date:

Student out of lesson record

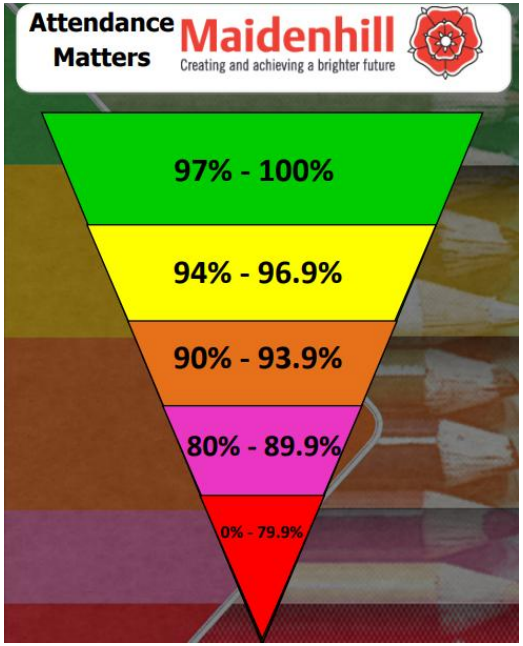
Date and time	Reason	Staff signature

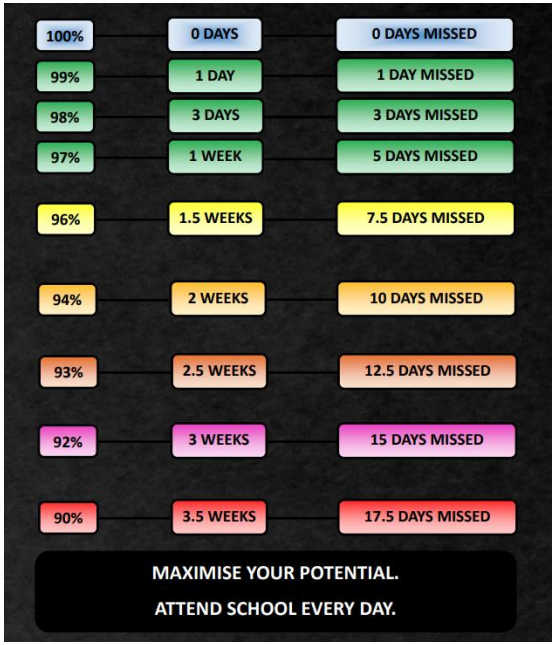
Have a problem? Worried about someone or something? Need someone to talk to? Scan the QR code and let us know.



Attendance

Attendance Groups	
Green	Expected Attendance
Yellow	Risk of Underachievement
Amber	Serious Risk of Underachievement
Pink	Severe Risk of Underachievement (PA)
Red	Extreme Risk (PA)





Personal Attendance Record

Week	Monday	Tuesday	Wednesday	Thursday	Friday	%	Colour	↑ → ↓
1								
2								
3								
4								

Home School Agreement and uniform expectations

As a student of the school I will:

- Attend school every day and on time
- Represent the school in a positive way on my way to and from school
- Wear the correct school uniform smartly at all times
- Ensure I have downloaded the ClassCharts app and actively use the platform so that I am up to date with notifications regarding my behaviour, attendance, homework and detentions
- Follow the "Maidenhill Expectations" for all students regarding their Behaviour for Learning and uphold the school's expectations to 'Be kind, Aspire, Persevere and Achieve'
- Not use my mobile phone in school
- Go to reception if I need to contact home
- Be polite and considerate to all members of the school community
- Ensure that my behaviour has a positive impact on other students' learning and progress
- Refuse to take part in bullying or anti-social behaviour, including on social media
- Take responsibility for my own learning and actively participate in lessons
- Actively seek ways to improve my work and respond effectively to feedback
- Complete all my classwork and homework to the best of my ability and on time
- Respect the environment of the school and its neighbourhood, and help to keep it clean and tidy, free from litter and graffiti
- Represent the school in a positive way in the local community and when participating in school activities or visits, and on social media
- Talk with my parent(s)/carer(s) and school staff about any concerns in school
- Pass any written correspondence to my parents'/carers' on the day they are issued
- Interact positively with any school social media platforms.

Student Signature ……

Maidenhill Uniform

- ❖ Maidenhill school blazer needed at all times
- ❖ Maidenhill school tie
- ❖ Long or short sleeved plain white shirt, **tucked in when in the school building**
- ❖ Plain black, smart, tailored trousers
- ❖ Footwear should be a shoe and not a boot, and entirely black
- ❖ White, grey or black socks with no logos
- ❖ Black or nude tights. No patterns.
- ❖ Optional
  - Maidenhill skirt
  - Maidenhill shorts
  - Simple black belt
  - Maidenhill jumper

- ❖ Jewellery must be easily removed for practical lessons. Earrings must be studs and not dangle. Necklaces should be underneath the shirt
- ❖ Make-up should be discreet
- ❖ Hair must not be of extreme style or colour. Long hair should be tied back for health and safety reasons in certain subjects

Maidenhill PE Uniform

- ❖ Red Maidenhill PE polo shirt
- ❖ Red Maidenhill hooded jumper
- ❖ Optional Rugby shirt
- ❖ Options for the lower half:
  - Plain black shorts with no logos
  - Black tracksuit bottoms with no logos
  - Maidenhill leggings
  - Maidenhill Skort
  - Plain black leggings with no logos

- ❖ Socks
  - White or black
  - Red needed for all fixtures
- ❖ Shoes
  - Suitable trainers
  - Optional studded boots for football/rugby

Borrowed uniform items

Date	Item	Number	Returned

Home School Agreement and Uniform

Equipment and acceptable use of the school ICT facilities

Equipment

You should be fully equipped for every lesson. Make sure you have the correct books for each lesson. It is always a good idea to pack your school bag the night before. Remember to check you timetable first. Here is a useful checklist.

Essential requirements

- ❑ At least 2 black pens
- ❑ 2 pencils and 2 x 2b or 4b pencils for Art, Design and Nutrition
- ❑ Ruler
- ❑ Rubber
- ❑ Pencil Sharpener
- ❑ Scientific calculator
- ❑ Colouring pencils and/or colouring pens
- ❑ Headphones for music
- ❑ PE kit to be worn on days with PE or dance

Student property

You are expected to have your clothing marked with your name and, wherever possible, all other items of property which you are expected to bring to school with you such as bags, pencil cases and PE kit named too.

Money, bus passes and other similar items of value should always be carried with you and never left in bags around the school at break and lunchtimes.

You have the opportunity, if you wish, to hand valuables to a teacher before PE and arrangements will be made for safe keeping. The changing rooms are not always locked during lessons. If you do not do this, the school cannot guarantee full security for your property.

Network rules

Never share your password with anyone – not even your best friend – if you suspect that someone knows it, change it or see an ICT technician as soon as possible
Never share your user area with anyone – email files to a friend or home as an attachment, or use Office 365 "One Drive"
Always log off before leaving a computer
Never tamper with ICT equipment, if your PC or laptop is damaged or not working properly, please inform a member of staff immediately. DO NOT disconnect, reconnect or move or swap any cables at any time
Never give a stranger any information about you or your home
Always communicate with strangers politely – ask a teacher to check before sending
Don't suffer bullying – report and give a printout of any email or other material that offends you to a teacher
Avoid the spreading of computer viruses – from the internet or home. Keep your home virus checking software up to date
Do not attempt to download or install software – use only the software provided
Always give credit for information obtained from the internet
Do not eat or drink close to electronic equipment or in any computer room
Use your printing credits with care – extra print credits in any one week can only be obtained through the permission of a teacher whose work you need to print
The use of the internet at school must be in support of learning. The use of all chat systems is strictly forbidden. Inappropriate use will result in access being withdrawn. A log of all internet access and activity is monitored throughout the day by the network staff so misuse of the system can be quickly identified and dealt with.

To access email from home, log on rmunify.com. School emails should only be used to communicate with staff/students about school related matters. You can also speak with staff via the message function on ClassCharts.

Visit the website 'thinkyouknow' for essential and excellent advice on using the internet safely outside of school.

Behaviour for Learning

At Maidenhill School we believe that students have the right to learn, and teachers have the right to teach.

When you make good choices and follow the rules, you will be rewarded.

Rewards

You can collect positive reward points in lessons and for completing quality homework. Rewards can be spent in the reward shop at the end of each term on vouchers, chocolate, stationery and much more! We have end of term rewards and end of year rewards in the form of our activities week, all to recognise the positivity and hard work you show each and every day.

If you make poor choices and do not follow the rules, then a clear set of consequences will follow.

Consequences

C2 – This is a verbal warning

C3 – Issued with a BFL detention of 40mins

C3r – This is when you are sent out of a lesson, and you must move to the referral room. You will be issued with a 55mins detention. Those students that are removed from lesson five times in a term, will then receive a 1 day internal isolation in the refocus room for every subsequent C3r. This will be reset at the start of the next term

C4 – Isolation in the refocus room

C4e – Educated off site at an alternative provision

C5 – Fixed term suspension

Be kind, Aspire, Persevere, Achieve

C5 Exclusions
If a student receives a C5 they will be excluded from school for a fixed period of time.

Incidents for which a students may be excluded include:

- In possession, under the influence of or dealing in illegal drugs. This also extends to alcohol and other toxic substances
- Serious physical or verbal aggression towards others
- Serious rudeness, defiance, threatening behaviour or inappropriate language towards a member of the school staff
- Anti-social behaviour such as theft or damage to property
- A build-up of incidents which are unacceptable and contravene school standards
- Repeated disruption and defiance which has disturbed the learning of other students
- Persistent poor behaviour

If a student persistently behaves in an unacceptable manner, this could lead to a permanent exclusion.

In exceptional circumstances, it is appropriate for the Headteacher to permanently exclude a student for a first offence. These might include such things as:

- Serious actual or threatened violence against another individual
- Sexual abuse or assault
- Supplying an illegal drug
- Carrying an offensive weapon

The school can take no responsibility for valuable items brought into school by students (so students are advised not to bring in expensive items).

The following items are not allowed to be brought into school:

- Alcohol and drugs
- Knives and other weapons
- Fireworks
- Cigarettes/e-cigarettes, vapes, tobacco, matches and lighters
- Tippex or other correcting fluids
- Aerosols
- Illegal substances
- Energy/fizzy drinks

Smoking is not permitted in school or on the way to and from school. Students found to be smoking/vaping or in possession of smoking/vaping equipment will receive a significant sanction.

Behaviour for Learning

Bullying

What is bullying?

Bullying is when one person or a group of people deliberately hurt, threaten or frighten someone over a period of time. It can be physical; like punching or kicking, or emotional like teasing or calling names.

Bullying includes repeated:

- Hitting
- Insults
- Cruel nicknames
- Making threats
- Isolating someone
- Damaging, taking or hiding property
- Writing or telling lies about someone
- Sending cruel text messages, video messages or emails
- Spreading rumours
- Being unfriendly and turning others against someone
- Posting inappropriate comments on websites and social media

Types

- Physical
- Cyber
- Verbal
- Emotional
- Prejudice based

If you are being bullied, do not suffer in silence:

- Be firm – look the bully in the eye and tell them to stop
- Get away from the situation as quickly as possible
- Tell an adult, peer or friend what has happened, straight away
- If you are scared to tell someone, get a friend to go with you
- Keep on speaking up until someone listens
- Don't blame yourself for what has happened

When you are talking about bullying, be clear about:

- When it started
- What has happened to you
- How often it has happened
- Who was involved
- Who saw what was happening
- Where and when it happened
- What you have already done about it

If you are being bullied, you can expect that:

- You will be listened to and taken seriously
- Action will be taken to help stop the bullying
- You will be involved in the process of deciding what action to take to stop the bullying and any worries that you may have will be listened to and respected
- You will be given the opportunity to talk about the way that the bullying has made you feel and to find strategies to deal with these feelings and to understand and cope with bullying behaviour
- If you are ever in fear of your physical safety, staff will take immediate action to keep you safe

ALL REPORTED INCIDENTS WILL BE TAKEN SERIOUSLY, INVESTIGATED AND APPROPRIATE ACTION TAKEN

Tutor time – Maths Task 1

Question 1 Factorise 55 + 35x	**Question 2** Factorise 12 - 8x	**Question 3** Simplify $a^2 \times b \times b^4 \times b$	**Question 4** Simplify $a^3 \times b \times a^3 \times b$
Question 5 Work out 64.7 - 8.74 =	**Question 6** Work out 8.2 × 1.9 =	**Question 7** Work out $\frac{3}{4} + \frac{1}{2} =$	**Question 8** Work out $\frac{1}{2} - \frac{2}{10} =$
Question 9 Find the nth term: 12, 22, 32, 42,...	**Question 10** Find the nth term: 13, 20, 27, 34,...	**Question 11** Work out 9.1 ÷ 0.7 =	**Question 12** Work out 8 ÷ 0.4 =
Question 13 Solve 4(5x - 3) = 28	**Question 14** Solve 6x + 6 = -6	**Question 15** Divide £90 in the ratio 3 : 7	**Question 16** Divide £48 in the ratio 3 : 5
Question 17 Express 95% as a fraction in its lowest form	**Question 18** Express $\frac{11}{25}$ as a percentage	**Question 19** Find the gradient of the line y = -3x - 2	**Question 20** Find the gradient of the line y = -4x + 5

SKILLS CHECK

Score

Tutor time – Maths Task 1

Tutor time – Maths Task 2

Question 1 Factorise 22 + 10x	**Question 2** Factorise 15x + 10	**Question 3** Simplify $a^4 \times b \times b \times a^4$	**Question 4** Simplify $a^3 \times b \times a^4 \times b$
Question 5 Work out 81.8 + 0.8 =	**Question 6** Work out 13.2 × 3.3 =	**Question 7** Work out $\frac{3}{4} + \frac{2}{3} =$	**Question 8** Work out $\frac{1}{2} - \frac{1}{5} =$
Question 9 Find the nth term: 1, 5, 9, 13,...	**Question 10** Find the nth term: 9, 17, 25, 33,...	**Question 11** Work out 18 ÷ 0.9 =	**Question 12** Work out 3.6 ÷ 0.3 =
Question 13 Solve 8x - 9 = -1	**Question 14** Solve 3(3x - 5) = 21	**Question 15** Divide £64 in the ratio 5 : 11	**Question 16** Divide £40 in the ratio 3 : 5
Question 17 Express 90% as a fraction in its lowest form	**Question 18** Express $\frac{7}{20}$ as a percentage	**Question 19** Find the gradient of the line y = 4x - 3	**Question 20** Find the gradient of the line y = -2x + 3

SKILLS CHECK

Score

Tutor time – Maths Task 2

Tutor time – Maths – Extra practice

Question 1 Factorise 12x - 66	**Question 2** Factorise 55x + 65	**Question 3** Simplify $b^2 \times b \times a^2 \times a$	**Question 4** Simplify $b^4 \times a \times b^4 \times b$
Question 5 Work out 43.5 - 0.91 =	**Question 6** Work out 29 × 8.6 =	**Question 7** Work out $\frac{1}{3} + \frac{1}{2} =$	**Question 8** Work out $\frac{3}{4} - \frac{1}{2} =$
Question 9 Find the nth term: 9, 21, 33, 45,...	**Question 10** Find the nth term: 7, 19, 31, 43,...	**Question 11** Work out 5 ÷ 1 =	**Question 12** Work out 3.9 ÷ 0.3 =
Question 13 Solve 5x - 3 = -3	**Question 14** Solve 8x + 5 = 4x - 11	**Question 15** Divide £88 in the ratio 1 : 7	**Question 16** Divide £176 in the ratio 5 : 11
Question 17 Express 19% as a fraction in its lowest form	**Question 18** Express $\frac{1}{5}$ as a percentage	**Question 19** Find the gradient of the line y = -4x + 4	**Question 20** Find the gradient of the line y = 3x + 10

SKILLS CHECK

Score

Tutor time – Maths – Extra Practice

Tutor time – Maths – Extra practice

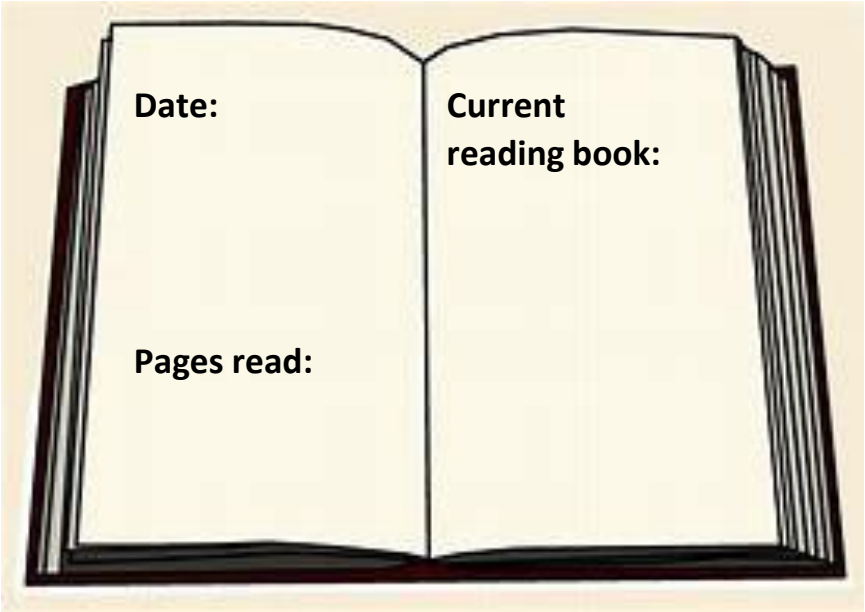
Question 1 Factorise 35x + 55	**Question 2** Factorise 30 + 66x	**Question 3** Simplify $a^3 \times b \times b^2 \times b$	**Question 4** Simplify $a \times b \times b^4 \times b$
Question 5 Work out 7.69 - 7.15 =	**Question 6** Work out 5.6 × 4.1 =	**Question 7** Work out $\frac{3}{10} + \frac{2}{3} =$	**Question 8** Work out $\frac{7}{9} - \frac{1}{2} =$
Question 9 Find the nth term: 9, 18, 27, 36,...	**Question 10** Find the nth term: 18, 30, 42, 54,...	**Question 11** Work out 4 ÷ 0.5 =	**Question 12** Work out 2.2 ÷ 0.2 =
Question 13 Solve 11x - 5 = -5	**Question 14** Solve 4x - 4 = 3x + 2	**Question 15** Divide £12 in the ratio 3 : 1	**Question 16** Divide £60 in the ratio 1 : 5
Question 17 Express 85% as a fraction in its lowest form	**Question 18** Express $\frac{13}{20}$ as a percentage	**Question 19** Find the gradient of the line y = x - 5	**Question 20** Find the gradient of the line y = x + 10

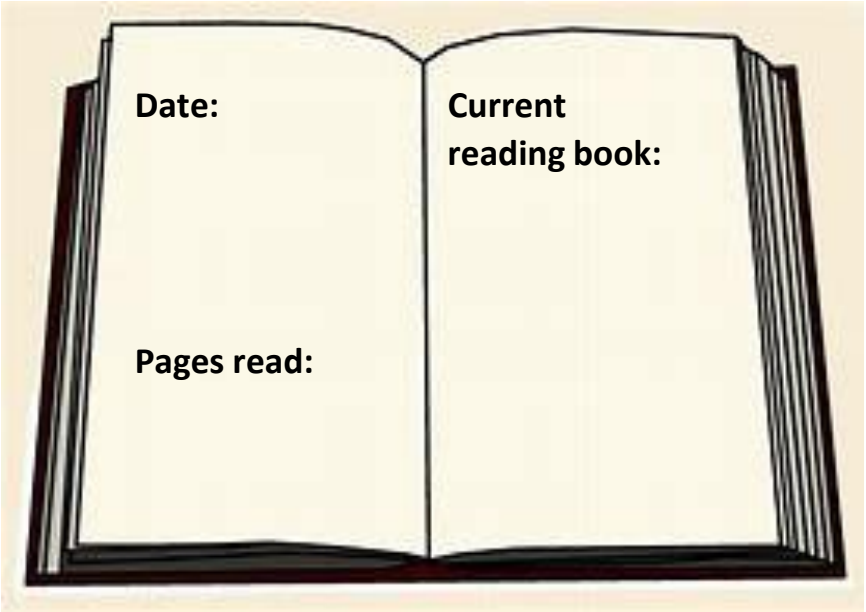
SKILLS CHECK

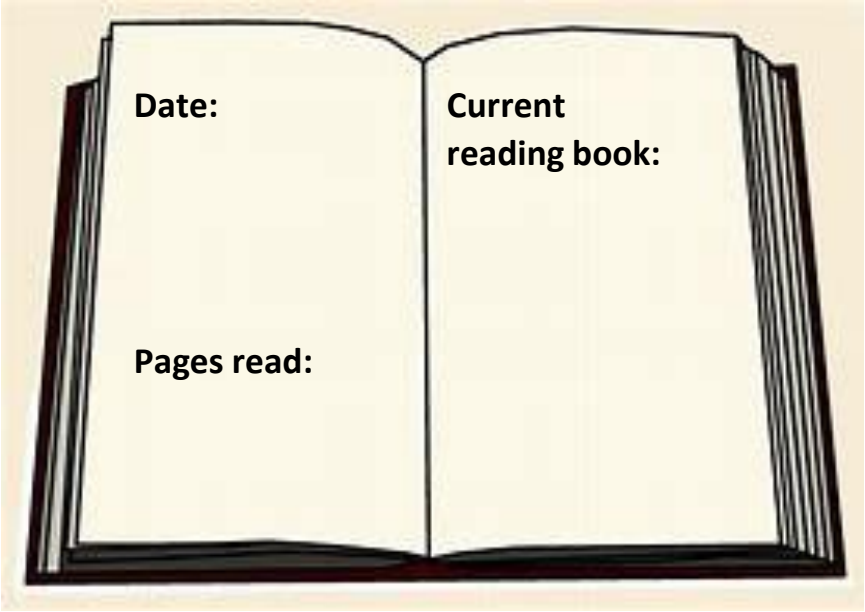
Score

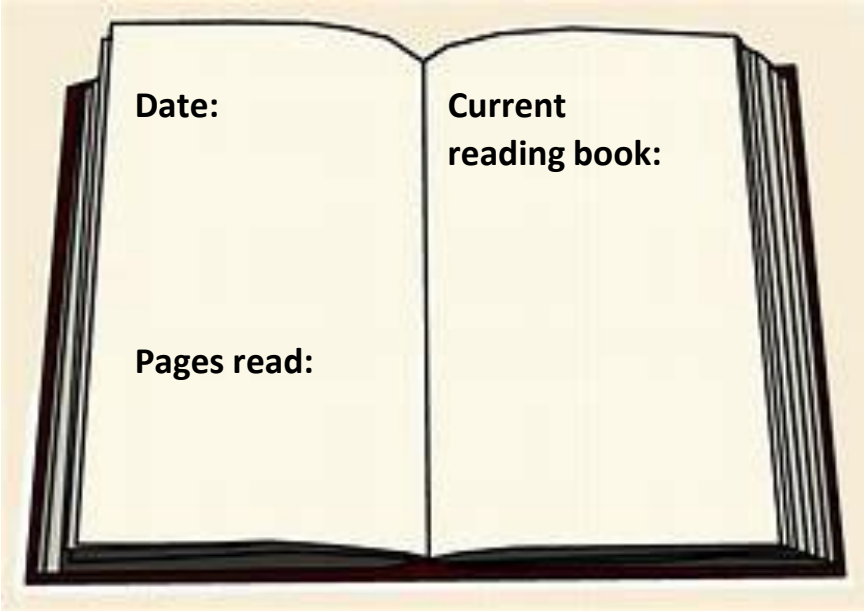
Tutor time – Maths – Extra practice

Tutor time – Reading









Tutor time – Reading

Your Knowledge Organiser for each subject can be found in the following order:

1. English
2. Mathematics
3. Science
4. Art, Design, Nutrition and Photography (on rotation)
5. Computing
6. Drama
7. French
8. Geography
9. History
10. Music
11. Physical Education
12. Religious Studies

Expectations

You are responsible for looking after your Knowledge Organisers.

You should:

- ✓ *Memorise and build upon the information in each Knowledge Organiser.*
- ✓ *Keep them neat and tidy.*
- ✓ *Bring them to school each day.*
- ✓ *Refer to them in lessons and your homework tasks.*

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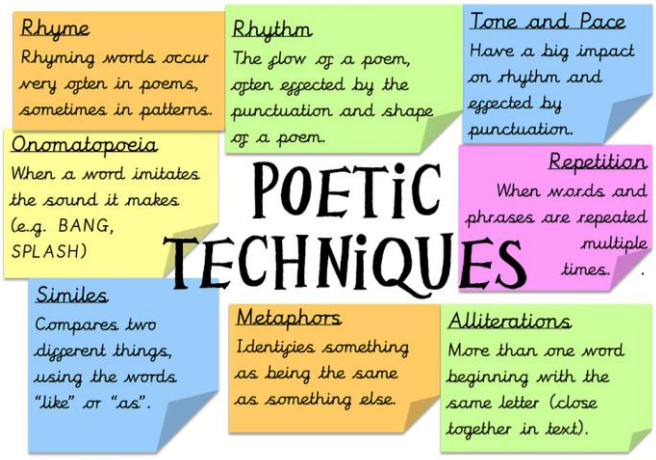
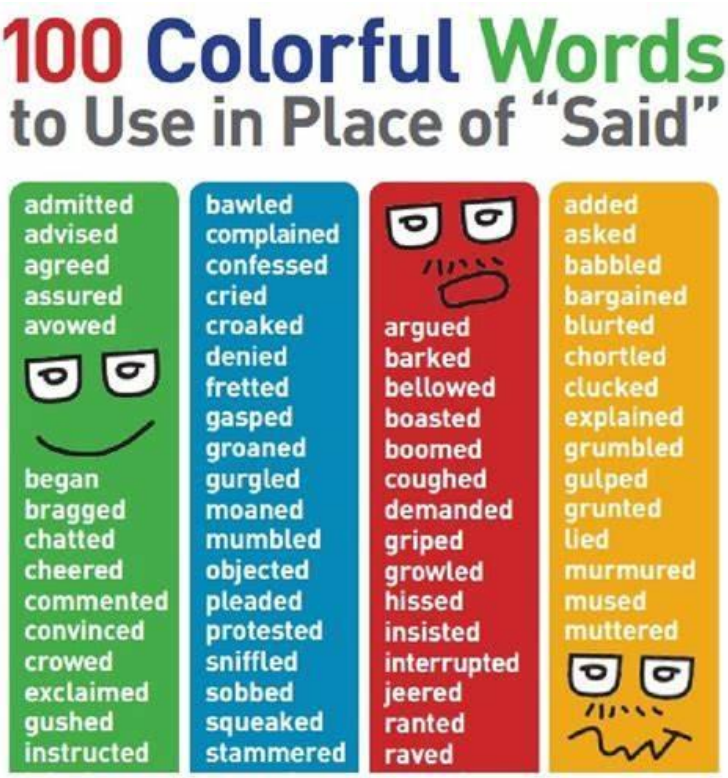


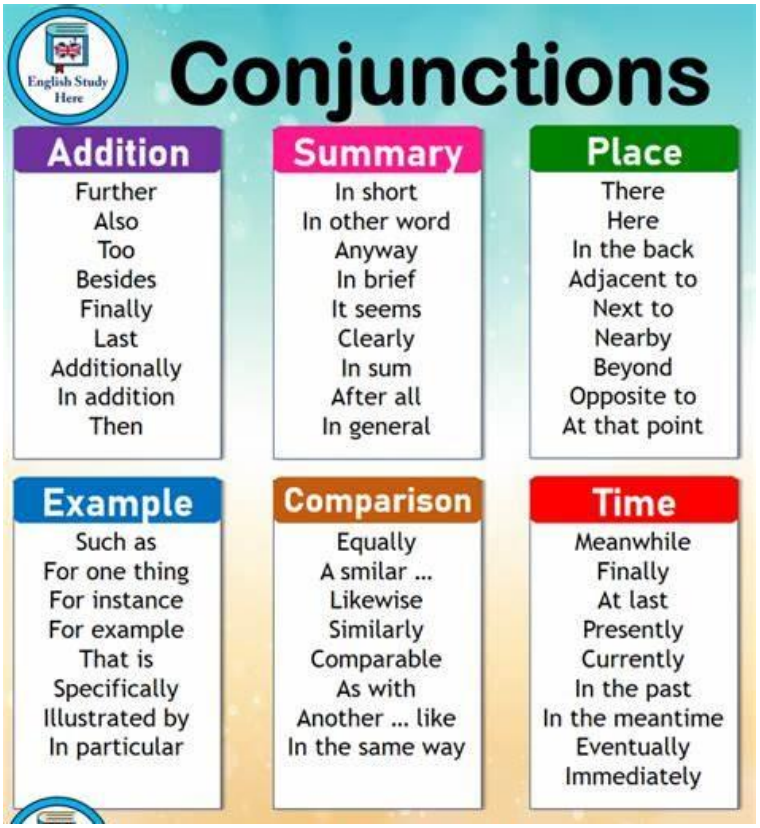


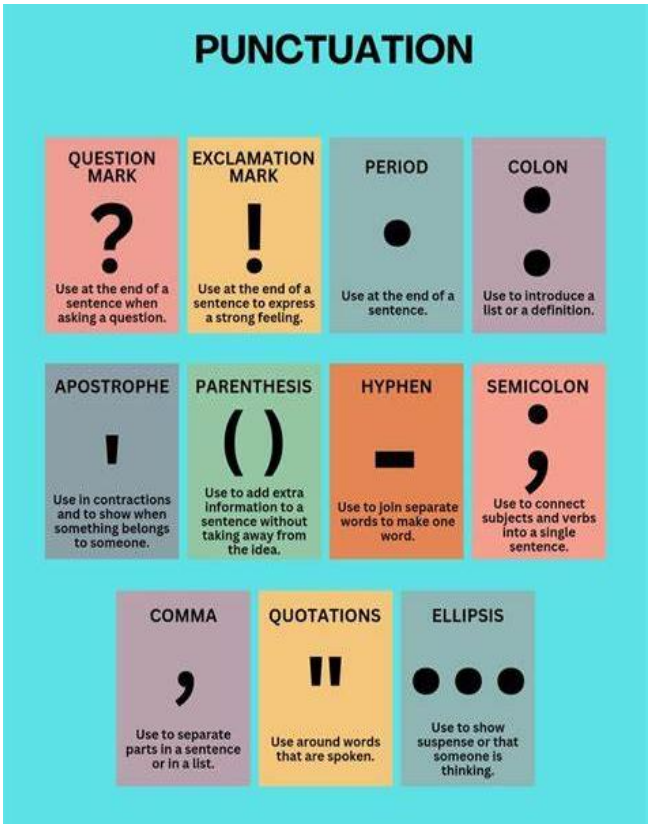
Fiction…

LITERARY DEVICE	DEFINITION	EXAMPLE
Simile	A comparison using "like" or "as"	Her eyes were like shining stars
Metaphor	A comparison without using "like" or "as"	Life is a journey
Personification	Giving human qualities to non-human things	The wind whispered through the trees
Hyperbole	An exaggeration for emphasis	I've told you a million times
Alliteration	Repetition of the same sound at the beginning of words	Peter Piper picked a peck of pickled peppers
Onomatopoeia	Words that sound like what they mean	Buzz, hiss, sizzle
Irony	A contrast between what is expected and what actually happens	A fire station burning down
Foreshadowing	Hinting at what will happen later in the story	The ominous music in a horror movie
Symbolism	Using objects or actions to represent ideas or qualities	A dove as a symbol of peace
Imagery	Descriptive language that creates a picture in the reader's mind	The sun set over the ocean, painting the sky with shades of orange and pink

Non-fiction…

- **Direct address**
- **Fact**
- **Opinion**
- **Rhetorical question**
- **Repetition**
- **Emotive language**
- **Statistics**
- **Three (list of)**
- **Imperative**





Verbs to sharpen your analysis

THIS SHOWS	THIS SUGGESTS	THIS HIGHLIGHTS	THIS INTERESTS
Demonstrates	Implies	Emphasises	Fascinates
Reveals	Infers	Stresses	Amuses
Exposes	Hints at	Reinforces	Satisfies
Discloses	Signifies	Spotlights	Terrifies
Uncovers	Connotes	Underlines	Enthrals
Encapsulates	Denotes	Accentuates	Enthuses
Proves	Insinuates	Underscores	Stimulates
Validates	Intimates	Foreshadows	Galvanises
Exhibits	Advocates	Exaggerates	Animates
Establishes	Poses	Reiterates	Rouses
Denotes	Conjures	Magnifies	Stirs
Displays	Symbolises	Zeroes in on	Placates
Flaunts	Points towards	Promotes	Provokes
Showcases	Indicates	Publicises	Deceives
Presents	Alludes to	Pinpoints	Astonishes

1.1 Key Vocabulary

Tyrant – A cruel and oppressive ruler.

Prophecy – A prediction of what will happen in the future.

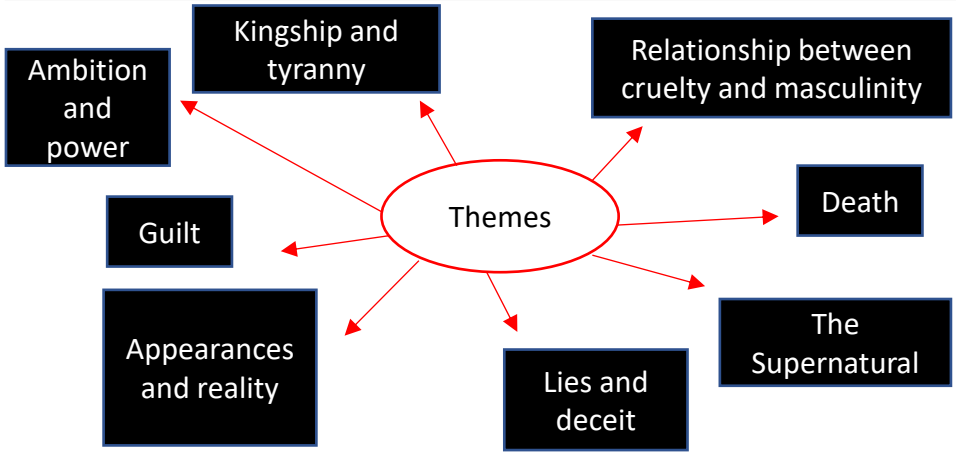
Villain – A character whose evil actions are important to the plot.

Hubris – Excessive pride or self-confidence.

Hamartia – A fatal flaw leading to the downfall of the tragic hero

Regicide – The action of killing a king.

1.2 Themes



1.3 Key Characters

Macbeth	Initially loyal to Duncan, a brave warrior who betrays his king and becomes a stereotypical villain. By the end of the play, he has lost all of those close to him but has regained some pride.	King Duncan	A much-loved king of Scotland. He rewards Macbeth's bravery in battle but is murdered in return. Symbolises good and the divine right of kings
Lady Macbeth	Macbeth's equal, at least in their relationship. Arguably, Lady Macbeth influences her husband to murder the king and seems to be the stronger of the two. Eventually, she succumbs to her guilt and commits suicide.	Malcolm and Donalbain	Duncan's sons and princes of Scotland. They flee after their father is killed. They return to oust Macbeth. Malcolm is crowned king after Macbeth is killed.
Banquo	A fellow general and Macbeth's friend. The Witches prophecise that his descendants will be kings of Scotland. Macbeth has him murdered.	Macduff	The Thane of Fife, Macduff suspects Macbeth of regicide. He leaves Scotland to help Malcolm gather support. He leads the attack against Macbeth and kills him.

1.4 Revision Task: Transform It

Graphic organisers are a great way of 'transforming' your notes/information into visual revision topics. They can be used to create links, show a narrative, identify the causes/consequences and importance of something.

Examples:

1. **Causation –** Create a visual flow diagram of the events or actions in the order that they happen, e.g plot summary section 1.5.
2. **Change and Continuity** – Create a **Venn diagram** to show what changed and did not, e.g. Macbeth's or Lady Macbeth's character change.

1.5 Plot Summary

- Macbeth, and Banquo, defeat the Scottish rebels. After the battle they meet the Witches. They prophecise Macbeth will become Thane of Cawdor and then King of Scotland.
- Lady Macbeth convinces Macbeth to murder King Duncan after she learns of the Witches.
- Macbeth murders King Duncan. He instantly begins to feel guilty.
- Consequently, Macbeth is crowned king.
- Macbeth orders Banquo and Fleance murdered. Fleance escapes.
- At a feast, Macbeth has visions of Banquo's bloody ghost.
- Macbeth seeks out the Witches, who show him four visions.
- Fearing the warning about Macduff, Macbeth has his family murdered. He begins to think he is invincible.
- Dunsinaine Castle is attacked. Macbeth refuses to give up, even despite coming to the realisation of the great evil he has done. He ends the play fighting Macduff, despite the Witches warnings.
- Macbeth is decapitated. Malcolm becomes king.

1.6 Flashcard Activities

Flashcards

Simply create with questions on one side and answers on the other side. You can colour code for specific topics and quiz yourself or others.

Post its can be also useful for key words and timelines

Create flashcards for the following activities:

1. Pick a theme from section 1.2 and write the question 'How is the theme of (insert chosen theme) presented in (insert chosen act and scene)?' on one side. On the other side, write down key quotations that link to the theme and explain why they do.
2. Pick a character from section 1.3 and write the question 'How is (insert chosen character) presented in (insert chosen act and scene)?' on one side. On the other side, write down key quotations that link to that character and explain why they do.

1.7 Analysing Extracts

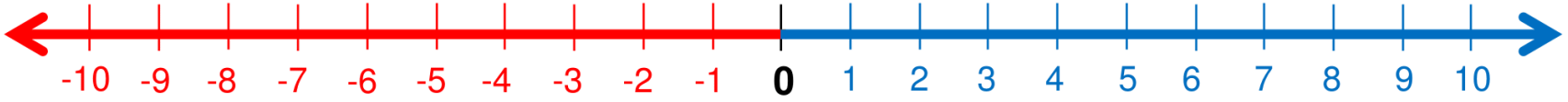
Analyse the short extract below referring to the question. Consider the language used to describe Macbeth and his actions.

How is Macbeth presented in this extract?

Sergeant
For brave Macbeth--well he deserves that name--
Disdaining fortune, with his brandish'd steel,
Which smoked with bloody execution,
Like valour's minion carved out his passage
Till he faced the slave;
Which ne'er shook hands, nor bade farewell to him,
Till he unseam'd him from the nave to the chaps,
And fix'd his head upon our battlements.

DUNCAN
O valiant cousin! worthy gentleman!

Respond below:



Multiplication Table Grid 1-12

X	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Maths Unit 5 – Equations, Inequalities and Sequences

What do I need to be able to do?

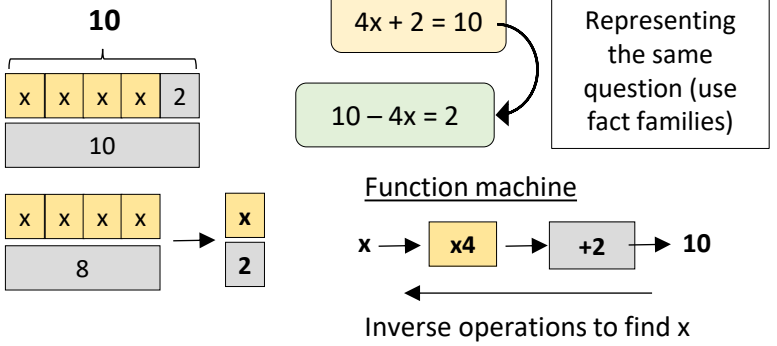
By the end of this unit you should be able to:

- Form Expressions
- Expand and factorise single brackets
- Form and solve equations
- Solve equations with brackets
- Represent inequalities
- Form and solve inequalities

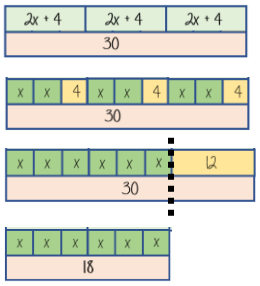
Keywords

Simplify: grouping and combining similar terms
Substitute: replace a variable with a numerical value
Equivalent: something of equal value
Coefficient: a number used to multiply a variable
Product: multiply terms
Highest Common Factor (HCF): the biggest factor (or number that multiplies to give a term)
Inequality: an inequality compares two values showing if one is greater than, less than or equal to another

Two-step equations (U325)



Solve equations with brackets (U325)



3 (2x + 4) = 30

3 (2x + 4) = 30

Expand the brackets

6x + 12 = 30

-12 -12

6x = 18

÷ 6 ÷ 6

x
3

x = 3

Simple Inequalities (U759)

< less than

≤ Less than or equal to

> More than

≥ More than or equal to

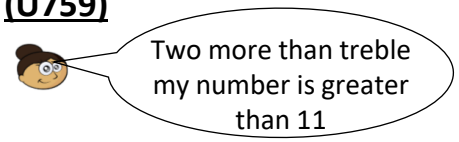
x < 10
Say this out loud "x is a value less than 10"

10 > x
Say this out loud "10 is more than the value"

Note:
x<10 and 10>x represent the same values

x + 2 ≤ 20
"my value + 2 is less than or equal to 20"
x ≤ 18
The biggest the value can be is 18

Form and solve inequalities (U759)



Find the possible range of values

Form

x → x3 → +2 → 11

3x + 2 > 11

Solve

x ← ÷3 ← -2 ← 11

x > 3

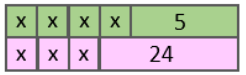
Check

This would suggest any value bigger than 3 satisfies the statement
3 x 3 + 2 = 11 ✓ 10 x 3 + 2 = 32 ✓

Unknowns on both sides (U870)

4x + 5 = 3x + 24

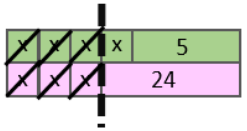
-3x -3x



x + 5 = 24

-5 -5

x = 19



Enrichment Opportunities

Luis' Eight

Maths– Equations, inequalities and Sequences

Maths Unit 5 – Equations, Inequalities and Sequences

What do I need to be able to do?

By the end of this unit you should be able to:

- Generate a sequence from term to term or position to term rules
- Recognise arithmetic sequences and find the nth term
- Recognise geometric sequences and other sequences that arise

Keywords

Sequence: items or numbers put in a pre-decided order
Term: a single number or variable
Position: the place something is located
Linear: the difference between terms increases or decreases (+ or -) by a constant value each time
Non-linear: the difference between terms increases or decreases in different amounts, or by x or ÷
Difference: the gap between two terms
Geometric: a sequence where each term is found by multiplying the previous one by a fixed non zero number

Sequences from algebraic rules (U213)

2n - 5 → Substitute the number of the term you are looking for in place of 'n'

e.g.
1st term = 2 **(1)** – 5 = -3
2nd term = 2 **(2)** – 5 = -1
100th term = 2 **(100)** – 5 = 195

Checking for a term in a sequence

Is 201 in the sequence 3n – 4?

Form an equation

Algebraic rule → **3n – 4 = 201** ← Term to check

Solving this will find the position of the term in the sequence.
ONLY an integer solution can be in the sequence.

Finding the algebraic rule (U213)

This is the 4 times table **4n**

4, 8, 12, 16, 20…..

↓ ↓ ↓

7, 11, 15, 19, 22

4n + 3

This has the same constant difference – but is 3 more than the original sequence

4n + 3

This is the constant difference between the terms in the sequence

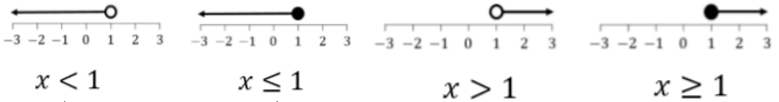
This is the comparison (difference) between the original and new sequence

Enrichment Opportunities

Printing error

Solutions on a number line (U509)

- Includes the value it sits above
- Does NOT include the value it sits above

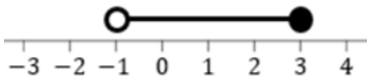


Both represent values less than 1

Includes the value 1

Both represent values more than 1

Includes the value 1



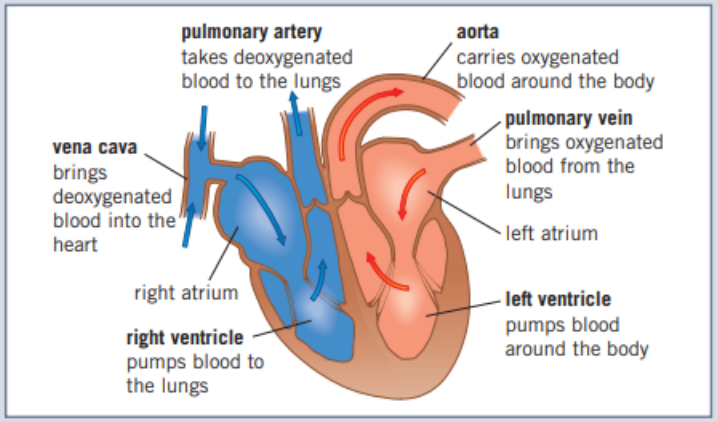
$-1 < x \leq 3$

This includes the integer values 0,1,2,3

Maths– Equations, inequalities and Sequences

The heart

The heart is the organ that pumps blood around your body. It is made from **cardiac** muscle tissue, which is supplied with oxygen by the **coronary artery**.



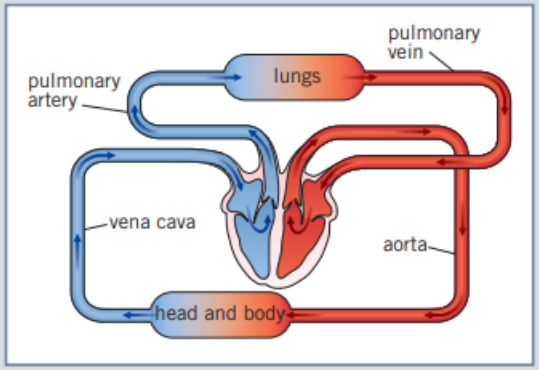
Heart rate is controlled by a group of cells in the right atrium that generate electrical impulses, acting as a pacemaker.

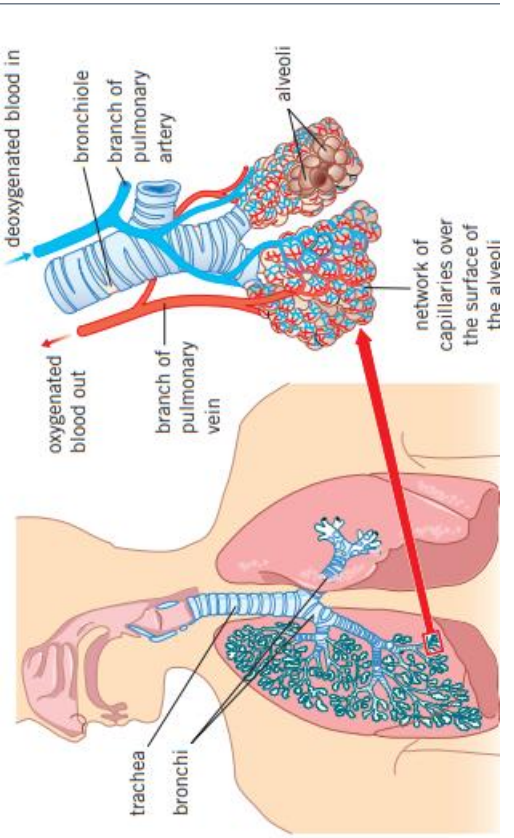
Artificial pacemakers can be used to control irregular heartbeats.

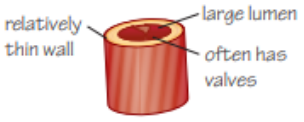
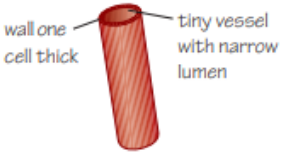
Double circulatory system

The human circulatory system is described as a **double circulatory system** because blood passes through the heart twice for every circuit around the body:

- the right ventricle pumps blood to the lungs where gas exchange takes place
- the left ventricle pumps blood around the rest of the body.





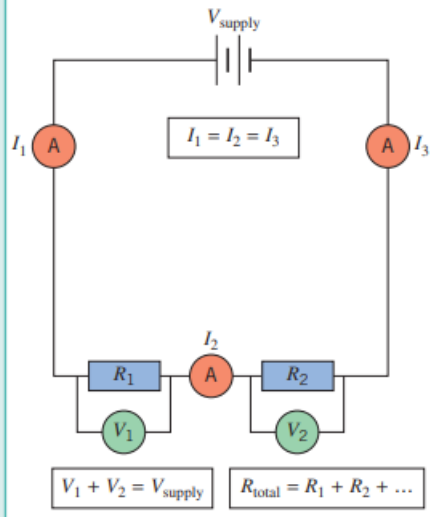
Vessel	Function	Structure	Diagram
artery	carries blood *away from* the heart (high pressure)	• thick, muscular, and elastic walls • the walls can stretch and withstand high pressure • small lumen	
vein	carries blood *to* the heart (low pressure)	• have valves to stop blood flowing the wrong way • thin walls • large lumen	
capillary	• carries blood to tissues and cells • connects arteries and veins	• one cell thick – short diffusion distance for substances to move between the blood and tissues (e.g., oxygen into cells and carbon dioxide out) • very narrow lumen	

Key Terms

Alveoli Aorta Artery Atrium Bronchi Bronchiole Capillary Cardiac Coronary Plasma Platelet Pulmonary Valve Vein Vena cava Ventricle

Series circuits

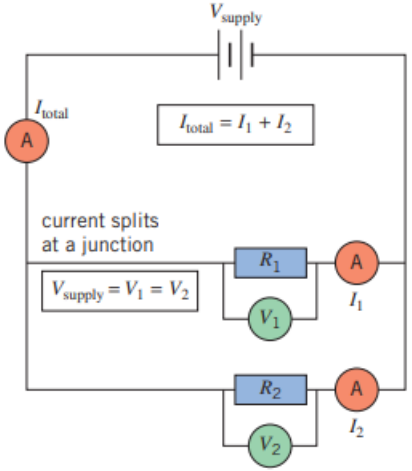
In a series circuit, the components are connected one after the other in a single loop. If one component in a series circuit stops working the whole circuit will stop working.



Components with a higher resistance will transfer a larger share of the total p.d. because $V = IR$ (and current is the same through all components).

Parallel circuits

A parallel circuit is made up of two or more loops through which current can flow. If one branch of a parallel circuit stops working, the other branches will not be affected.



The total resistance of two or more components in parallel is always less than the smallest resistance of any branch. This is because adding a loop to the circuit provides another route for the current to flow, so more current can flow in total even though the p.d. has not changed. Adding more resistors in parallel decreases the total resistance of a circuit.

Key terms

Make sure you can write a definition for these key terms.

- ampere
- charge
- coulomb
- current
- electric field
- electrostatic force
- LDR
- parallel
- potential difference
- resistance
- series
- static
- thermistor

Electric current

Electric current is when **charge** flows. The charge in an electric circuit is carried by electrons.

The unit of current is the ampere (amp, A).

1 ampere = 1 coulomb of charge flow per second

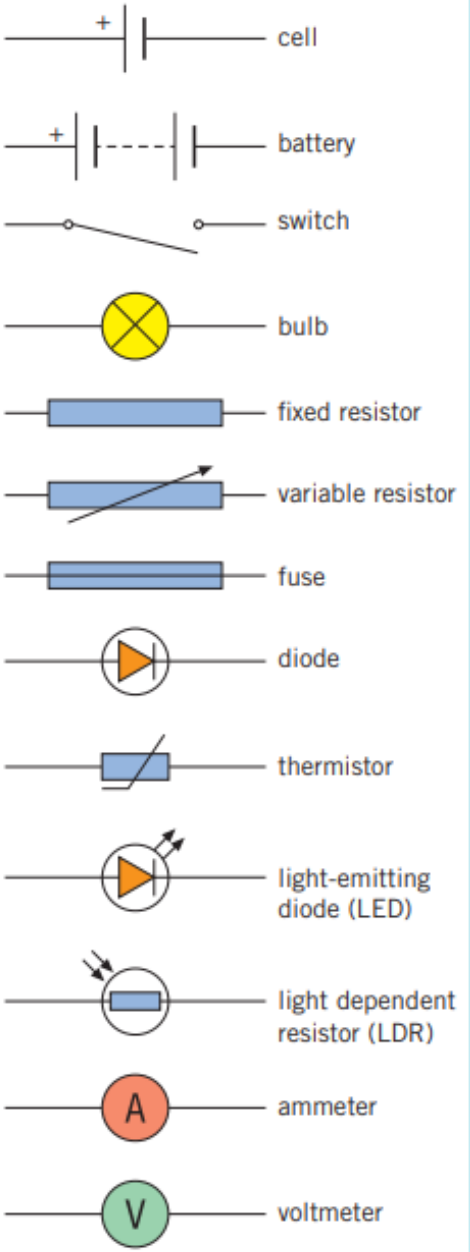
Charge (C) = current (A) x time (s)

In circuit diagrams, current flows from the positive terminal of a cell or battery to the negative terminal. This is known as conventional current.

In a single closed loop, the current has the same value at any point in the circuit.

Metals are good conductors of electricity because they contain delocalised electrons, which are free to flow through the structure.

Circuit components

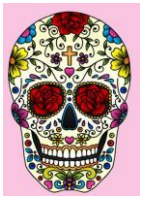


Dia de los Muertos

Day of the Dead Festival:

- **1st November** 'Dia de los Angelitos' Day of the angels, innocents souls of **children** are remembered
- **2nd November** 'Dia de los Difuntos' Day of the dead (**adults**)
- The official celebration day is the 2nd November but celebrations can start on the 31st October so it lasts 3 days in total.
- The festival is to **remember your loved ones which have passed away, be happy, joyful and laugh**.
- Dia de los muertos is **not related to Halloween**, it is an older Aztec celebration.
- The difference with Halloween is that **day of the dead** is a **happy** event and Halloween instils fear in people about death and the dead which does not **preserve their spirit** or **memory respectfully or peacefully**.

Pan de muerto/death bread: has bone shapes on the top, it is a sweet orange sugary bread



Altars

Sugar Skulls

Art & Design – Day of the Dead

Man Made

Man made objects have been constructed, caused or made in some way by human beings. Natural forms have occurred or grown naturally.

Many artists are inspired by man-made objects, Michael Craig-Martin, Jim Dine and Mark O'Brien are some of the artists that we will look at.

Michael Craig-Martin

Jim Dine

Mark O'Brien

Sculpture Key Words and Information

An artist who creates work that is three dimensional is called a **sculptor.**
Sculpture can be made from a range of materials that might make the work permanent or temporary, such as:

- natural materials, e.g., grasses, bark, pebbles, rushes, leaves, clay, stone, wood
- made materials, e.g., fabric, card, cardboard, clay tiles, plastic, bronze, metal, wire, glass
- reclaimed materials, e.g., made for one purpose and used again for another purpose
- visual qualities, e.g., shape, form, texture, colour, pattern
- Different materials will give different tactile qualities, e.g., hard, soft, rough, smooth, bumpy, rigid, pliable
- Different processes are used to create a range of outcomes, processes could include assembling, carving, modelling, casting or constructing

Enrichment: Watch the following series with artist Grayson Perry https://www.channel4.com/programmes/graysons-art-club

Forming & Shaping Techniques

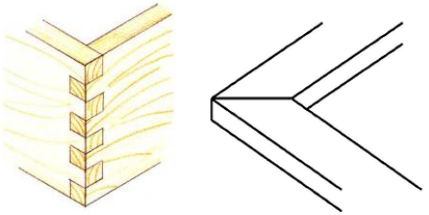
Tools & Equipment

Name of tool	Picture	What the tool is used for
Tenon Saw		Cuts accurate straight lines in small pieces of wood and provides a smooth cut.
Hot wire strip heater		Used for forming plastic by applying heat to the material
Try Square		Marks out and checks right angles
Disc Sander		This machine smooths surfaces and removes old finishes (e.g. paint)
Bench Hook		Holds the material when cutting straight lines.

Polymers

Thermosetting Polymers	Thermoforming Polymers
Urea Formaldehyde Epoxy Resin Melamine Formaldehyde Phenol Formaldehyde	Acrylic Polypropylene High-Density Polyethylene Polyvinyl Chloride (PVC)
Uses: Electrical fittings, kitchen worktops, boat hulls, adhesives	**Uses:** Signage, drinks bottles, food packaging and window sills

Wood Joints

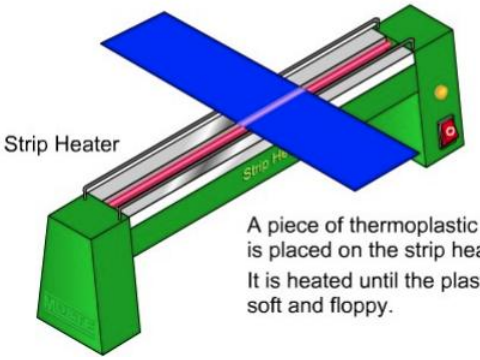


Finger Joint Mitre Joint

The finger joint requires a higher degree of skill to produce but is far superior in strength. Aesthetically, the mitre joint looks attractive and is used for frame construction.

Line Bending

Heat until soft → Bend → Hold until cool



A piece of thermoplastic sheet material is placed on the strip heater.
It is heated until the plastic becomes soft and floppy.

Health & Safety

1. Listen carefully to the teacher's instructions
2. Always clamp work before drilling/cutting
3. Wear safety glasses when using machinery
4. Carry and store sharp tools safely

Key words;

- Acrylic
- Former
- Thermoforming polymers
- Design brief
- Thermosetting polymers

Try these websites to support you

www.youtube.com/watch?v=pojJIMo8U2I
www.educationquizzes.com/ks3/d-and-t/resistant-materials-02/

The Science of Food: Eggs & Cakes

Red Lion and how they can be used

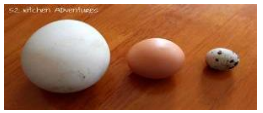
All eggs sold in Britain must be marked with a code that shows:
- Which egg producer they came from (Farm ID)
- The country of origin (UK)
- The type of method used, e.g. free range, organic, barn, cage.

Farming Methods

Caged / battery:
- Hens are kept indoors in cages. Light, food and temperature are all controlled to maximise egg laying. Fertilisers/medication are sometimes used. This is the cheapest method of egg production.

Barn:
- Hens are kept indoors but are free to roam about. The light and feed are controlled. The hens have access to some perches and are able to express some natural habits.

Free range / organic:
- Hens are allowed to roam in the open air, they are kept in hen houses at night. They are able to forage for natural foods and express all of their natural habits. No fertilisers are used. This is the most expensive way of producing eggs.



Lion Quality Mark

Eggs displaying the Lion mark have been produced to the highest standard. Hens are tested for salmonella and hygiene is strictly controlled.

Nutrition in eggs

Eggs are a nutritious food and good value for money.

There is no recommended limit on how many eggs we should eat. Eggs offer us:

Easily digested protein needed for growth.

Essential vitamins, A,D,E, K and B groups – but no vitamin C

Minerals in iron, phosphorus and zinc

Only 80-90 kcal an egg – and are low in saturated fat.

Flour
- Forms the structure of the cake
- Can have the raising agent in it sometimes

Fat
- Gives the cake a longer shelf life
- Adds colour to the cake
- Adds flavour to the cake

Sugar
- Gives flavour And sweetness

Eggs
- Adds colour and flavour to the cake

Raising agent
- Makes the cake rise

Key Words:

1. Coagulation
2. Gelatinisation
3. Caramelisation
4. Shorten
5. Viscosity
6. Aerate
7. Raising Agent
8. High risk food
9. Emulsion
10. Peak

Eggs should be stored in the fridge (3°C) or a cool place away from strong smelling foods. Eggs should be stored blunt end upwards. They should be removed from the fridge an hour or so before use, because cold eggs do not whisk well.

Most eggs we use come from British hens, but they can also come from duck, geese and quail.

Raising Agents

Chemical	Biological	Mechanical	Physical
Bicarbonate of soda / baking powder	Yeast	Whisk or sieve	Steam

Creaming Method	Rubbing-in Method
Examples: Victoria sponge / muffins Definition: Sugar and butter creamed with a wooden spoon before other ingredients are added	Examples: Crumble, shortbread, pastry Definition: Use your hands to mix fat and flour together before adding any other ingredients
Whisking / All-in-one Method	**Melted Method**
Examples: Swiss roll, cupcakes, sponges, gateaux Definition: • All-in-one – Add all ingredients to the bowl at once and mix until smooth • Whisking – Use the whisk to aerate the mixture	Examples: Brownies, flapjacks, rocky road Definition: Melt the fats on the hob in a saucepan before mixing the eggs and baking the product

Cake making methods

Trapping air/Aerating:

The protein in the egg white stretches when beaten and traps air.

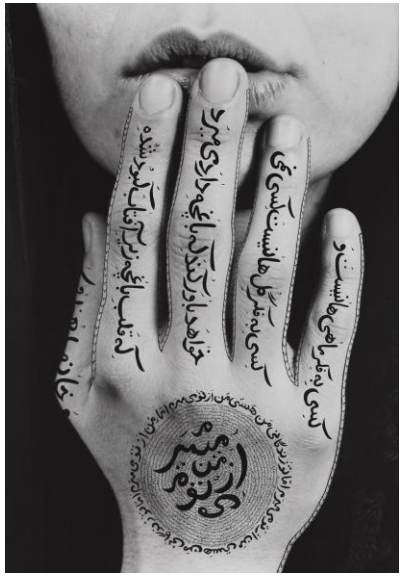
Example: sponge cake, swiss roll and meringues

Stretch & Challenge:

Use website: www.foodafactoflife.org.uk Click: 11-14years- food commodities- Eggs- Functional properties of foods- Understanding the Science behind the food.

Photography

Many photographers combine photographic elements with editing techniques to produce a unique image. The image can tell you a story or convey a mood or feeling.



Photography is the process of capturing light with a device known as a camera and creating an image. That camera could come in various forms including phone cameras, digital cameras, and film cameras. Photo editing is the act of altering an image. You can change an image to improve its quality, style or mood. There are lots of different methods and tools to edit photos.

THE LANGUAGE OF PHOTOGRAPHY

- Composition
- Angle
- Light
- Framing
- Cropping
- Juxtaposition
- Exposure
- Focus
- Zoom
- Orientation
- Line
- Tone
- Colour
- Texture
- Form
- Shape
- Pattern

WHAT YOU'LL LEARN

Introduction to Portrait Photography:
Learning the basics of capturing expressive and engaging portraits, including techniques for posing subjects, utilizing natural lighting to highlight facial features and expressions, and understanding which focal lengths to use.

Composition and Framing:
Understanding how to arrange elements within the shot to capture the viewer's attention and convey the desired message.

Lighting Techniques:
Utilizing available light effectively and understanding the impact of different lighting conditions on the mood and quality of the image.

Post-Processing:
Enhancing and altering images using Affinity editing software to adjust colours, contrast, and sharpness or to create artistic effects.

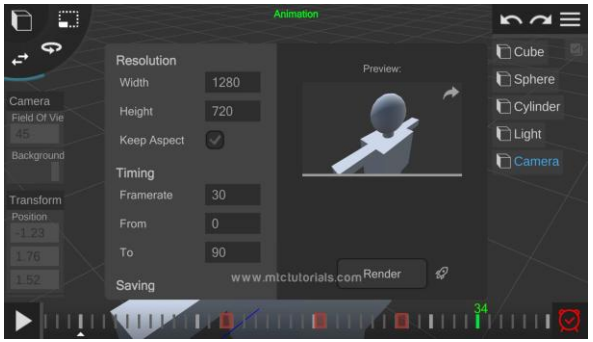
Storytelling:
Crafting a narrative through a series of images or a single photograph to convey a specific emotion or story.

Angle and Perspective:
Experimenting with different shooting angles and perspectives to add depth or intrigue to photographs.

Digital Filters and Effects:
Applying filters and effects to create unique looks or emphasize certain aspects of a photo.

Enrichment: Explore the history of photography
https://www.tate.org.uk/art/art-terms/p/photography

3D ANIMATION



Blender
Blender is open source software. This means it is free for you to use. With Blender you can make pretty much anything, from animations to 3D printing designs.

Stop Motion
Stop motion means you have to manually animate every frame of the animation
e.g. Shaun the Sheep

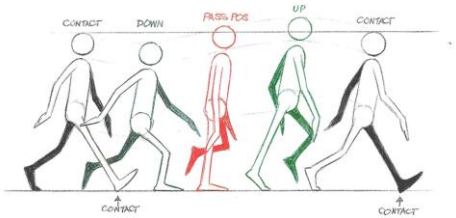
Keyframe animation only requires you to pick the important locations, the keyframes and the computer works out the rest (called tweening)
e.g. Pixar films

Lights
Like any film set, you need to add lights to your scenes.
There are four types of light in Blender:

Camera
Film cameras can be very expensive. Different lenses are used for different effects. Blender can simulate any sort of lense.
Composition is the most important thing.

What are 3D models made up of?
Face: A surface made up of three or more sides
Vertex: A point where one or more edges meet
Edge: A line connecting two vertices

Organic modelling
Symmetry is considered by some to be a sign of beauty.
But often symmetrical things can look very unnatural.
Symmetrical things in nature often have differences, both tiny and large.
To create natural/organic-looking objects, you need to make them look less symmetrical.



Design and power
Choosing the level of detail need to represent something is a form of abstraction.
The more faces, the slower your computer might go!

A 'low-poly' bird

Enrichment Opportunities

Coding Club on Thursdays
Download Blender for Free: https://www.blender.org/

Frantic Assembly

Frantic Assembly are a theatre company that use physical theatre to create exciting and modern performances. They were created in 1994 by Scott Graham, Steven Hoggett and Vicki Middleton whilst they were studying at Swansea University. They have gone on to receive multiple awards for their productions and continue to develop ways of performing physical theatre.

Some of the techniques they are known for are:

- Reinterpreting texts /devising pieces
- Dance like interaction with set
- Chair duets
- Hymn Hands
- Narration
- Ensemble work
- Through, round, by

The Unreturning

Three young men are coming home from war.
Their stories, set at different times over a hundred years, are interwoven in *The Unreturning*, a play which uses physical theatre to show the effect that war has on young people's lives, and asks – what does coming home really mean? The play explores themes of war, PTSD, mental health and comradery.

The play follows three characters

- George (1918) a Western Front survivor shaken to his core by exposure to the horrors of World War 1.
- Frankie (2013) a disgraced soldier following an attack on a civilian in Afghanistan,
- Nat (2026) desperately searching for a lost brother in a future Britain torn apart by civil war.

Year 9 Assessment Criteria

Performing	Analysing	Devising	Drama Roles	Drama Techniques
• Can identify and use all elements of VTTAPE FEMPIG effectively • Can confidently perform a range of characters and texts • Can perform in a range of styles including Brecht and Physical Theatre • Can perform using props and costume • Can perform using design elements	• Can analyse use of VTTAPE FEMPIG in professional theatre • Can discuss and analyse different styles of theatre including Brecht, Naturalism, Comedy, Physical Theatre • Can discuss design elements such as colour, texture etc and their effect • Can understand semiotics and symbolism	• Can create performances for a specific purpose e.g. theatre for change • Can create performances in a range of genres and styles • Can work positively in groups with a range of people • Can work independently; rehearsing, improving and developing your performances • Can develop detailed creative ideas in response to a stimulus	• Can understand backstage and design roles • Can create lighting, set and costume designs for a chosen text • Can understand roles in professional theatre • Can apply these roles to a performance project	• Can recognise multiple techniques and their purpose • Can identify and use Brecht techniques • Can use multiple techniques together for an intended purpose e.g. educate • Can use techniques confidently and effectively considering the audience

Extension and Further Info

Frantic Assembly Podcast
https://www.franticassembly.co.uk/the-frantic-podcast

Key Terms

Physical Theatre – puts the human body at the centre of the storytelling process. It has an emphasis on MOVEMENT.

As a result, it's often abstract in style, using movement in a stylised and representational way with the expression of ideas choreographed through movement. As such performers use very little or no dialogue at all.

Ensemble – A collective group of performers who work together to tell a story. They are in sync with each other and are able to move seamlessly and collaborate smoothly.

Pace – the speed of a performance

Contact – the physical connection between performers

Narration – One performer explaining what is happening or telling a story directly to the audience.

Devising – creating a piece of theatre from scratch without using a script.

The Curious Incident of the Dog in the Night-time

The Curious Incident of the Dog in the Night-Time follows the story of Christopher Boone, a 15 year old, who is exceptional at Maths but finds people confusing.

The play opens with Christopher discovering a dead dog in his neighbour, Mrs Shears', garden. Despite his father, Ed, warning Christopher not to get involved, Christopher decides to investigate the death of the dog. In doing so he discovers that his mother is not dead as his father had told him, but alive and well, living in London.

In searching for his mother Christopher ventures on a journey of self discovery.

Francophone countries

History

- A Francophone country is a country where French is the main or official language.
- French became an international language in the Middle Ages thanks to the influence of the Kingdom of France.
- French is the official language of France, which is composed of 27 regions. 22 of them are situated in Europe and 5 are overseas territories. In addition to this, France is the official language of 28 countries around the world.
- International Francophonie Day is held on the 20th of March every year. It celebrates the French language and diverse Francophone cultures through cultural activities held worldwide.

Enrichment Opportunities

Martinique

- Martinique is an overseas territory of France (a TOM). It is a Caribbean Island located in the Caribbean sea.
- The capital of Martinique is Fort-de-France.
- Martinique is about 50 miles long and reaches 22 miles wide.
- The temperature in Martinique doesn't change much throughout the year at around 26 degrees, making it quite a warm place.
- Instead of a summer or winter, Martinique has a wet and dry season. The dry season lasts from December to June. The wet season, where there is abundant rain, is July to November.
- Martinique is a popular Caribbean tourist destination.
- Martinique's economy is heavily dependent on trade with France.

Québec

- Québec is a walled city, meaning there is a wall that goes all the way around it, enclosing the city.
- Québec is mainly French-speaking, making it a Francophone country. Only 5% of people living in Québec don't speak French!
- Québec is located in Canada. It is the largest province in Canada.
- The capital is Québec City.
- Québec has very cold winters with lots of snow. On around 149 days each year, there is up to an inch of snow.
- The summer is very warm with average temperatures of around 25 degrees.
- There is a strong Irish presence in Québec.
- Many people visit Québec to go skiing and for other winter sports. *Le Massif* is a famous ski resort with an altitude of 770 meters high.
- The national dish of Québec is *Poutine* – a dish of chips, cheese sauce and gravy.

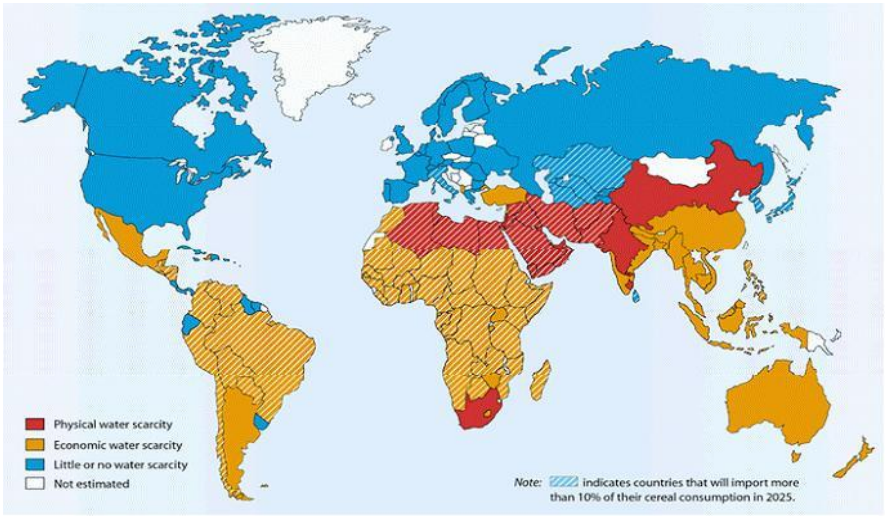
Madagascar

- The official languages of Madagascar are Malagasy and French.
- Over 90% of Madagascar's wildlife is not found anywhere else in the world.
- Madagascar is the world's fourth largest island.
- Over 50% of the world's chameleon population lives in Madagascar.
- Madagascar is one of the poorest nations in the world.
- People who are from Madagascar are called *Malagaises.*
- Contrary to the film, there are no lions, giraffes, hippos or zebras in Madagascar!
- Because of Madagascar's deep red colour, the country is often called the *Great Red Island*.
- The *baobab* tree is the most unique and famous plant found in Madagascar.

Key words:

Appropriate technology – simple technology, that can be easily fixed and maintained support the development of a developing country e.g. a hand pump.
Aquifers – Underground water supply, stored in lakes under the ground.
Conflict – serious disagreement, which may lead to violence or even war.
Desalinisation plant – where seawater is turned into freshwater by removing its salt.
Desert – gets very little rain, it can be hot or cold, sandy or rocky.
Development – a process of change to improve peoples lives.
Economic scarcity – There is water available, but the country is too poor to put suitable infrastructure in place to deliver clean water to its people.
Extreme poverty – where people have less than $1.90 a day to live on. This figure is set by the world bank and can change.
Finite resource – there is a limited amount of it, so it could run out.
Ground water – water that collects below ground, when rain trickles through the soil.
Harvesting pond – fill up when there is heavy rain, use to water crops and for animals
Hydroelectricity – electricity generated when flowing water spins a turbine.
Infrastructure – facilities such as roads, water supply, electricity grid, and railways that keeps a country and its economy running.
Irrigate – to water crops.
Natural resources – it occurs naturally in the environment, and we can make use of it.
Non-Government Organisation (NGO) – a charity that helps people and is not linked to the government e.g. Oxfam.
Non-renewable resource – a resource that is limited and could one day run out.
Over abstraction – too much water is removed from aquifers or lakes
Physical scarcity – water is unavailable or limited usually due to climatic conditions.
Precipitation – water falling from the sky, as rain, hail, sleet or snow.
Renewable resources - a resource we can make use of, and that will not run out e.g. sunshine or wind.
Sustainable - can be carried into the future without doing harm.
Water security – when a country or area can meet the demands for its water.
Water stress – when a country or area cannot meet demand for fresh water.
Water Transfer – moving water from an area of surplus water to an area with less water.

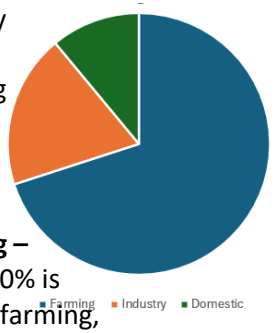
This map shows areas of the world suffering from water scarcity



How do we use our water?

Industry – about 19% is used in industry for washing and cooling

Farming – about 70% is used in farming, most of it for irrigating crops.



Domestic use – about 11% is used in homes for drinking, washing, cooking, toilets and watering plants.

This image shows a hand pump being used. This is an example of appropriate technology. These are often installed with the help on NGOs.

Enrichment Opportunities

Visit Change starts with water | WaterAid UK The Water Aid website. Water Aid is an NGO. Read about some of the projects they deliver and how you could get involved.

Knowledge Organiser - Year 9: How did people from Gloucestershire experience WWII?

Key People	
Winston Churchill	British Prime Minister who led the country during WWII.
Lord Gort	Commander of the British Expeditionary Force during the Dunkirk evacuation.
King George VI	British monarch during WWII.
Vera Lynn	Singer known as the "Forces' Sweetheart," whose songs boosted morale among troops and civilians.
Herbert Morrison	British Home Secretary during in WWII.
Bernard Montgomery	British Army officer who played a key role in the planning and execution of the D-Day landings.

Key Dates of WWII

1st September, 1939: WWII starts and evacuation of civilians from British cities begins.
8th January, 1940: Introduction of food rationing in Britain.
26th May, 1940: Start of Operation Dynamo.
4th June, 1940: Completion of the Dunkirk evacuation.
7th September, 1940: Beginning of the Blitz, with the first major bombing raid on London.
February 1941: Launch of the "Dig for Victory" campaign.
10th May, 1941: End of the Blitz.
6th June, 1944: D-Day, the Allied invasion of Normandy.
8th May, 1945: Victory in Europe.
2nd September 1945: WWII ends.

Key Terms/ Concepts	
Operation Dynamo	The code name for the evacuation of Allied soldiers from the beaches of Dunkirk.
British Expeditionary Force (BEF)	The British Army sent to the Western Front during World War II.
The Blitz	The sustained bombing campaign carried out by Nazi Germany against Britain in 1940-1941.
Evacuation	The process of moving children, pregnant women, and other vulnerable people from cities to the countryside to protect them from bombing raids.
Rationing	The controlled distribution of scarce resources and goods.
Dig for Victory	A campaign encouraging people to grow their own food to reduce reliance on imports.
Operation Overlord	The code name for the Allied invasion of Normandy.
Paratroopers	Soldiers who parachuted into enemy territory to secure key positions.
Utah, Omaha, Gold, Juno, Sword	The five landing beaches of the Normandy Invasion.

Enrichment Opportunities

Watch – *Adventures in History: On the Home Front* - https://www.youtube.com/watch?v=9SdTO82_IGM
Read – *Adventures in Time: The Second World War*, Dominic Sandbrook
Listen – History's Secrets Heroes - https://www.bbc.co.uk/sounds/play/m0028vdc

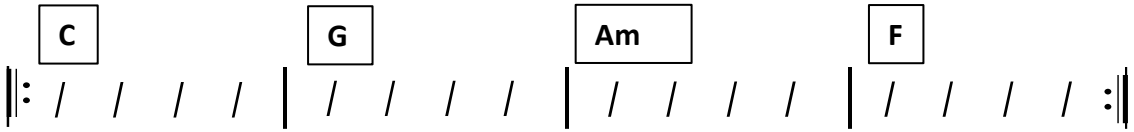
Band Skills

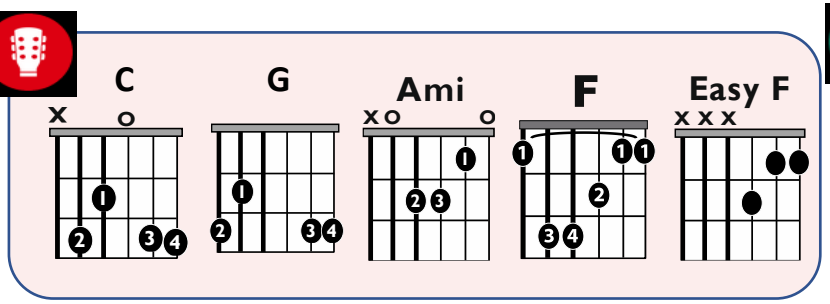
There are many benefits to learning to play a musical instrument from building confidence, improving patience, improving memory, relieving stress and it has been proven to make you smarter! Learning to work as a band also improves your communications skills. You will need to be able to work well with other people and make decisions as a group to enable you to succeed. Musicianship skills such as rhythm and timing will also be important. Good luck!!

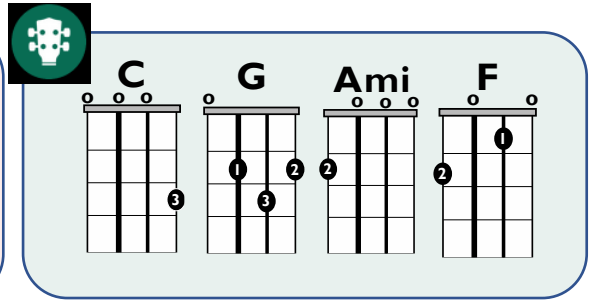
MAD T-SHIRT

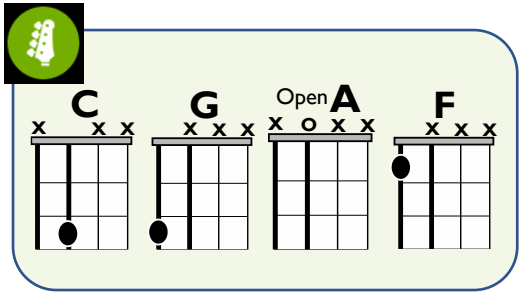
Melody – the tune / pitches played
Articulation – the way it is played
Dynamics – the volume
Texture – layers of sound Thick / Thin
Structure – the order
Harmony – 2 or more notes at the same time
Instruments – what is making the sound
Rhythm & Tempo – duration of the sound and speed
Timbre – the quality of the sound

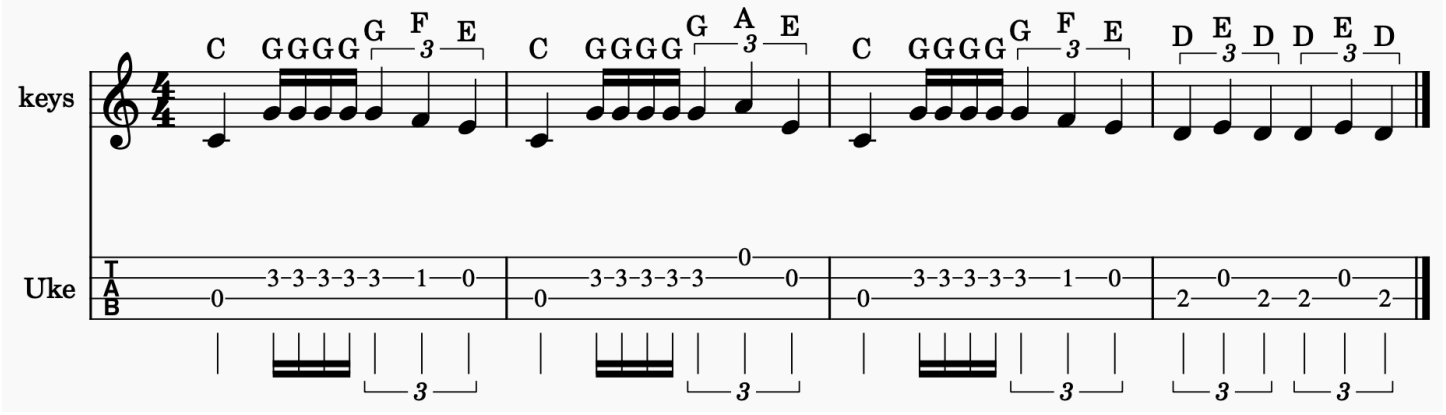
Chord Sequence











Recommended Listening

https://www.youtube.com/watch?v=Lw3eYsnl31c
https://www.youtube.com/watch?v=B_Smt1VsoqQ

Extension and Further Info

https://www.youtube.com/watch?v=R_qmvyUDvEc
https://www.youtube.com/watch?v=9AXAJpFCNfo

Immediate effects of exercise	Explanation
Getting hot	Heat is a by-product of energy production, the harder we train the hotter we get
Getting sweaty	Sweat glands produce sweat to cool you down, sweat evaporating from the surface of your skin removes some body heat
Having red skin	Blood vessels dilate close to the surface of the skin to help you lose heat, this makes you look red
Increased depth and rate of breathing	This allows more gaseous exchange to occur more quickly. More oxygen can be delivered to the working muscles and more carbon dioxide can be removed
Increased heart rate	This allows gases to be transported around the body. Oxygen can be delivered to the working muscles and carbon dioxide can be removed

Short-term effects of exercise	Explanation
Tiredness and fatigue	When we are exercising energy, stores are being use up this will lead to tiredness and fatigue
Light headedness or nausea	When we exercise, we lose fluids, this can lead to dehydration. Light headedness and nausea are symptoms of being dehydrated
Aching muscles	Normal response after exercise as it indicates the muscles are responding to the workout.
Cramp	Cramp is an involuntary muscular contraction. A cause of cramp is a depletion of energy stores or dehydration and a lack of electrolytes due to sweating
DOMS	DOMS can occur due to micro tears in the muscles from vigorous activity

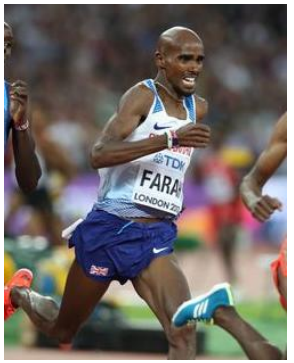
Long-term effects of exercise	Explanation
Change in body shape	A change in body shape can improve performance. An increase in muscle mass will assist in strength and power sports such as sprinting and rugby. A reduction of body fat will assist a long-distance runner
Improved stamina	Improved stamina will allow performers to last longer in an activity without getting tired. For example, performing to a high standard for 90 minutes in football
Increase in size of the heart (cardiac hypertrophy)	An increase in the size of the heart will allow more blood pumped per beat (stroke volume) when exercising. This will allow more oxygen to be delivered to the working muscles
Lower resting heart rate (bradycardia)	Because the heart can pump more blood per beat it will not have to work as hard at rest therefore resting heart rate will be lower

Strength allows us to provide a force applied by a muscle group to overcome a resistance

Muscular endurance allows repeated contractions and avoid fatigue

Suppleness/flexibility allows a greater range of movement at a joint

Speed allows us to perform movements quickly



Cardiovascular endurance allows oxygen to be supplied to the working muscle so you can perform for a long time without getting tired

1.1 Key Vocabulary

Absolutism – The view that certain actions are inherently good or bad

Altruism – Selfless actions done without thought or expectations of a reward

Artificial intelligence (AI) – Computer systems that are able to carry out tasks normally done by humans

Artificial superintelligence – The name given to possible future inventions that is more intelligent that humans and can outperform us in everything.

Dualism – The belief that humans have both body and another separate, immaterial part, such as a mind or soul

Ethics – The philosophical study of right and wrong

Hedonic calculus – Jeremy Bentham's way of calculating which actions are right and wrong

Materialism – The belief that the only thing that exists is physical matter and the movement of this matter

Morality – Ideas or principles about what is right and wrong

Relativism – The view that whether an action is good or bad depends on the situation

Thought experiment – A mental test which people think though consequences of different actions, often in scenarios that can't be tested out in real life.

Turing test – A test created by Alan Turing to try and show if a computer can think

Utilitarianism – A theory that the best actions in any situation is one which creates the greater amount of good for the greatest number.

The will to power – a term used by Nietzsche to describe a natural human desire for strength and power.

1.2 Key people

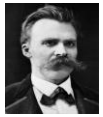
Hannah Arendt: 20th century German philosopher who wrote about 'the banality of evil'

Jeremy Bentham: 18th century English philosopher, regarded as the founder of utilitarianism, who argued that pleasure and pain are the same as good and bad

Philippa Foot: 20th century English philosopher who designed the runaway train thought experiment in 1967

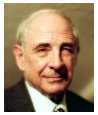
John Locke: 17th century English philosopher who argued that when we are born our mind is like a blank slate (tabular rasa)

John Stuart Mill: 19th century English philosopher who developed utilitarianism by arguing that the quality of pleasure or pain produced by an action is more important than the quantity



Friedrich Nietzsche: 19th century German atheist who expressed his belief that humans no longer needed the idea of God by saying 'God is dead and we killed him.'

Robert Nozick: 20th century American philosopher who used an example of an imaginary 'experience machine' to show that humans value more than simply pleasure



John Searle: 20th century American philosopher who used the example of the Chinese thought experiment to argue against Alan Turing's claim that computers can think

Alan Turing: 20th century English computer scientist and philosopher who designed the Turing test to show whether a computer can think

Enrichment Opportunities

1) Undertake your own research into one of these key people in ethics. Find out how their work has influenced ethics today.