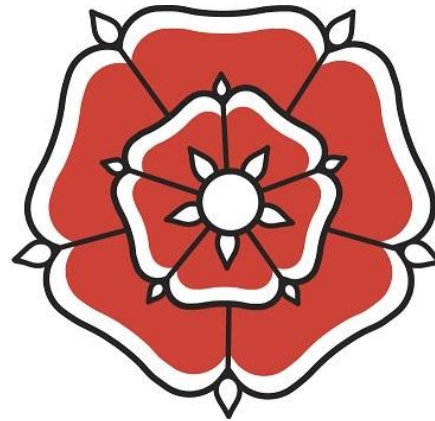


Maidenhill School

Knowledge Organiser

Year 9 – Term 2



Be kind, Aspire, Persevere, Achieve

Name:

Tutor: 9

Planner



Week 1	Notes
Monday 3 rd November	
Tuesday 4 th November	
Wednesday 5 th November	
Thursday 6 th November	
Friday 7 th November	
Week 2	Notes
Monday 10 th November	
Tuesday 11 th November	
Wednesday 12 th November	RP1 published
Thursday 13 th November	
Friday 14 th November	

Week 1	Notes
Monday 17 th November	
Tuesday 18 th November	P2/3 Intercommunity Basketball and Netball
Wednesday 19 th November	
Thursday 20 th November	
Friday 21 st November	
Week 2	Notes
Monday 24 th November	
Tuesday 25 th November	
Wednesday 26 th November	
Thursday 27 th November	
Friday 28 th November	



Week 1	Notes
Monday 1 st December	
Tuesday 2 nd December	
Wednesday 3 rd December	
Thursday 4 th December	
Friday 5 th December	
Week 2	Notes
Monday 8 th December	
Tuesday 9 th December	
Wednesday 10 th December	
Thursday 11 th December	
Friday 12 th December	

Week 1	Notes
Monday 15 th December	
Tuesday 16 th December	
Wednesday 17 th December	
Thursday 18 th December	
Friday 19 th December	Christmas Jumper Day



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 (this is 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.

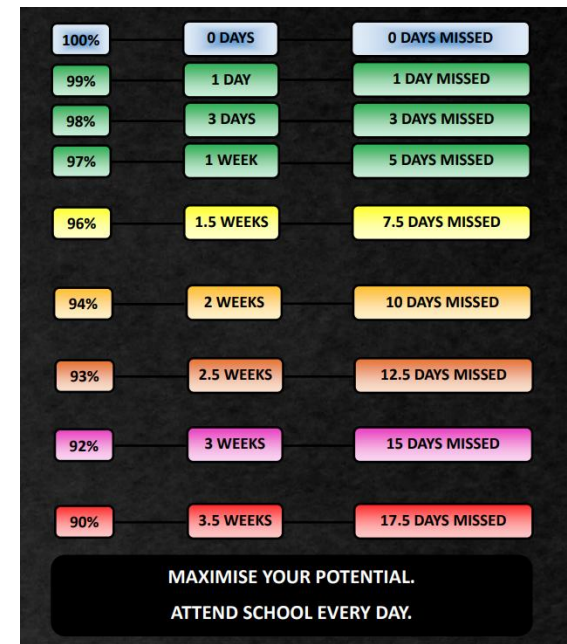
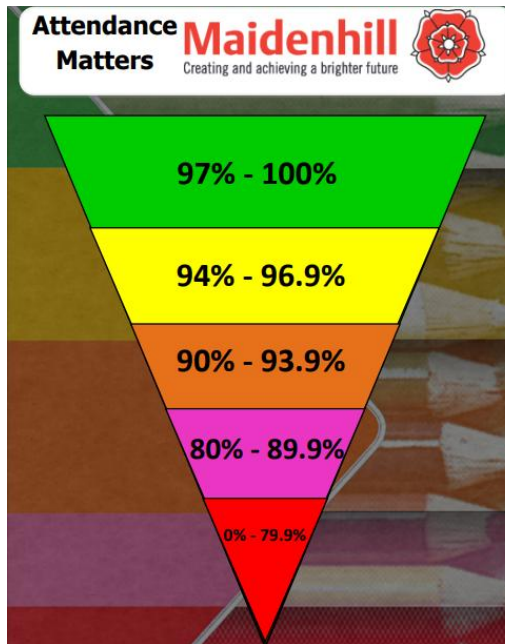
Reporting your concerns



Attendance Matters



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								
5								
6								
7								

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



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 your timetable first. Here is a useful checklist.

Essential requirements

- ☐ At least 2 black pens
- ☐ Green pen
- ☐ 2 pencils and 2 x 2b or 4b pencils for Art, Design and Nutrition
- ☐ Ruler
- ☐ Rubber
- ☐ Pencil sharpener
- ☐ Scientific calculator
- ☐ Whiteboard and whiteboard pen
- ☐ Headphones for music
- ☐ Reading book
- ☐ Plastic wallet and knowledge organiser

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 to 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.





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

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:

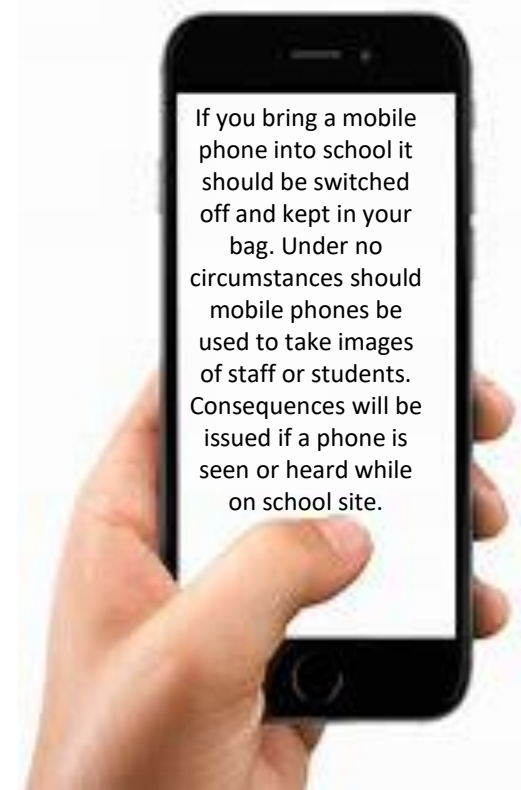
- In possession, under the influence of or dealing in illegal drugs. This also extends to alcohol and other toxic substances
- Serious physical or verbal aggression towards others
- Serious rudeness, defiance, threatening behaviour or inappropriate language towards a member of the school staff
- Anti-social 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.



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

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

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



What is Remembrance Day?

Remembrance Day is an annual event, where we remember all the people who have lost their lives while serving in the armed forces. It's also called Armistice Day or Poppy Day.

In Britain, Remembrance Day has been a tradition since the end of the First World War. It's also celebrated in many countries across the globe. People from different backgrounds, cultures, and religions come together to honour Remembrance Day. We remember the bravery and courage of those who fought in the World Wars on Remembrance Day. But, we also commemorate all those who have served in the army since, and those who are serving in the army today.

When is Remembrance Day 2025?

Remembrance Day 2025 will take place on Tuesday 11th of November. Remembrance Day is celebrated every year on the 11th of November. This is because during WW1, the conflict ended "at the eleventh hour of the eleventh day of the eleventh month".

How is Remembrance Day commemorated in the UK?

From laying Remembrance Day poppy wreaths to watching parades, there are lots of ways that people in Britain commemorate Remembrance Day each year.

One important moment that happens every year on Remembrance Day is a two-minute silence. Held at 11:00 a.m. on the 11 November, the silence takes place across the country.

Colour in
and
reflect...

WE WILL

REMEMBER THEM





REMEMBRANCE DAY WORD SEARCH

Lest We Forget

For The Fallen

Medal Commemorate

In Flanders Fields

Chelsea Pensioners

Remember

Remembrance Day

Nineteen Eighteen

Wreath Silence

Bravery Military

Honour Sacrifice

Memorial Heroes

Eleventh Cenotaph

Armistice Day Cemetery

The Last Post

November War

Salute Soldier

Cross Poppy

Bugle Army

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



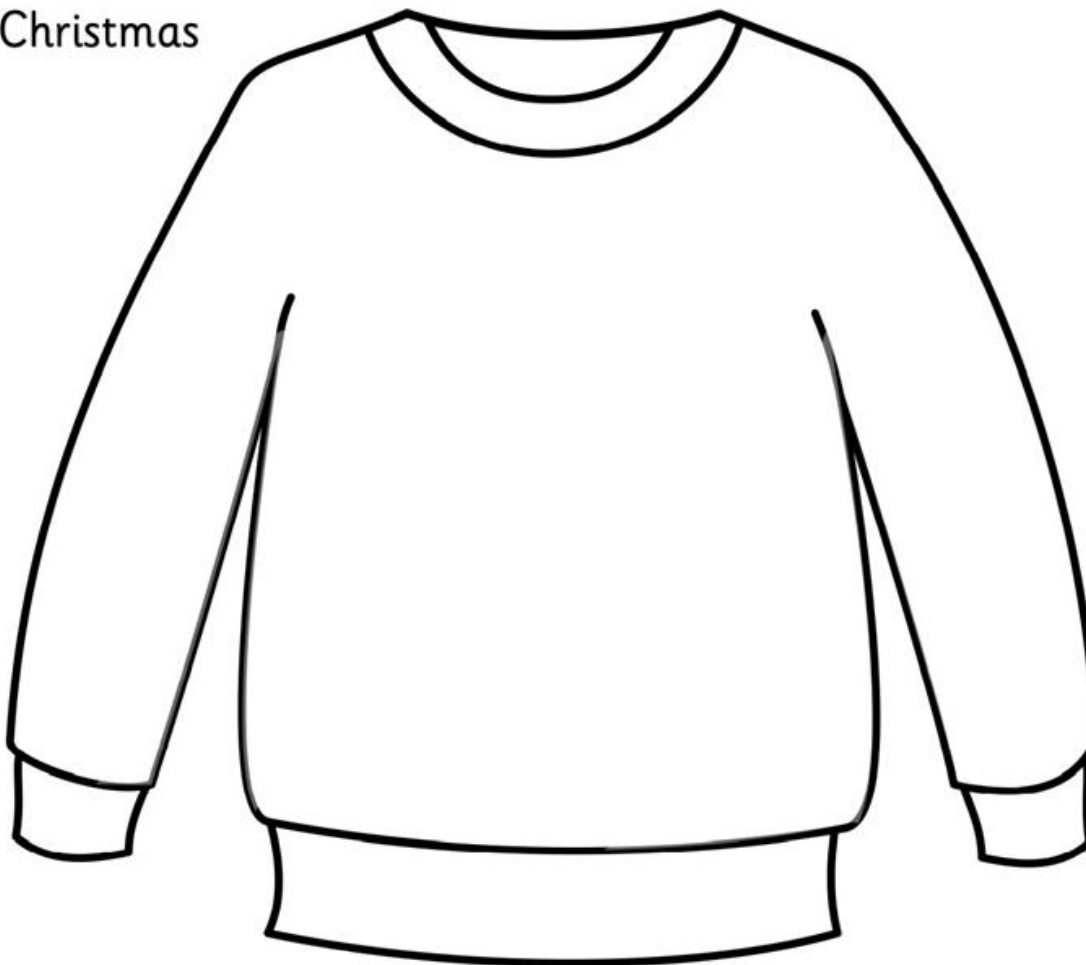
WHAT IS CHRISTMAS JUMPER DAY?

Christmas Jumper Day is one of Save the Children's biggest annual fundraising events. It's been going since 2012!

Every December we ask schools, workplaces, and community and friend groups to put on a Christmas jumper and donate whatever they can afford. And every year, millions of you join us in making the world better in a sweater.

We'll use the money raised on Christmas Jumper Day to help children in the UK and all around the world stay safe, healthy and learning - and change their future for good.

Design a Christmas jumper.



Review Point 1



	Attitude to Learning		Attitude to homework		Organisation	
Outstanding because student...	<p>...always engages with activities showing resilience when challenged</p> <p>...actively seeks ways to improve work and responds effectively to feedback</p> <p>...demonstrates consistently high levels of effort and focus</p>	Consistent Persevere, Aspire, Achieve ↑ ↓ C3 Behaviour / C3 Inadequate Learning Profile / C3r	<p>...always demonstrates high levels of determination and motivation</p> <p>...works hard to proof read homework for spelling, punctuation and grammar (SPAG)</p> <p>...shows great pride in their presentation of homework</p>	Quality homework ↑ Homework completed ↑ Homework not completed C3 Homework not completed	<p>...is always on time to lessons and enters the classroom ready to learn</p> <p>...always brings correct equipment</p> <p>... always meets deadlines and is well prepared for tests, assessments and exams</p>	No equipment or late marks ↑ ↓ Equipment and late marks
Good because student...	<p>...engages with activities often showing resilience when challenged</p> <p>...improves their work by responding to feedback</p> <p>...demonstrates high levels of effort and focus</p>		<p>...often demonstrates determination and motivation</p> <p>...proof reads homework for spelling, punctuation and grammar (SPAG)</p> <p>...shows pride in their presentation of homework</p>		<p>...is on time to lessons and enters the classroom ready to learn</p> <p>...brings the correct equipment</p> <p>...meets deadlines and is prepared for tests and exams</p>	
Not yet good because student...	<p>...sometimes engages with learning activities but can be passive</p> <p>...responds to feedback but doesn't always work hard enough at this</p> <p>...sometimes demonstrates high levels of effort and but not consistently</p>		<p>...sometimes demonstrates determination but sometimes effort is below expectation</p> <p>...checks homework for spelling, punctuation and grammar (SPAG) but could put more effort into this</p> <p>...could take more pride in their presentation of homework</p>		<p>...does not always arrive on time and/or is not always ready to learn.</p> <p>...sometimes forgets to bring the correct equipment for learning</p> <p>...sometimes does not meet deadlines and/or is not prepared for tests and exams</p>	
Urgent improvement required because student...	<p>...rarely engages with learning activities but not at the standard expected</p> <p>...rarely improves their work by responding to feedback and doesn't put enough effort into this</p> <p>...can make poor choices regarding behaviour and/or disrupts the learning of others</p>		<p>...rarely demonstrates determination and effort is often below expectation</p> <p>...makes insufficient effort to proof read for spelling, punctuation and grammar (SPAG)</p> <p>...rarely takes pride in their presentation of homework</p>		<p>...is often late to lessons and/or often enters the classroom not ready to learn</p> <p>... often lacks the correct equipment</p> <p>...often misses deadlines and/or is often unprepared for tests and exams</p>	
X	Teacher is unable to comment due to student absence.		Teacher is unable to comment due to student absence.		Teacher is unable to comment due to student absence.	13



Subject	Attitude to Learning	Attitude to Homework	Organisation
English			
Maths			
Science			

Reflections and Goal Setting

I am proud of
.....
.....
.....

My first key area for development is
.....
.....
.....

I will do this by
.....
.....
.....

My second key area for development is
.....
.....
.....

I will do this by
.....
.....
.....

Student signature

Parent/Carer signature

Tutor signature



Question 1 Estimate $258 \times 27 =$	Question 2 Estimate $60 \times 47 =$	Question 3 Work out $\frac{5}{9} \times \frac{1}{6}$	Question 4 Work out $\frac{2}{11} \times \frac{3}{7}$
Question 5 Work out $\text{£}368.80 \div 8$	Question 6 Work out $\text{£}585.60 \div 6$	Question 7 Expand $4x(7x - 11)$	Question 8 Expand $3x(7 - 5x)$
Question 9 Express 31% as a fraction in its lowest form	Question 10 Express 39% as a fraction in its lowest form	Question 11 Find the highest common factor of 30 and 120	Question 12 Find the lowest common multiple of 32 and 12
Question 13 Work out $72 \div -8 =$	Question 14 Work out $-20 \div -2 =$	Question 15 Complete the ratio $8 : 44 = 1 : ?$	Question 16 Complete the ratio $4 : 40 = 1 : ?$
Question 17 Solve $8x + 3 = 3x + 18$	Question 18 Solve $5x - 1 = 3x + 9$	Question 19 Express 660 as a product of prime factors	Question 20 Express 28 as a product of prime factors

SKILLS CHECK



Score

15



Question 1 Estimate $29 \times 71 =$	Question 2 Estimate $18254 \div 29 =$	Question 3 Work out $\frac{2}{5} \times \frac{2}{3}$	Question 4 Work out $\frac{3}{4} \times \frac{1}{2}$
Question 5 Work out $\text{£}393 \div 6$	Question 6 Work out $\text{£}193.50 \div 3$	Question 7 Expand $2x(11x + 1)$	Question 8 Expand $2x(3x - 5)$
Question 9 Express 50% as a fraction in its lowest form	Question 10 Express 85% as a fraction in its lowest form	Question 11 Find the highest common factor of 6 and 15	Question 12 Find the lowest common multiple of 40 and 30
Question 13 Work out $4 \div -1 =$	Question 14 Work out $-40 \div -4 =$	Question 15 Complete the ratio $6 : 48 = 1 : ?$	Question 16 Complete the ratio $8 : 36 = 1 : ?$
Question 17 Solve $6x + 1 = 4x - 1$	Question 18 Solve $4x - 1 = 3x + 3$	Question 19 Express 135 as a product of prime factors	Question 20 Express 8 as a product of prime factors

SKILLS CHECK



Score



Question 1 Estimate $3755 - 3062 =$	Question 2 Estimate $4249 - 1546 =$	Question 3 Work out $\frac{2}{3} \times \frac{1}{2}$	Question 4 Work out $\frac{5}{8} \times \frac{1}{2}$
Question 5 Work out $£536.90 \div 7$	Question 6 Work out $£306 \div 4$	Question 7 Expand $5x(3 - 2x)$	Question 8 Expand $5x(2x - 5)$
Question 9 Express 70% as a fraction in its lowest form	Question 10 Express 76% as a fraction in its lowest form	Question 11 Find the highest common factor of 16 and 32	Question 12 Find the lowest common multiple of 36 and 72
Question 13 Work out $20 \div -5 =$	Question 14 Work out $-8 \times -5 =$	Question 15 Complete the ratio $16 : 64 = 1 : ?$	Question 16 Complete the ratio $6 : 30 = 1 : ?$
Question 17 Solve $7x + 2 = 4x - 10$	Question 18 Solve $4x - 4 = 3x - 3.5$	Question 19 Express 420 as a product of prime factors	Question 20 Express 144 as a product of prime factors

SKILLS CHECK



Score



Question 1 Estimate $20 \times 54 =$	Question 2 Estimate $123 \times 49 =$	Question 3 Work out $\frac{5}{6} \times \frac{1}{2}$	Question 4 Work out $\frac{6}{10} \times \frac{7}{8}$
Question 5 Work out $£311 \div 5$	Question 6 Work out $£375.60 \div 6$	Question 7 Expand $5x(3 + 2x)$	Question 8 Expand $4x(5x - 2)$
Question 9 Express 24% as a fraction in its lowest form	Question 10 Express 27% as a fraction in its lowest form	Question 11 Find the highest common factor of 126 and 140	Question 12 Find the lowest common multiple of 30 and 40
Question 13 Work out $2 \times -1 =$	Question 14 Work out $10 \times -1 =$	Question 15 Complete the ratio $12 : 48 = 1 : ?$	Question 16 Complete the ratio $8 : 24 = 1 : ?$
Question 17 Solve $6x + 2 = 2x - 14$	Question 18 Solve $3x + 5 = 2x + 7$	Question 19 Express 108 as a product of prime factors	Question 20 Express 44 as a product of prime factors

SKILLS CHECK



Score



Question 1 Estimate $5902 + 3985 =$	Question 2 Estimate $45 \times 56 =$	Question 3 Work out $\frac{2}{8} \times \frac{1}{2}$	Question 4 Work out $\frac{2}{3} \times \frac{1}{2}$
Question 5 Work out $\text{£}223.50 \div 5$	Question 6 Work out $\text{£}297.20 \div 4$	Question 7 Expand $6x(2x + 11)$	Question 8 Expand $5x(2x - 3)$
Question 9 Express 93% as a fraction in its lowest form	Question 10 Express 91% as a fraction in its lowest form	Question 11 Find the highest common factor of 120 and 135	Question 12 Find the lowest common multiple of 20 and 30
Question 13 Work out $10 \times -1 =$	Question 14 Work out $81 \div -9 =$	Question 15 Complete the ratio $12 : 48 = 1 : ?$	Question 16 Complete the ratio $6 : 36 = 1 : ?$
Question 17 Solve $4x - 5 = 3x - 3$	Question 18 Solve $4x + 3 = 3x - 2$	Question 19 Express 24 as a product of prime factors	Question 20 Express 54 as a product of prime factors

SKILLS CHECK



Score



Question 1 Estimate $17671 \div 93 =$	Question 2 Estimate $4122 \div 19 =$	Question 3 Work out $\frac{8}{9} \times \frac{1}{2}$	Question 4 Work out $\frac{4}{8} \times \frac{1}{2}$
Question 5 Work out $\text{£}538.30 \div 7$	Question 6 Work out $\text{£}150.60 \div 2$	Question 7 Expand $5x(7 + 5x)$	Question 8 Expand $3x(11x + 3)$
Question 9 Express 86% as a fraction in its lowest form	Question 10 Express 80% as a fraction in its lowest form	Question 11 Find the highest common factor of 30 and 60	Question 12 Find the lowest common multiple of 28 and 35
Question 13 Work out $7 \times -6 =$	Question 14 Work out $4 \times -1 =$	Question 15 Complete the ratio $10 : 35 = 1 : ?$	Question 16 Complete the ratio $4 : 32 = 1 : ?$
Question 17 Solve $5x + 4 = 4x + 9$	Question 18 Solve $4x + 0 = 3x + 2$	Question 19 Express 504 as a product of prime factors	Question 20 Express 210 as a product of prime factors

SKILLS CHECK



Score

20



Task 1

Read this context paragraph, which has been written about, Animal Farm. Using your green pen, correct the SPaG errors. This includes full stops, capital letters, commas and spelling errors.

Animal Farm is a novella by George Orwell published in 1945 It tells the story of animals on a farm who rebel against their human owner to take control of the farm themselves At first the animals dream of creating a fair society where everyone is equal but over time the pigs especially two named Napoleon and Snowball start taking control As they gain more power the pigs become more like the humans they replaced treating the other animals unfairly The book is a symbol of the Russian Revolution and how the leaders who promised equality became corrupt Through this story Orwell shows how power can corrupt people and how political promises can be twisted to control others

Reminders:

- Start of a sentence: capitalise the first word of every sentence.
- Use a full stop to indicate the end of a statement and start the next sentence with a capital letter.
- Use a comma when joining two sentences with "but," or "or." Example: *She was late, but she finished the work.*
- After intro. words: use a comma after a word or phrase at the beginning of a sentence. Example: *After school, we played football.*
- Extra information: use commas to add extra details that aren't necessary for the sentence to make sense. Example: *My brother, who is 10, loves football.*



Task 2

Read the speech below. This speech was delivered by a Old Major in chapter one of Animal Farm. **What DAFORRESTI techniques can you identify? Highlight and label them.**

"Man is the only true enemy we have. Remove Man from the midst, and the root cause of hunger and hardship is gone forever. Man is the only creature that consumes without creating. He does not give milk, he does not lay eggs, he is too feeble to pull the plough, he cannot run fast enough to catch rabbits. And yet, he rules over all the animals. Why should we continue to serve him? Why should we continue to live in misery, working for nothing? He takes our labor, our food, and our freedom. He sets us to work, gives back just the bare bones of what will stop us from starving, and keeps the rest for his selfish self."



Task 3

Read the descriptive sentences below. The writer has used the senses to create clear images for the reader.

Can you fill in the blanks? (You don't have to use individual words; phrases are encouraged.)

1. The _____ fields stretch out under a _____ sky, with the red-roofed barn standing tall. As the story progresses, the once well-kept farm starts to look _____ and chaotic, especially as the pigs take over and humans return.



2. The air is filled with _____. Cows lowing, sheep bleating, and chickens clucking. At night, the silence is broken by _____ and the _____. Later, the harsh barks of guard dogs and the squealing of pigs dominate, drowning out the voices of the other animals.
3. The fresh scent _____ fills the farm, mixed with the _____ smell of the barn. After the rebellion, the stench of sweat, mud, and animal waste becomes stronger as the farm falls into _____ and the animals are overworked.

Which senses have been used?

- 1.
- 2.
- 3.



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.*

100 Colorful Words to Use in Place of "Said"

Rhyme
Rhyming words occur very often in poems, sometimes in patterns.

Rhythm
The flow of a poem, often effected by the punctuation and shape of a poem.

Onomatopoeia
When a word imitates the sound it makes (e.g. BANG, SPLASH)

Similes
Compares two different things, using the words "like" or "as".

Metaphors
Identifies something as being the same as something else.

Alliterations
More than one word beginning with the same letter (close together in text).

Repetition
When words and phrases are repeated multiple times.

Tone and Pace
Have a big impact on rhythm and effected by punctuation.

POETIC TECHNIQUES

admitted
advised
agreed
assured
avowed

began
bragged
chatted
cheered
commented
convinced
crowded
exclaimed
instructed

bawled
complained
confessed
cried
croaked
denied
fretted
gaspd
groaned
gurgled
moaned
mumbled
objected
pleaded
protested
sniffled
sobbed
squeaked
stammered

argued
barked
bellowed
boasted
boomed
coughed
demanded
griped
growled
hissed
insisted
interrupted
jeered
ranted
raved

added
asked
babbled
bargained
blurted
chortled
clucked
explained
grumbled
gulped
grunted
lied
murmured
mused
muttered

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

Common Techniques

D DIRECT ADDRESS
A ALLITERATION
F FACT
O OPINION
R RHETORICAL QUESTION
R REPETITION
E EMOTIVE LANGUAGE
S STATISTICS
T THREE (LIST OF)
I IMPERATIVE

Transactional Writing

- Letters
- Reviews
- Reports
- Articles





Conjunctions

Addition

Further
Also
Too
Besides
Finally
Last
Additionally
In addition
Then

Summary

In short
In other word
Anyway
In brief
It seems
Clearly
In sum
After all
In general

Place

There
Here
In the back
Adjacent to
Next to
Nearby
Beyond
Opposite to
At that point

Example

Such as
For one thing
For instance
For example
That is
Specifically
Illustrated by
In particular

Comparison

Equally
A smilar ...
Likewise
Similarly
Comparable
As with
Another ... like
In the same way

Time

Meanwhile
Finally
At last
Presently
Currently
In the past
In the meantime
Eventually
Immediately

PUNCTUATION

QUESTION MARK

?

Use at the end of a sentence to express asking a question.

EXCLAMATION MARK

!

Use at the end of a sentence to express a strong feeling.

PERIOD

•

Use at the end of a sentence.

COLON

• •

Use to introduce a list or a definition.

APOSTROPHE

'

Use in contractions and to show when something belongs to someone.

PARENTHESIS

()

Use to add extra information to a sentence without taking away from the idea.

HYPHEN

-

Use to join separate words to make one word.

SEMICOLON

• ;

Use to connect subjects and verbs into a single sentence.

COMMA

,

Use to separate parts in a sentence or in a list.

QUOTATIONS

" "

Use around words that are spoken.

ELLIPSIS

• • •

Use to show suspense or that someone is thinking.

THERE →

(Refers to a place)
He went in the door over there.

THEÏR

(Shows ownership)
Their cat is the sweetest.

THEY'RE

(A contraction for "they are")
They're going to the movies.

Verbs to sharpen your analysis

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





1. Key Vocabulary

Allegory: a narrative that contains a hidden meaning, typically a moral or political one.
Dystopia: an imagined state or society in which there is great suffering or injustice, typically one that is totalitarian or post-apocalyptic.

2. Contextual Knowledge

The Russian Revolution

- Orwell wrote the controversial novel as an allegorical tale that links with the history of the Soviet Union.
- The Bolsheviks were a revolutionary party, committed to the communist ideas of Karl Marx. They believed that the working classes would liberate themselves from the control of the ruling classes. Lenin led the Bolshevik party. He was supported by Trotsky, who created a militia and they overthrew the Government in 1917.
- After Lenin died, Stalin came into power. He would not let anyone come in his way, so he exiled Trotsky. Stalin became a tyrannical leader; he controlled the media, set up labour camps and forced farmers into 'collectivisation' – anyone who disagreed was murdered. There was a huge food shortage and many more died.

3. Russian Revolution Timeline vs Animal Farm

Animal Farm					The Russian Revolution				
Animals oust Mr Jones after he fails to feed them	Battle of Cowshed	Seven Commandments of Animalism	Snowball chased away by dogs	Hens smash their eggs	Dogs assisted Napoleon to search through belongings	Napoleon executes 4 pigs that led the rebellion	Mr Frederick and his men destroy the rebuilt windmill	Treaty of Pilkington	
Russian Revolution and abdication of Nicholas II	Russian Civil War	Lenin presents his April theses	Trotsky banished from Soviet Union	Peasants destroy crops/ Equipment rather than give it in.	NKVD helped Stalin carry out purges	Moscow trials of Stalin's opponents	German invasion of Russia	Postdam Conference leads to the division of Germany	28

4. Contextual Knowledge: Characters

Old Major stands for Vladimir Lenin.
Snowball represents the intellectual revolutionary Leon Trotsky.
Napoleon stands for Stalin, while the dogs are his secret police.
The horse Boxer stands in for the proletariat, or working class.

5. Key Quotes

Challenge yourself to annotate these quotes:

"All men are enemies. All animals are comrades."

"'I have no wish to take life, not even human life,' repeated Boxer, and his eyes were full of tears."

"Napoleon is always right."

"The human beings did not hate Animal Farm any less now that it was prospering; indeed, they hated it more than ever."

"They were always cold, and usually hungry as well."

"Besides, in those days they had been slaves and now they were free, and that made all the difference, as Squealer did not fail to point out."



6. Literature: Extract Question

What is it? Some of your GCSE questions will include extract questions. You will be given an extract from a moment in the novel. You will be asked a question about the extract and the rest of the novel. You will have revised quotations to help you answer the question.

7. Example Question

How is Napoleon presented in this extract and the rest of the novel?

Napoleon took no interest in Snowball's committees. He said that the education of the young was more important than anything that could be done for those who were already grown up. It happened that Jessie and Bluebell had both whelped soon after the hay harvest, giving birth between them to nine sturdy puppies. As soon as they were weaned, Napoleon took them away from their mothers, saying that he would make himself responsible for their education. He took them up into a loft which could only be reached by a ladder from the harness-room, and there kept them in such seclusion that the rest of the farm soon forgot their existence. The mystery of where the milk went to was soon cleared up. It was mixed every day into the pigs' mash. The early apples were now ripening, and the grass of the orchard was littered with windfalls. The animals had assumed as a matter of course that these would be shared out equally; one day, however, the order went forth that all the windfalls were to be collected and brought to the harness room for the use of the pigs. At this some of the other animals murmured, but it was no use. All the pigs were in full agreement on this point, even Snowball and Napoleon.

8. Key Words

Highlights
Suggests
Implies
Insinuates
Reiterates
Displays

Could
Might
May
Possibly
Potentially

'An alternative interpretation, could be...'
'The word 'x' suggests...'
'The effect on the reader may be...'

9. Homework

Each week you must complete either an Educake quiz or Lexia (directed by your class teacher). If you are unable to access ICT at home; you must attend StudyZone. Record your progress below.

Week (homework set)	Educake (%)	Lexia (time in minutes)	AR Quiz (%)
2			
3			
4			
5			
6			
7			

11. WHAT – HOW - WHY

What idea is being expressed?
How does the text convey this?
Why is this thought portrayed/?



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 Algebra Unit 2

What do I need to be able to do?

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

- Understand like and unlike terms
- Simplify algebraic expressions
- Be able to substitute into single and two step function machines.
- Multiply and divide expressions with indices

Keywords

Simplify: grouping and combining similar terms

Term: a single number or variable

Like: variables that are the same are 'like'

Coefficient: a multiplicative factor in front of a variable e.g. $5x$ (5 is the coefficient, x is the variable)

Expression: a maths sentence with a minimum of two numbers and at least one math operation (no equals sign)

Product: multiply terms

Like and unlike terms

Like terms are those whose variables are the same

♥ and 3♥
are like terms
the variable is the same

★ 3♥
are unlike terms
the variables are NOT the same

Examples and non-examples

Like terms

$y, 7y$
 $2x^2, x^2$
 $ab, 10ba$
 $5, -2$

Un-like terms

$y, 7x$
 $2x^2, 2c^2$
 $ab, 10a$
 $5, -2t$

Note here ab and ba are commutative operations, so are still like terms

Collecting like terms (156-157)

The \equiv symbol means equivalent to. It is used to identify equivalent expressions

Collecting like terms

Only like terms can be combined

$$4x + 5b - 2x + 10b$$

$$\begin{array}{c} \text{4x} \quad \text{5b} \quad \text{-2x} \quad \text{10b} \\ \swarrow \quad \searrow \quad \swarrow \quad \searrow \\ 2x + 15b \end{array}$$

Common misconceptions

$$2x + 3x^2 + 4x \equiv 6x + 3x^2$$

Although they both have the x variable x^2 and x terms are un-like terms so can not be collected

Multiply expressions with indices (158)

$$4b \times 3a$$

$$\equiv 4 \times b \times 3 \times a$$

$$\equiv 4 \times 3 \times b \times a$$

$$\equiv 12ab$$

$$5t \times 9t$$

$$\equiv 5 \times t \times 9 \times t$$

$$\equiv 5 \times 9 \times t \times t$$

$$\equiv 45t^2$$

$$2b^4 \times 3b^2$$

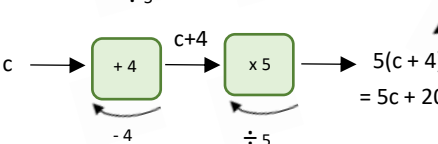
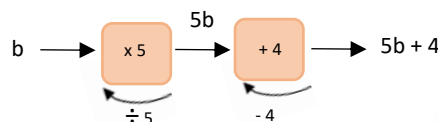
$$\equiv 2 \times b \times b \times b \times b \times 3 \times b \times b$$

$$\equiv 2 \times 3 \times b \times b \times b \times b \times b \times b$$

$$\equiv 6b^6$$

There are often misconceptions with this calculation but break down the powers

Two step function machines



IMPORTANT
Calculate the value at the end of each operation

NOTE:
The whole first output is multiplied by 5

Enrichment Opportunities

'Perimeter expressions'
<https://nrich.maths.org/7283>



Maths Algebra Unit 2

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
 - Substitute values into expressions and formulae

Substitution into expressions (780)

$4y$ ← 4 lots of 'y'

If $y = 7$ this means the expression is asking for 4 'lots of' 7

e.g. : $y - 2$
 $= 7 - 2 = 5$ $4y = 28$

Divide expressions with indices (159)

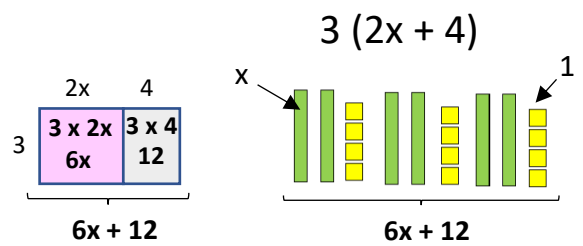
$$\frac{24}{36} \rightarrow \frac{\cancel{2} \times \cancel{2} \times 2 \times 3}{\cancel{2} \times 3 \times \cancel{2} \times \cancel{3}} \rightarrow \frac{2}{3}$$

$$\frac{5a^3b^2}{15ab^6} \rightarrow \frac{\cancel{5} \times \cancel{a} \times \cancel{a} \times \cancel{a} \times \cancel{b} \times \cancel{b}}{3 \times \cancel{5} \times \cancel{a} \times \cancel{b} \times \cancel{b} \times \cancel{b} \times \cancel{b} \times \cancel{b} \times \cancel{b}} \rightarrow \frac{a^2}{3b^4}$$

Cross cancelling factors shows cancels the expression

$\left. \begin{array}{l} 23a^7y^2 \\ 5db^6 \end{array} \right\}$ This expression cannot be divided (cancelled down) because there are no common factors or similar terms

Multiply single brackets (160)

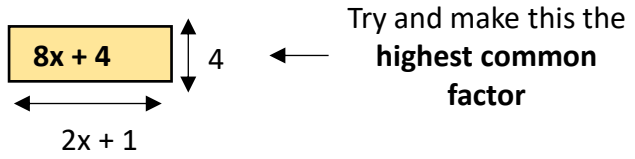


$2x + 4$			$2x + 4$			$2x + 4$		
x	x	4	x	x	4	x	x	4
$6x + 12$								

Different representations of $3(2x+4) = 6x + 12$

Factorise into a single bracket (168)

$8x + 4$



The two values **multiply** together (also the area) of the rectangle

$8x + 4 \equiv 4(2x + 1)$ Note:
 $8x + 4 \equiv 2(4x + 2)$
 This is factorised but the HCF has not been used

Keywords

- Substitute:** replace a variable with a numerical value
- Equivalent:** something of equal value
- Highest Common Factor (HCF):** the biggest factor (or number that multiplies to give a term)

Enrichment Opportunities

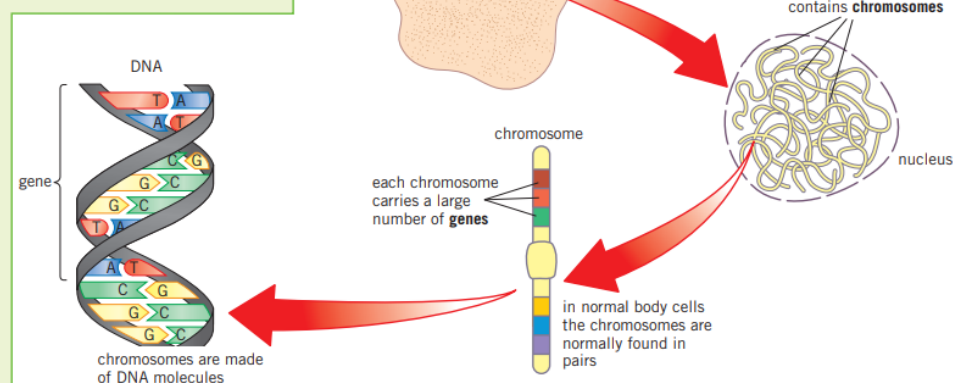
- 'The simple life'
<https://nrich.maths.org/13207/note>
- 'Hollow Squares'
<https://nrich.maths.org/hollowsquares>



Chromosomes

The nucleus of a cell contains chromosomes.

Each chromosome carries a large number of genes made of DNA molecules.



Stem cells in medicine

A stem cell is an undifferentiated cell that can develop into one or more types of specialised cell.

There are two types of stem cell in mammals: **adult stem cells** and **embryonic stem cells**.

Stem cells can be **cloned** to produce large numbers of identical cells.

Type of stem cell	Where are they found?	What can they differentiate into?	Advantages	Disadvantages
adult stem cells	specific parts of the body in adults and children – for example, bone marrow	can only differentiate to form certain types of cells – for example, stem cells in bone marrow can only differentiate into types of blood cell	<ul style="list-style-type: none"> fewer ethical issues – adults can consent to have their stem cells removed and used an already established technique for treating diseases such as leukaemia relatively safe to use as a treatment and donors recover quickly 	<ul style="list-style-type: none"> requires a donor, potentially meaning a long wait time to find someone suitable can only differentiate into certain types of specialised cells, so can be used to treat fewer diseases
embryonic stem cells	early human embryos (often taken from spare embryos from fertility clinics)	can differentiate into any type of specialised cell in the body – for example, a nerve cell or a muscle cell	<ul style="list-style-type: none"> can treat a wide range of diseases as can form any specialised cell may be possible to grow whole replacement organs usually no donor needed as they are obtained from spare embryos from fertility clinics 	<ul style="list-style-type: none"> ethical issues as the embryo is destroyed and each embryo is a potential human life risk of transferring viral infections to the patient newer treatment so relatively under-researched – not yet clear if they can cure as many diseases as thought
plant meristem	meristem regions in the roots and shoots of plants	can differentiate into all cell types – they can be used to create clones of whole plants	<ul style="list-style-type: none"> rare species of plants can be cloned to prevent extinction plants with desirable traits, such as disease resistance, can be cloned to produce large numbers of identical plants fast and low-cost production of large numbers of plants 	<ul style="list-style-type: none"> cloned plants are genetically identical, so a whole crop is at risk of being destroyed by a single disease or genetic defect

Therapeutic cloning

In therapeutic cloning

- cells from a patient's own body are used to create a cloned early embryo of themselves
- stem cells from this embryo can be used for medical treatments and growing new organs
- these stem cells have the same genes as the patient, so are less likely to be rejected when transplanted.

Key terms

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

adult stem cell	binary fission	cell cycle
chromosome	clone	daughter cells
gene	meristem	nucleus
	mitosis	embryonic stem cell
		therapeutic cloning

Enrichment Opportunities

<https://kids.britannica.com/students/article/stem-cell/544349>

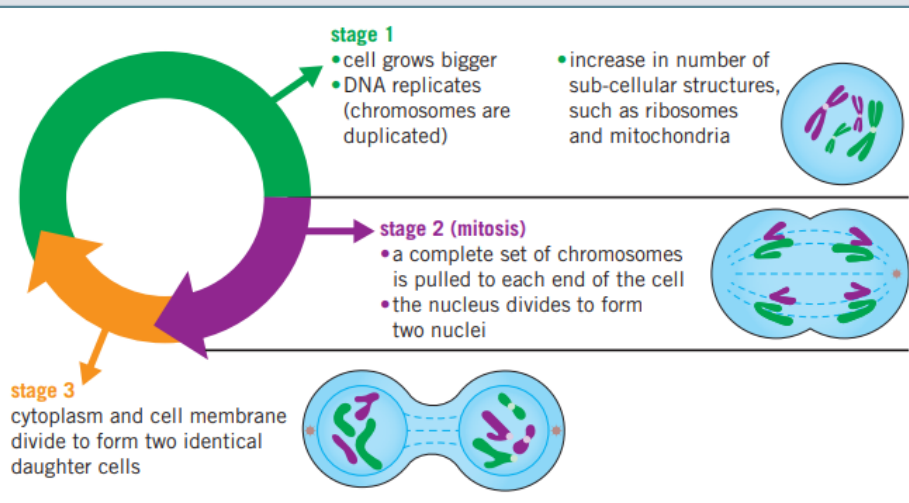
<https://www.bbc.co.uk/bitesize/guides/znbp2sg/revision/7>

The cell cycle

Body cells divide to form two identical **daughter cells** by going through a series of stages known as the **cell cycle**.

Cell division by **mitosis** is important for the growth and repair of cells, for example, the replacement of skin cells. Mitosis is also used for asexual reproduction.

There are *three* main stages in the cell cycle:



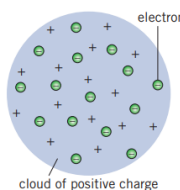
Dalton's model

John Dalton thought of the **atom** as a solid sphere that could not be divided into smaller parts. His model did not include **protons**, **neutrons**, or **electrons**.

The plum pudding model

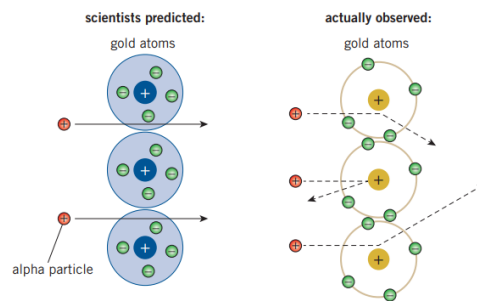
Scientists' experiments resulted in the discovery of sub-atomic charged particles. The first to be discovered were electrons – tiny, negatively charged particles.

The discovery of electrons led to the plum pudding model of the atom – a cloud of positive charge, with negative electrons embedded in it. Protons and neutrons had not yet been discovered.



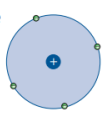
Alpha scattering experiment

- Scientists fired small, positively charged particles (called alpha particles) at a piece of gold foil only a few atoms thick.
- They expected the alpha particles to travel straight through the gold.
- They were surprised that some of the alpha particles bounced back and many were deflected (alpha scattering).
- To explain why the alpha particles were repelled the scientists suggested that the positive charge and mass of an atom must be concentrated in a small space at its centre. They called this space the **nucleus**.



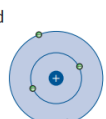
Nuclear model

Scientists replaced the plum pudding model with the nuclear model and suggested that the electrons **orbit** the nucleus, but not at set distances.



Electron shell (Bohr) model

Niels Bohr calculated that electrons must orbit the nucleus at fixed distances. These orbits are called **shells** or **energy levels**.



The proton

Further experiments provided evidence that the nucleus contained smaller particles called protons. A proton has an opposite charge to an electron.

Size

The atom has a radius of 1×10^{-10} m. Nuclei (plural of nucleus) are around 10 000 times smaller than atoms and have a radius of around 1×10^{-14} m.

Relative mass

One property of protons, neutrons, and electrons is **relative mass** – their masses compared to each other. Protons and neutrons have the same mass, so are given a relative mass of 1. It takes almost 2000 electrons to equal the mass of a single proton – their relative mass is so small that we can consider it as 0.

The neutron

James Chadwick carried out experiments that gave evidence for a particle with no charge. Scientists called this the neutron and concluded that the protons and neutrons are in the nucleus, and the electrons orbit the nucleus in shells.

Key terms

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

abundance	atom	atomic number	aqueous	compound	electron
element	energy level	isotope	neutron	nucleus	orbit
product	proton	reactant	relative atomic mass	shell	
relative charge		relative mass			

Atoms and particles

	Relative charge	Relative mass	
Proton	+1	1	= atomic number
Neutron	0	1	= mass number – atomic number
Electron	-1	0 (very small)	= same as the number of protons

All atoms have equal numbers of protons and electrons, meaning they have no overall charge:

$$\text{total negative charge from electrons} = \text{total positive charge from protons}$$

Mixtures

- A mixture consists of two or more elements or compounds that are not chemically combined together.
- The substances in a mixture can be separated using physical processes.
- These processes do not use chemical reactions.

Separating mixtures

- filtration – insoluble solids and a liquid
- crystallisation – soluble solid from a solution
- simple distillation – solvent from a solution
- fractional distillation – two liquids with similar boiling points
- paper chromatography – identify substances from a mixture in solution

Isotopes

Atoms of the same element can have a different number of neutrons, giving them a different overall mass number. Atoms of the same element with different numbers of neutrons are called **isotopes**.

The **relative atomic mass** is the average mass of all the atoms of an element:

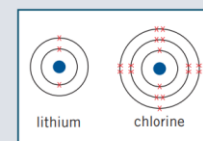
$$\text{relative atomic mass} = \frac{(\text{abundance of isotope 1} \times \text{mass of isotope 1}) + (\text{abundance of isotope 2} \times \text{mass of isotope 2})}{100}$$

Drawing atoms

Electrons in an atom are placed in fixed shells. You can put

- up to two electrons in the first shell
- eight electrons each in the second and third shells.

You must fill up a shell before moving on to the next one.



Elements and compounds

Elements are substances made of one type of atom. Each atom of an element will have the same number of protons.

Compounds are made of different types of atoms chemically bonded together. The atoms in a compound have different numbers of protons.

Enrichment Opportunities

<https://www.rsc.org/periodic-table>
<https://phet.colorado.edu/en/simulations/build-an-atom>
<https://www.bbc.co.uk/bitesize/guides/zwn8b82/revision/3>



Changes of state

Changes of state and conservation of mass

Changes of state are physical changes because no new substances are produced. The mass always stays the same because the number of particles does not change.

Particles and kinetic energy

When the temperature of a substance is increased, the kinetic energy store of its particles increases and the particles vibrate or move faster.

If the kinetic store of a substance's particles increases or decreases enough, the substance may change state.

Density

You can calculate the density of an object if you know its mass and volume:

$$\text{density (kg/m}^3\text{)} = \frac{\text{mass (kg)}}{\text{volume (m}^3\text{)}}$$
$$\rho = \frac{m}{V}$$



Internal energy

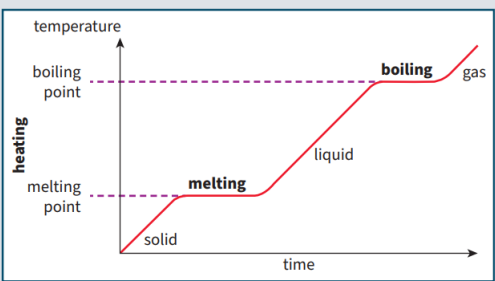
Heating a substance increases its **internal energy**.

Internal energy is the sum of the total kinetic energy the particles have due to their motion and the total potential energy the particles have due to their positions relative to each other.

Latent heat

In a graph showing the change in temperature of a substance being heated or cooled, the flat horizontal sections show when the substance is changing state.

The energy transfers taking place during a change in state do not cause a change in temperature, but do change the internal energy of the substance.



States of matter

Gas	Arrangement	<ul style="list-style-type: none">particles are spread outalmost no forces of attraction between particleslarge distance between particles on average
	Movement	<ul style="list-style-type: none">particles move randomly at high speed
	Properties	<ul style="list-style-type: none">low densityno fixed volume or shapecan be compressed and can flowspread out to fill all available space
Liquid	Arrangement	<ul style="list-style-type: none">particles are in contact with each otherforces of attraction between particles are weaker than in solids
	Movement	<ul style="list-style-type: none">particles are free to move randomly around each other
	Properties	<ul style="list-style-type: none">usually lower density than solidsfixed volumeshape is not fixed so they can flow
Solid	Arrangement	<ul style="list-style-type: none">particles held next to each other in fixed positions by strong forces of attraction
	Movement	<ul style="list-style-type: none">particles vibrate about fixed positions
	Properties	<ul style="list-style-type: none">high densityfixed volumefixed shape (unless deformed by an external force)

The relationship between temperature and pressure in gases

Gas temperature

The particles in a gas are constantly moving in random directions and with random speeds. The temperature of a gas is related to the average kinetic energy of its particles. When a gas is heated, the particles gain kinetic energy and move faster, so the temperature of the gas increases.

If the temperature of a gas in a sealed container is increased, the pressure increases because

- the particles move faster so they hit the surfaces with more force
- the number of these impacts per second increases, exerting more force overall.

Gas pressure

The pressure a gas exerts on a surface, such as the walls of a container, is caused by the force of the gas particles hitting the surface. The pressure of a gas produces a net force at right angles to the walls of a container or any surface.

If a gas is compressed quickly, for example, in a bicycle pump, its temperature can rise. This is because

- compressing the gas requires a force to be applied to the gas – this results in work being done to the gas, since work done = force × distance
- the energy gained by the gas is not transferred quickly enough to its surroundings.

Specific heat capacity

When a substance is heated or cooled the temperature change depends on:

- the substance's mass
- the type of material
- how much energy is transferred to it.

Every type of material has a **specific heat capacity** – the amount of energy needed to raise the temperature of 1 kg of the substance by 1 °C.

The energy transferred to the thermal store of a substance can be calculated from the substance's mass, specific heat capacity, and temperature change:

$$\text{change in thermal energy (J)} = \text{mass (kg)} \times \text{specific heat capacity (J/kg}^\circ\text{C)} \times \text{temperature change (}^\circ\text{C)}$$
$$\Delta E = m c \Delta \theta$$

This equation will be given to you on the equation sheet, but you need to be able to select and apply it to the correct questions.



Key terms

Write a definition for these key terms.

boiling	condensation	conservation of mass	density	evaporation	freezing	fusion
internal energy	latent heat	melting	specific latent heat	sublimation	vaporisation	

Enrichment Opportunities

Gas properties simulation

https://phet.colorado.edu/sims/html/gas-properties/latest/gas-properties_en.html

Revision

<https://www.bbc.co.uk/bitesize/topics/z3ybb82>

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



Sugar Skulls



Altars



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

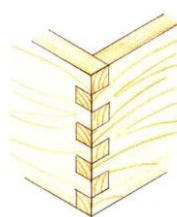
Tools & Equipment

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.

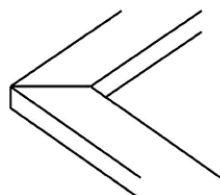
Polymers

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.

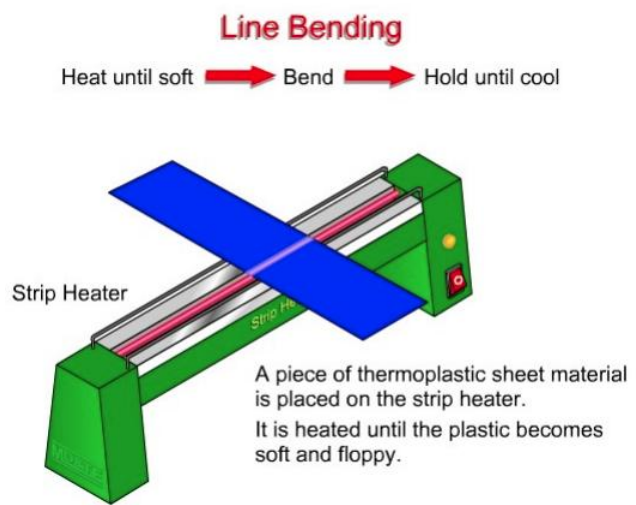
Health & Safety

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

Try these websites to support you

www.youtube.com/watch?v=pojJlMo8U2I

www.educationquizzes.com/ks3/d-and-t/resistant-materials-02/



Key words;

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

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.

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.

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.

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.



Farming Methods

Caged / battery:

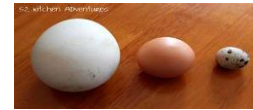
- Hens are kept indoors in cages. Light, food and temperature are all controlled to maximise egg laying. Fertilisers/medication are sometimes used. This is the cheapest method of egg production.

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.



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.

Raising Agents

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



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



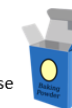
Eggs

- Adds colour and flavour to the cake



Raising agent

- Makes the cake rise



Creaming Method

Examples:
Victoria sponge / muffins

Definition:
Sugar and butter creamed with a wooden spoon before other ingredients are added

Rubbing-in Method

Examples:
Crumble, shortbread, pastry

Definition:
Use your hands to mix fat and flour together before adding any other ingredients

Whisking / All-in-one Method

Examples:
Swiss roll, cupcakes, sponges, gateaux

- All-in-one – Add all ingredients to the bowl at once and mix until smooth
- Whisking – Use the whisk to aerate the mixture

Melted Method

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

Photography

Many photographers use light and shadow, alongside editing techniques, to transform ordinary objects into striking images. Shadows can create mystery, drama, or atmosphere, while light can highlight detail and form. Together they can tell a story or convey a powerful 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

The Photo:

- Composition
- Vantage point
- Angle
- Light
- Framing
- Cropping
- Juxtaposition

The Camera:

- Aperture
- Shutter speed
- Focus
- Depth of Field
- ISO

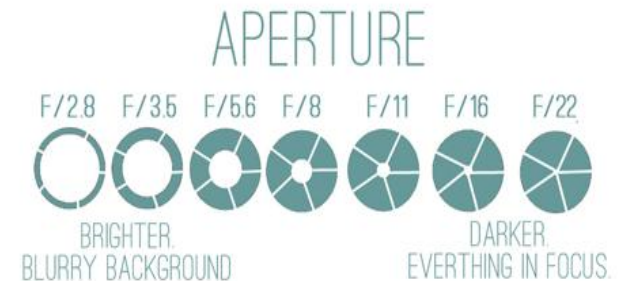
The Visual:

- Line
- Tone
- Colour
- Texture
- Form
- Shape
- Pattern



PHOTOGRAPHY CHEAT SHEET

a guide to help you shoot manual



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



Python -> English	
<code>print('hello!')</code>	Prints a value on screen (in this case, hello!)
<code>input('')</code>	Inputs a value into the computer.
<code>x=input('')</code>	Inputs a value and stores it into the variable x.
<code>x=int(input(''))</code>	Inputs a value into x, whilst also making it into an integer.
<code>print(str(x))</code>	Prints the variable x, but converts it into a string first.
<code>if name == "Fred":</code>	Decides whether the variable 'name' has a value which is equal to 'Fred'.
<code>else:</code>	The other option if the conditions for an if statement are not met (eg. name = 'Bob' when it should be Fred)
<code>elif name == "Tim"</code>	elif (short for else if) is for when the first if condition is not met, but you want to specify another option.
<code>#</code>	# is used to make comments in code – any line which starts with a # will be ignored when the program runs.

Comparative Operators	
<code>==</code>	Equal to
<code>!=</code>	Not equal to
<code>></code>	Greater than
<code><</code>	Less than
<code>>=</code>	Greater than or equal to
<code><=</code>	Less than or equal to

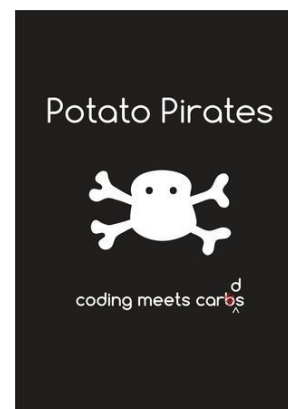
You will use Google Colab to run and test code and use the game potato pirates to help you understand the key concepts.

Using the TIME method:

- Try
- Investigate
- Make
- Evaluate

Don't be afraid to experiment and try things out!

Key vocabulary	
Python	A high level programming language.
Programming	The process of writing computer programs.
Code	The instructions that a program uses.
Sequence	Parts of the code that run in order and the pathway of the program reads and runs very line in order.
Selection	Selects a pathway through the code based on whether a condition is true
Iteration	Code is repeated (looped), either while something is true or for a number of times
Algorithm	A set of rules/instructions to be followed by a computer system
Variable	A value that will change whilst the program is executed. (eg. temperature, speed)
Comparative Operator	When comparing data, an operator is used to solve the equality such as <code><</code> , <code>!=</code> or <code>==</code>
Syntax	The punctuation/way that code has to be written so that the computer can understand it. Each programming language has its own syntax.
Data Type	This indicates how the data will be stored. The most common data types are integer, string, and float/real.
String	A collection of letters, numbers or characters. (eg, Hello, WR10 1XA)
Integer	A whole number. (eg. 1, 189)
Float/Real	A decimal number, not a whole number. (eg. 3.14, -26.9)
Boolean	1 of 2 values. (eg. True, False, Yes, No)



Enrichment Opportunities

Buy Potato pirates: <https://potatopirates.game/>
Codecademy: www.codecademy.com/catalog/language/python
Python for kids: https://www.amazon.co.uk/Python-Kids-Playful-Introduction-Programming/dp/1593274076/ref=sr_1_3?dchild=1&keywords=python+for+kids&qid=1624629281&sr=8-3
(Sometimes on humble bundle)
GrokLearning: <https://groklearning.com/>

Design Element Features

Acting

- VTAPPE FEMPIG
- Blocking – where you stand and move on stage
- Emotional journey – what emotions your character feels through the play
- Learning Lines – crucial to a good performance. Learn them by going over them a little but often using a cover and repeat method, the first letter method (above) or by running them with friends and family.

Set Design

- Naturalistic or non naturalistic
- Location – how do you show where it is set?
- Mood / atmosphere – how will the audience feel?
- Colour / texture
- Sightlines – can the audience see everything?

Costume Design

- Shape / cut – what design is it?
- Material / fabric – what is it made from?
- Colour – what do you want to tell the audience?

Lighting Design

- Colour - what do you want to tell the audience?
- Coverage – how much of the stage is covered
- Intensity – how bright it is
- Edges – a clear hard edge or a hazy soft edge
- Gobo/specials – patterned cut outs or any other lights

Extension
and Further
Info

Learning
Lines



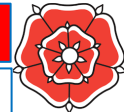
Topic Objectives

- To develop and rehearse a script extract for performance
- To use acting, directing and design elements in a professional way
- To perform the extract to the class using all the skills from KS3

Year 9 Assessment Criteria

Performing	Analysing	Devising	Drama Roles	Drama Techniques
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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





Armistice Day

History

- In 1914 Germany invaded France starting World War I. For almost four years, France and its allies fought against the advance of Germany.
- Armistice Day is a day to remember soldiers who lost their lives in World War I, and subsequent wars.
- On the 11th November 1918, an armistice treaty was signed to end the hostilities of World War I. This is why Armistice Day occurs on the 11th November each year.
- The ceasefire to end World War I came into effect at 11 minutes past the 11th hour on November 11th.
- A law was approved on October 24th 1922 to make November 11th a public holiday in France.

General Information

- Armistice Day is a public holiday in France, meaning there is no school or work.
- Special church services are held to remember those who died in World War I and subsequent wars.
- The unknown soldier, *le soldat inconnu*, was an unknown fallen soldier from WWI. Although his name was unknown, he represents and honours more than a million French soldiers who died in the conflict.
- The body of the unknown soldier was buried under the Arc de Triomphe on 11th November 1920. This soldier serves as a symbol to all those who died in WWI.
- The Arc de Triomphe is at the heart of Armistice Day as many public figures, including France's president, lay wreaths and flowers there and at war memorials around the country.
- Each town in France has its own ceremony to celebrate Armistice Day.
- Many people wear black or dark clothes to show respect for the fallen soldiers.
- Children in France often recite a poem as a symbol of remembrance. You can find the most popular poem on the right of this page.
- The French national flag, *le tricolor*, plays an important role in Armistice Day. It is often displayed at half-mast or on flag poles held diagonally by military service people.
- In France, the blue cornflower, *le bleuet*, is worn to represent Armistice Day, but not as widely as the poppy is in the UK.

Enrichment Opportunities

[FRENCH ARMISTICE DAY - November 11, 2023 - National Today](#)

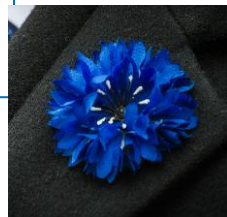
Armistice Day poem – *Le dormeur du val* by Arthur Rimbaud

C'est un trou de verdure où chante une rivière
Accrochant follement aux herbes des haillons
D'argent ; où le soleil, de la montagne fière,
Luit : c'est un petit val qui mousse de rayons.

Un soldat jeune, bouche ouverte, tête nue,
Et la nuque baignant dans le frais cresson bleu,
Dort ; il est étendu dans l'herbe, sous la nue,
Pâle dans son lit vert où la lumière pleut.

Les pieds dans les glaïeuls, il dort. Souriant comme
Sourirait un enfant malade, il fait un somme :
Nature, berce-le chaudement : il a froid.

Les parfums ne font pas frissonner sa narine ;
Il dort dans le soleil, la main sur sa poitrine
Tranquille. Il a deux trous rouges au côté droit.





Key word definitions

Consumer – someone who buys something.

Exploitation - the action of treating someone unfairly in order to benefit from their work.

Export – goods sent out of a country.

Deindustrialisation – countries close their factories due to cheaper competition from abroad.

Globalisation - flows of people, ideas, money and goods are making an increasingly complex global web of interdependence that links people from distant continents together.

Import – goods coming into a country.

Interdependence - when countries rely on each other and work together.

Inward investment - when a foreign company invests in a country, perhaps by building a factory or a shop.

Marketing - the action of a business promoting and selling products and services.

Multinational company (MNC) - companies that operate in two or more countries

Multiplier effect - an effect in economies in which spending and investment encourages growth of business and economy.

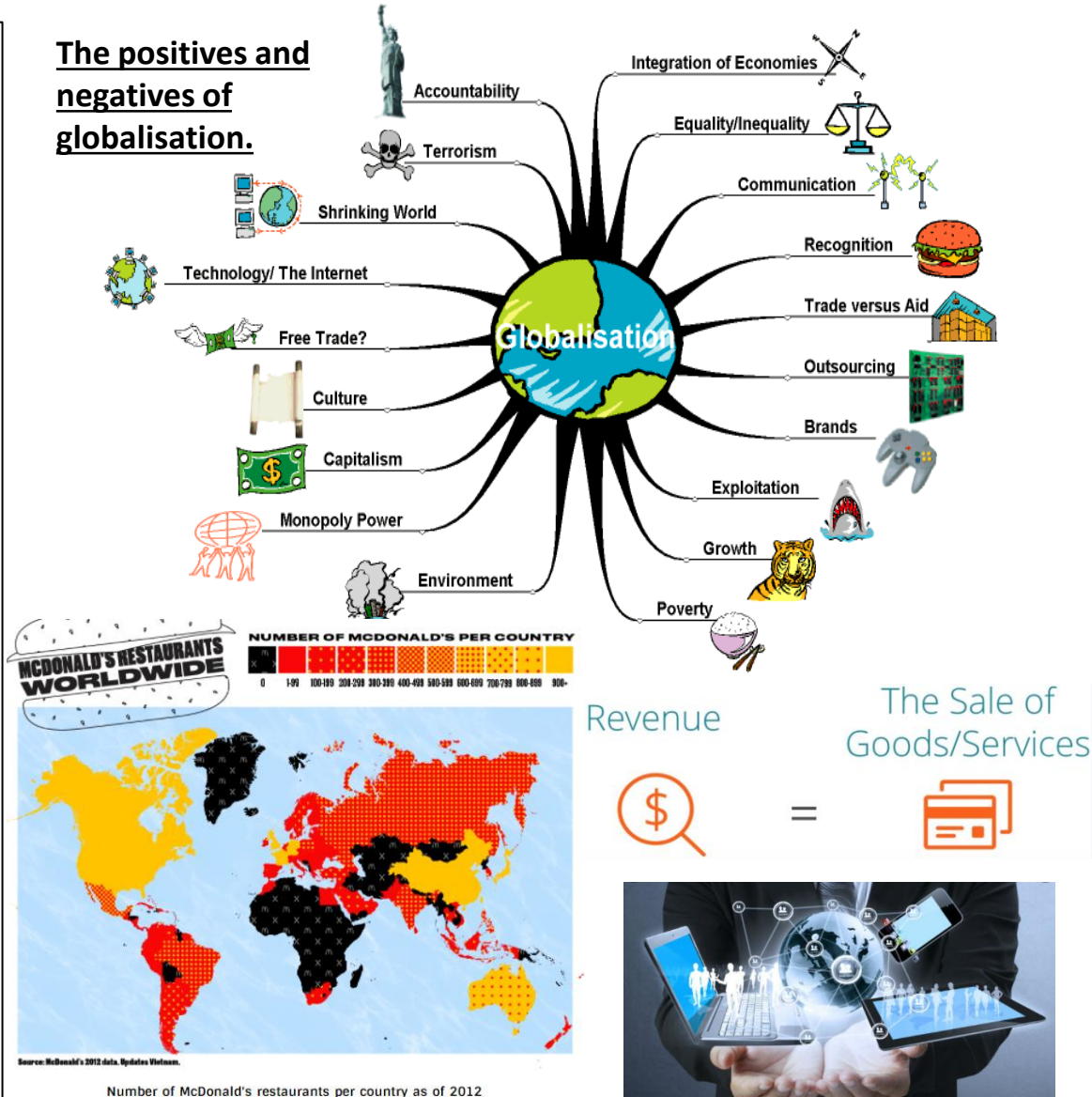
Outsourcing - to get a product or service from a supplier that is outside of the company.

Sweatshops – a factory or workshop, especially in the clothing industry, where manual workers are employed at very low wages for long hours and under poor conditions.

Trade – the buying and selling of goods and services between different countries around the world.

World Trade Organisation (WTO) - an international organisation concerned with the regulation of world trade.

The positives and negatives of globalisation.



Enrichment Opportunities:

Research the positive and negative impacts of an alternative MNC of your choice and create a table.

Extra challenge: Break the impacts down into social, economic and environmental. Are they a sustainable company?



1.1 Key Events

1897	NUWSS formed – Millicent Fawcett is the leader
1903	WSPU formed by Emmeline Pankhurst and daughters
1905	Militant campaign begins.
1908	Mass rally in London with up to 500,000 activists attending. Window-smashing using stones with written pleas on them
1909	Hunger strike and force feeding starts – Marian Wallace Dunlop becomes the first Hunger Striker
1913	Militant bomb and arson campaigns and increasing arrests, leading to the Cat and Mouse Act, under which hunger strikers are temporarily released then rearrested so that they don't die in police custody
1914	Emily Davison attempts to pin a Suffragette scarf onto the King's Horse at the Epsom Derby. She is struck by the horse and dies
1918	The Representation of the People act is passed, allowing men over the age of 21, and women who own property over the age of 30 to vote

1.2 Key People



Emmeline Pankhurst - WSPU

Led the WSPU from October 1903. Took more **militant** action such as windows smashing, **arson** and **hunger strikes**. Arrested numerous times, went on **hunger strike** and was force fed. Died in 1928.



Christabel Pankhurst - WSPU

Became a speaker for the WSPU in 1905. She trained as a lawyer but could not practice as woman. Arrested with her mother. Fled England in 1912 for fear of being arrested again. Unsuccessfully ran for Parliament in 1918.



Emily Wilding Davison - WSPU

Joined WSPU in 1906. 3 years later, left job as a teacher and became a **suffragette** full time. Frequently arrested for number of crimes inc. setting fire to post box. By 1911, became increasingly **militant**.



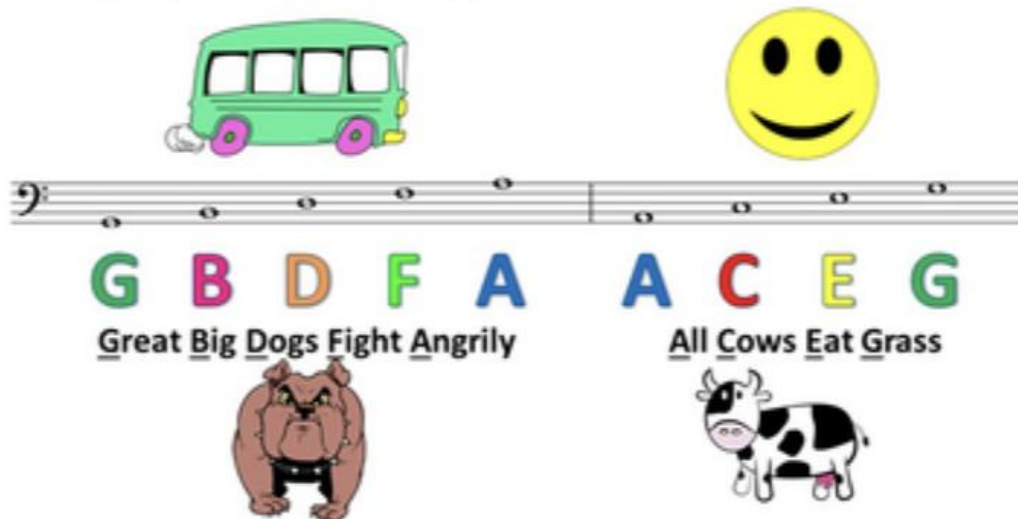
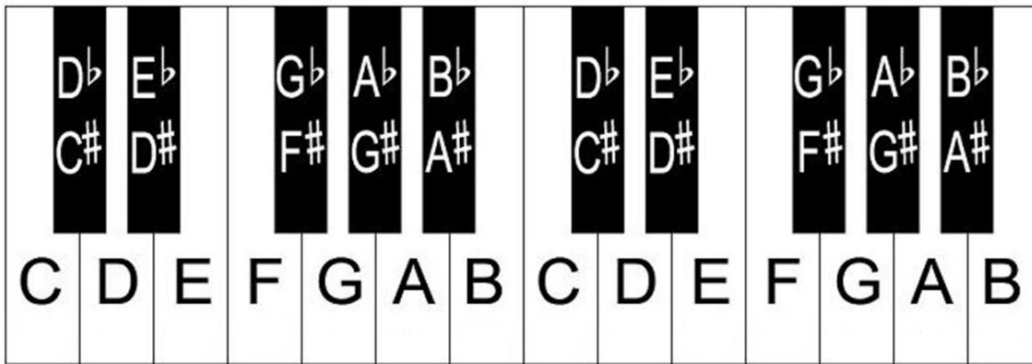
Millicent Fawcett - NUWSS

Leading **suffragist** and led NUWSS from 1897-1919. Played a key role in getting women the vote. Dedicated to using **constitutional** means, and argued that **militancy** was counter-productive.

1.3 Key Terms

Arson	The act of deliberately setting fire to something
Cat and Mouse Act	Permitted suffragettes on hunger strike to be released, but re-arrested once well again to complete their sentences
constitutional	A peaceful, legal way of campaigning, using methods such as petitions and pamphlets
enfranchisement	To be granted the vote
Force feeding	Imprisoned suffragettes on hunger strike were sometimes force fed, involving a rubber tube being inserted into the throat or nose and liquidised food being poured in
Hunger strike	Refusing to eat to raise awareness for their cause
manifesto	A public declaration or statement of the aims and methods of a particular group
militant	Aggressive and violent behaviour
NUWSS	National Union of Women's Suffrage Society – the Suffragists
pacifist	An individual who disagrees with war
petition	A formal written request or application, often signed by many people, to a particular individual or group, such as the government
suffrage	The right to vote in political elections
suffragette	A campaigner for women's suffrage willing to undertake militant action, or break the law
suffragist	A campaigner for women's suffrage who believes in non-violent methods of campaigning
WSPU	Women's Social and Political Union was formed when Emmeline Pankhurst didn't like the progress of the NUWSS. 'Deeds not words' was their slogan.

Piano Keys and Notes



Keyboard Chords



Play one – Miss one – play one – miss one – play one

MAD T-SHIRT

Melody – the tune, combination of different pitches of notes

Articulation – the way it is played

Dynamics – how loud the music is

Texture – layers of sound Thick / Thin

Structure – the order in which the music happens

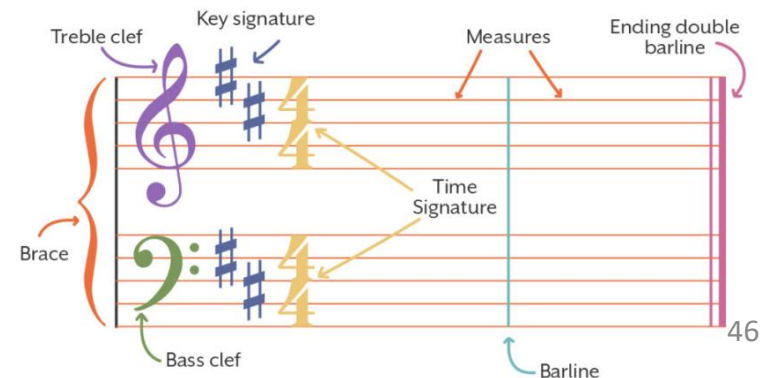
Harmony – How the notes sound together. **Chords**, notes played at the same time

Instrumentation – Ukulele, Vocals

Rhythm and Tempo – combination of long and short notes, fast or slow, **bpm** – Beats Per Minute

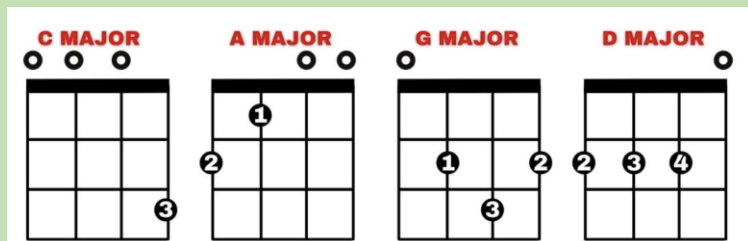
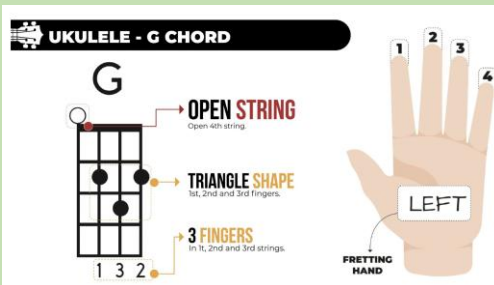
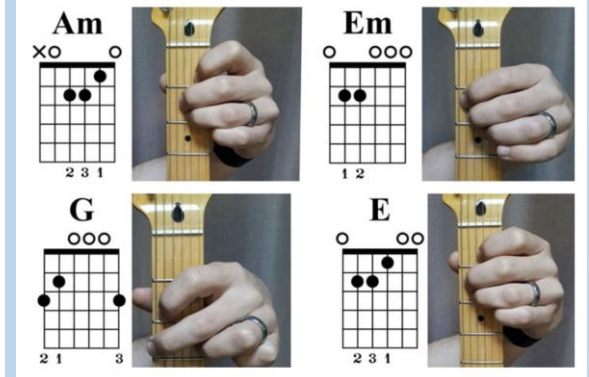
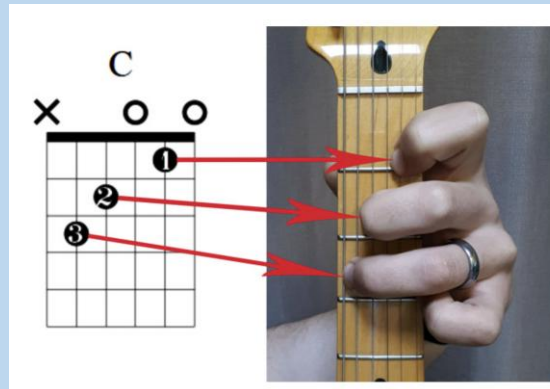
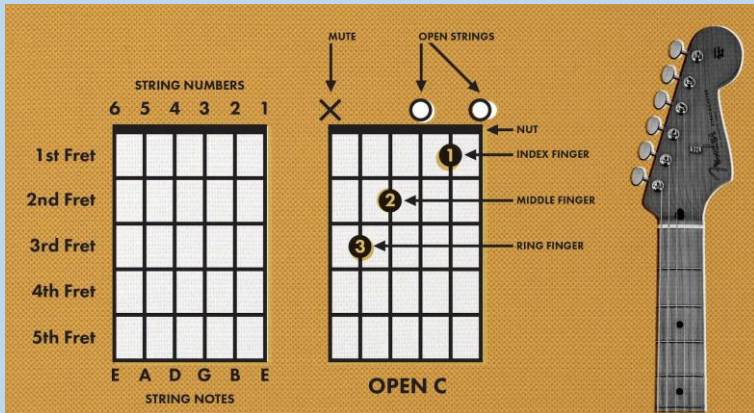
Timbre – the quality of the sound

Grand Staff

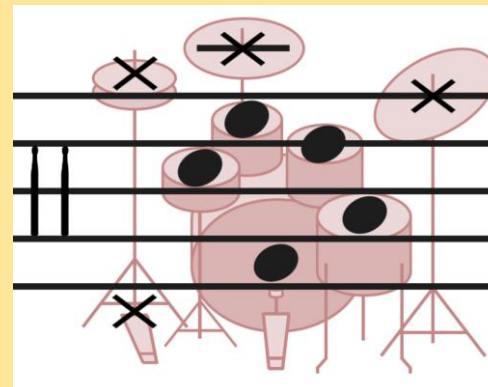




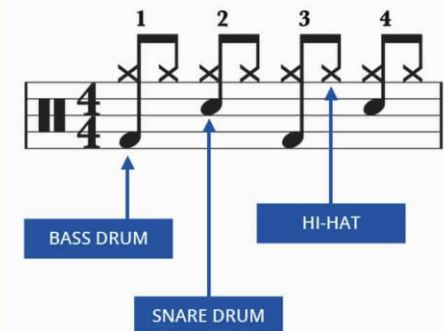
How to read Guitar Chords



















How to read Drum Tab


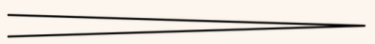


Standard 8th Note Groove








Time values			
NOTE	NAME	LENGTH (duration)	REST
	Semibreve	4 beats	
	Minim	2 beats	
	Crotchet	1 beats	
	Quaver	½ beats	
	Semiquaver	¼ beats	
A dot after the note increases its length by half:			
	Dotted minim		
	Dotted crotchet		
Groups of quavers/semiquavers are usually beamed together:			
 			

Dynamics					
<i>pp</i>	<i>p</i>	<i>mp</i>	<i>mf</i>	<i>f</i>	<i>ff</i>
PIANISSIMO	PIANO	MEZZO PIANO	MEZZO FORTE	FORTE	FORTISSIMO
very soft (v.quiet)	soft (quiet)	moderately soft	moderately loud	loud	very loud
 crescendo (cresc.) gradually getting louder			 diminuendo (dim.) gradually getting quieter		




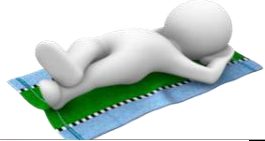



Tempo					
LARGO	LENTO/ ADAGIO	ANDANTE/ MODERATO	ALLGRETTO	ALLEGRO/ VIVACE	PRESTO
v.slow	slow	walking pace/ moderate	quite fast	quick/lively	very quick

Form and structure	
BINARY	A B
Two sections: A usually ends in a related key (e.g. dominant or relative minor), but B returns to the tonic. B will contain with some change/contrast.	
TERNARY	A B A
Three sections: section B provides a contrast (e.g. new tune key change). A may return exactly or with some slight changes.	
RONDO	A B A C A
A longer form: A returns throughout the piece, with contrasting sections called 'episodes', containing new ideas and using different keys.	

Texture	
MONOPHONIC	A single melodic line. 
HOMOPHONIC	A chordal style or melody and accompaniment: moving together. 
POLYPHONIC	A more complex (contrapuntal) texture with a number of different lines. 

The structure of a pop/rock song may include:
INTRO: short opening section, usually instrumental.
VERSE: same music but different lyrics each time.
CHORUS: repeated with the same lyrics each time (refrain).
MIDDLE EIGHT: a link section, often eight bars, with different musical ideas.
BRIDGE: a link/transition between two sections.
OUTRO: an ending to finish the song (coda).
*You may also hear a pre-chorus, instrumental interlude or instrumental solo.



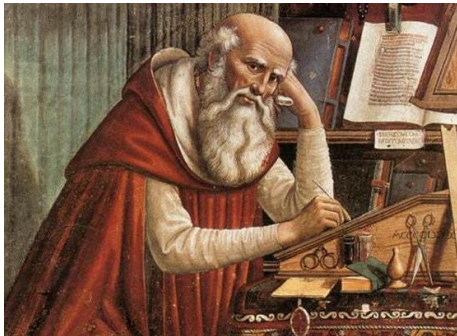
Injury prevention Method	Explanation	picture
Complete a warm-up	Warming up before exercising increases the temperature and elasticity of your muscle, tendons and ligaments , helping to prevent pulls, strains and tears	
Avoid overstretching	Stretching should be completed carefully without overstretching or bouncing as this can result in a muscle strain or tear	
Avoid overtraining	If you train too hard, positive adaptations will not take place e.g. lifting too heavy a weight can cause an injury such as a strain	
Take adequate rest	Rest allows the body to recover and adapt positively to training. Training programmes should include rest days to avoid over-use injuries	
Use taping or bracing	Taping and bracing can be used to provide additional support to joints and muscles that may have had prior injuries. E.g. an ankle support can reduce the chance of a twisted ankle (sprain)	
Remain hydrated	Drinking water helps the body to stay hydrated . Dehydration can lead to dizziness and nausea as well as muscular issues such as cramp	
Wear appropriate clothing and footwear	Ensure clothing and footwear is appropriate for the sport. E.g. wearing correct studs for football minimises slipping whilst a gum shield protects the teeth in boxing and rugby	

1.1 Key Vocabulary

Pacifist – Someone who believes in non-violence
Just War – A war fought for the right reasons and in the right way
Conflict Resolution – Bringing a fight or struggle to a peaceful conclusion
The United Nations – An international body set up to promote world peace
World peace – The ending of war throughout the world
Weapons of Mass Destruction – Weapons which can destroy large areas and numbers of people
Nuclear weapons - A bomb or missile that uses nuclear energy to cause an explosion.
Exploitation – Taking advantage of a weaker person or group
Extremism - Believing in and supporting ideas that are very far from what most people consider correct or reasonable.
Terrorism - The unlawful use of violence and intimidation, especially against civilians, in the pursuit of political aims.
Oppression – Malicious or unjust treatment or exercise of power by a government or authority
Liberation - The action of setting someone free from imprisonment, slavery, or oppression.
Liberation theology - A Christian approach to stand up for people who are the oppressed just like Jesus did.

1.2 Just War Theory

St Thomas Aquinas (1225 – 1274), a Catholic priest, developed the work of Augustine (a theologian and philosopher), on the rules around going to war. Augustine argued that war could be allowed if certain conditions were met. Aquinas put those into 6 principles:



^ Augustine of Hippo



^ St. Thomas Aquinas

Revision suggestions:

- 1) Create revision cards or fold outs for each of the religions. On these make notes about some of the main religious views on war and conflict.
- 2) Create your own quiz about religious views on war and conflict and ask a family member or friend to test you. The words that are in bold are important key terms so you could focus on them.

50

A JUST WAR MUST MEET THESE REQUIREMENTS

1. A LAST RESORT

Only if ALL peaceful methods fail

2. A JUST CAUSE

Must correct a grave, immediate, ongoing evil

3. VALID AUTHORITY

Must arise from a consistent policy or principle

4. PROBABLE SUCCESS

Men can't be sent to die hopelessly

5. PROPORTIONALITY

Force must be proportionate, and no more than necessary

6. EXIT STRATEGY

It must be fought fairly and end as quickly as possible



1.3 Religious views on war

Christianity

- The *Bible* does not give Christians a clear answer about whether war is permitted or not, but it has a lot to say about *justice*, the *sanctity of life* (how special life is), the importance of resolving conflict and working for peace.
- Some Christians are **pacifists** and believe that war is never justified because Jesus taught many teachings about non-violence. In the Bible it says;

‘Love your enemies and pray for those who persecute you.’ Matthew 5:44

‘If anyone strikes you on the right cheek, turn to him the other also.’ Matthew 5:39
- However, some Christians believe fighting for your country is important if it is to protect others. In these circumstances **The Just War Theory** would apply. In the Bible it says;

‘Defend the rights of the poor and orphans; be fair to the needy and helpless. Rescue them from the power of evil men.’ Psalm 82

Islam

- In Islam there is a concept called *Jihad*: **Greater jihad** is the personal, inner struggle to be a good Muslim. **Lesser jihad** is about defending Islam from threat.
- While the majority of Muslims see their religion as one of peace, sometimes Muslims have taken up arms against enemies when they or other Muslims have been *persecuted*. The Qur’an says:

‘Permission [to fight] has been given to those who are being fought, because they were wronged. And indeed, Allah is competent to give them victory’ Surah 22:39
- While the Qur’an allows violence to defend Islam, it warns against going beyond the limits of what is necessary for this defence and every opportunity should be seized to make peace with an enemy :

‘Fight in the way of Allah those who fight against you but do not transgress. Indeed, Allah does not like transgressors’ Surah 2:190

‘If the enemy is inclined towards peace, do make peace with them, and put your trust in Allah. He is the One Who hears all, knows all’ Surah 8:61
- Any form of war must be approved by a religious leader, fought in self-defence and not used to either convert people to Islam or gain land. Islam teaches that lesser jihad can never be used to justify terrorist attacks. Strict rules exist about how lesser jihad can be carried out. For instance: 1. It must be in defence of Allah. 2. No harm must be done. 3. Peace must be restored. 4. Mercy must be shown.

Hinduism

- Opinion is divided amongst Hindus about war and the use of violence. On the one hand, the ***Bhagavad Gita*** teaches that it is important to follow **dharma**. Therefore, it may be the duty of some Hindus, particularly those whose **varna (caste)** is **Kshatriya (warrior caste)** to fight wars.

‘If you do not engage in this righteous battle then both your personal dharma and your honour will be destroyed, and you will accumulate sin’

Bhagavad Gita 2:33
- Some Hindus also believe that **atman** is indestructible means that ending a life to protect others or in defence is acceptable.
- Some Hindus believe that violence in any form is wrong and a bad action, whether it be fighting in a war or harming a small living creature. Some Hindus follow **Mahatma Gandhi’s** teaching about war and violence:

‘I see neither bravery nor sacrifice in destroying life or property for offence or defence.’ Mahatma Gandhi

Buddhism

- The **Five Precepts** are moral guides that all Buddhists try to follow. The first is to abstain from taking life. Buddhists must show *compassion* and help all living beings. They must abandon any fight that crosses their path.
- The **Noble Eightfold Path** teaches **right speech** and not engage in an argument which might result in a physical fight.
- **Ahimsa** is the principle of 'non-harm'. Most Buddhists try to practice **ahimsa** in their everyday lives and believe that it is wrong to show violence at any time. This means that it is possible that a Buddhist may therefore refuse to fight under any circumstances. Some Buddhists are **pacifists**, even when it comes to self-defence.
- **Shaolin** is a well-known form of *martial art* which has very strict rules about how violence can be used. The Shaolin teaching forbids the Buddhist *monk* from ever being the *aggressor*. This type of martial art is a form of self-defence and uses physical skill to avoid harm.

Date	KO*	WB*	Case*	Date	KO*	WB*	Case*
3/11				1/12			
4/11				2/12			
5/11				3/12			
6/11				4/12			
7/11				5/12			
10/11				8/12			
11/11				9/12			
12/11				10/12			
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14/11				12/12			
17/11				15/12			
18/11				16/12			
19/11				17/12			
20/11				18/12			
21/11				19/12			
24/11							
25/11							
26/11							
27/11							
28/11							

*Knowledge Organiser * Whiteboard * Pencil Case

RUBBER

You should also have:

- Reading book
- Calculator
- Headphones
- Protractor
- Sharpener
- Compass
- (no scissors)



PENCIL

WHITEBOARD PEN

GREEN PEN

BLACK PEN

You should also have when needed:

- Ingredients

- PE kit

- Completed homework

RULER

You can borrow core items without penalty between 8.30-8.45am before passing your Head of Year