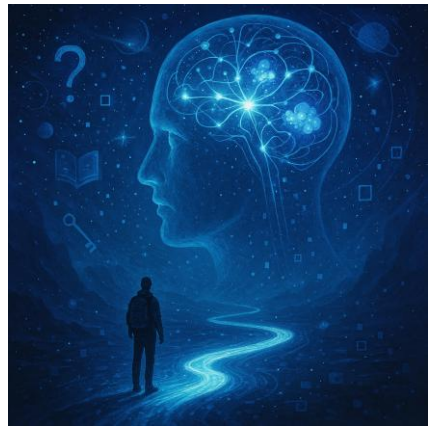
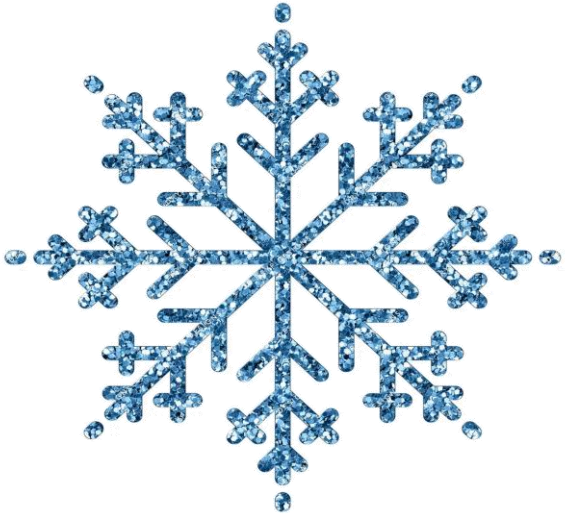
YEAR 9



BHA's Knowledge Quest

Autumn 2
(Nov - Dec)
2026-2027



Bristnall Hall Academy

How to use your

Knowledge Quest Booklet

To support you in making progress in each of your lessons, your teachers have produced Knowledge Organisers which contain all of the main facts, knowledge and information that you need to know to be successful and make progress this half term. There are lots of ways to use these Knowledge Organisers, but the most important thing is that you are revising the knowledge and you are able to recall it in your lessons. Please see below details of how to use this booklet; what your half termly homework looks like and how to secure lots of positive Class Charts points!

English: 30 minutes of Sparx Reader, every week.

Maths: 30 minutes of Sparx Maths, every week.

Science: 30 minutes of Seneca Science, every week.
MFL: 1 list of vocabulary to learn for a test in lesson AND 1 quiz to complete on Language Nut, MFL platform every fortnight.
History: 30 minutes of Seneca revision, every week. Additional revision provided for assessments.
Geography: 1 hour of Seneca per fortnight.
RE: Holistic quiz using Knowledge Organiser and lesson on teams, every 4 weeks.
PSHE: Independent self quizzing from Knowledge Organiser.
DT: Food Studies- Seneca assignment set as part of each 9-week rotation.

Art: To research/find and create resource images for projects when required.

All other subjects: Revise the information in this booklet using the revision sheets included with each subject.

Timetable

Use this page to copy out your lessons and room numbers

	W1 Mon	W1 Tues	W1 Wed	W1 Thurs	W1 Fri	W2 Mon	W2 Tues	W2 Wed	W2 Thurs	W2 Fri
1										
2										
3										
4										
5										
6										

Enrichment and Intervention 2026-27 Term One

Autumn Term

	Monday	Tuesday	Wednesday	Thursday	Friday
Breakfast 7.45am – 8.30am	Start Right Club Library open	Start Right Club Library open Computer room access JSI Room 31 8am- 8.30am	Start Right Club Library open Computer room access JSI Room 31 8am- 8.30am	Start Right Club Library open Computer room access JSI Room 31 8am- 8.30am	Start Right Club Library open Computer room access JSI Room 31 8am- 8.30am
Lunch 12.45pm – 1.15pm	Yr 9 MUGA Yr 11 Library Yr 11 Rock Band- SWE- Room 36 Yr 7 Table Tennis Yr 7-10 Art Club EF Room 26	Yr 11 MUGA Yr 10 Library Yr 8 Table Tennis Yr 8 – Cyber Girls Competition - room 62 – JMole (Start OCT)	Yr 10 MUGA Yr 9 Library Y7-10 Singing Stars- SWE- Room 36 Yr 9 Table Tennis Yr 8 – Cyber Girls Competition - room 62 – JMole (Start OCT)	Yr 8 MUGA Yr 8 Library Yr 10 Table Tennis Yr 8 – Cyber Girls Competition - room 62 – JMole (Start OCT)	Yr 7 MUGA Yr 7 Library Yr10/11 Music Coursework catch- up SWE- Room 36 Yr 11 Table Tennis
Period 7 Monday Tuesday Thursday 3.30pm – 4.30pm	Year 11 Geography /History Intervention Yr 7 –10 Sparx Maths Club – EMU / RMI Room 10 Yr 7–10 Cooking Club MS/CC Room 45	Year 11 English and Math Intervention Yr 7 – 10 Contemporary Dance Club CG Dance Studio Yr 7 – 10 Digital Skills MCA Room 43 Yr 7–10 Crochet Club JWE Room 53	Year 11 Open / MFL Subject Intervention Week 1: **C Block** Week 2: **B Block** Yr 7–10 Chess Club XIS Rm 12 Yr7-10 Latin Club for Beginners AA Room 58 Yr 7–10 Crochet Club JWE Room 53/54	Year 11 Science Intervention Yr 7-10 Rep Theatre – Performing Arts Club Room 38 Yr 10 Rock Band SWE- Room 36 Yr7-10 Learn Russian RM Room 57	Y7-Y11 SEND Master Builder LOM Lower School Hall Y7-Y11 SEND BHA Mic Drop BKA/NBI Room 3 Y7-Y11 Dungeons and Dragons PCR Room 5
Wednesday Friday 2.35pm – 3.35pm	Term 1 full but sign up for term 2 available Yr 7 Football LSM/EBR Field Yr 7-10 Trampolining GHO Small Gym Yr 7 – 10 Table tennis ADA Large Gym Yr 7 – 10 Science Experimental Club JTA / SEL Room 48 Yr 7 – 10 Sparx Reader Club LOM/ADi Room 31 Yr 7- 10 Karaoke Club JRO Dance Studio	Yr 7 – 10 Beyond the Books- Reading Club FHU Room 24 Yr 7 – 10 Fantastic Films and Brilliant Books- Writing Reviews FBA- Room 23 Yr 8 Football WTH Field Yr 7-10 Netball GHO Large Gym Yr7-10 Basketball JSM MUGA Yr 7-10 Board Game Club KGO Room 38 SEND Cooking Club MS / CCR Room 45 Y10iMedia Skills Lab HA Room 10	Yr 7-10 Studio G- Tech Club SWS Room 43 Yr 7 – 10 The Forum- Debate and Ideas Society BED Room 38 Yr 7 – 10 The story Forge Creative Writing Club SBS Room 24 Yr 7 – 10 Uno Club QSM Room 23 Yr10 Science Intervention ASI Room 40 Yr 9/10 Football JSM/WTH Field Yr 7 – 10 Netball ADA MUGA Yr 7 – 10 Make a War Film Club DL Room 22 Yr 7 – 10 Homework Club KJO/JRE Room 15 with laptops Yr 7 – 10 Boards of Fame- Board game club MSH/NBI Room 55 Yr 7 – 10 WBA Multi Skills SJO Back Playground	Yr7-10 Latin Club Legacy Cohort AA Room 60 Yr10 Geography Intervention SHO Room 1 Yr 7–10 Girls Football ADA Field Yr 7–10 Trampolining GHO Small Gym Yr 7–10 Basketball JSM MUGA Yr 7–10 Table tennis WTH Large Gym Y7-10 Task Master, GEG Room 28 Y7–10 Boccia Ballers HCL/NBI Dance Studio SEND Art Attack CC/MS Room 3 Y10 Additional Reading Comprehension (Invite Only) Room 53, LOM/ADi	Y7-Y11 Friday Film Club Room 16 RBE
			Y10 Additional Literacy JPG Room 52 Y10 Computer Science - JMole – Room 62/10 (Invite Only) KS3/4 – Pilot School – Room 62 – J Mole/H Anderson (Limited Spaces) To launch later		

Academic	**Creative**	**Physical**
☐ All Intervention Classes or Coursework catch up ☐ Beyond the books reading club ☐ Chess Club ☐ Fantastic Films and Brilliant Books Review ☐ The Forum Debate and Ideas Society ☐ Homework Club ☐ Latin Club (Beginners and Legacy) ☐ Learn Russian Club ☐ Science Experimental Club ☐ Sparx Maths ☐ Cyber Girls Computing ☐ Task Master	☐ Digital Skills ☐ REP Theatre - Performing Arts ☐ Rock Band ☐ Studio G Tech Club ☐ Singing Stars Lunch Club ☐ Art Lunch Club ☐ Crochet Club Tue/Wed ☐ Cooking Club ☐ Make a War Film Club ☐ Dungeons and Dragons ☐ The Story Forge Creative Writing Club ☐ Friday Film Club ☐ Mic Drop ☐ Art Attack ☐ Masterbuilder The Big Build- Lego Club ☐ Boards of Fame – Board Game club ☐ Uno Club ☐ Task Master	☐ Contemporary Dance ☐ Football ☐ Trampolining ☐ Table Tennis ☐ Basketball ☐ Netball ☐ Boccia Ballers ☐ WBA MultiSkills ☐ Task Master

Dates to remember this half term:

November

December

Attendance record



Week	Attendance %
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	

Sparx Check!

Remember to click: 'Login with Microsoft' using your academy email address and password!

In the boxes below, write the XRP score that you achieved for each subject. Your form tutor will award you additional CC points for the more XRP points you achieve in addition to the set points for each weekly homework.

	Sparx Reader Points:	Sparx Maths Points:
Week 1		
Week 2		
Week 3		
Week 4		
Week 5		
Week 6		
Week 7		
Total this half term:		

Seneca Check!

Remember to click: 'Login with Microsoft' using your academy email address and password!

In the boxes below, write the titles of the assignments that you complete for each subject and your overall percentage scores. Your form tutor will award you additional CC points for the highest percentages you achieve in addition to the set points for each weekly homework.

	Science Assignments:	History Assignments:	Geography Assignments:
Week 1			
Week 2			
Week 3			
Week 4			
Week 5			
Week 6			
Week 7			
Total assignments completed this half term:			

Language Nut Check!

Remember to click: 'Login with Microsoft' using your academy email address and password!

In the boxes below, write out how many points you have achieved from your weekly homework. Your form tutor will award you additional CC points for the highest scores you achieve in addition to the set points for each weekly homework.

	MFL Homework:
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	
Total assignments completed this half term:	

Independent Study Check!

Your form tutor and your parent/carer will also check that you are completing your independent study within this booklet. Additional positive CC points will be awarded for beautiful presentation and your ability to demonstrate a strong recall of the knowledge within this booklet.

	End of Half term Form Tutor Check:	Parent/Carer Check:
Independent Study Completed?		
Beautiful Presentation?		
Recall of Knowledge?		

Personal Reflection: What are you most proud of within your Independent Study Booklet?

_____

_____

_____

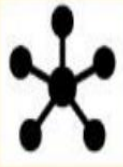
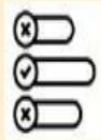
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Homework Log

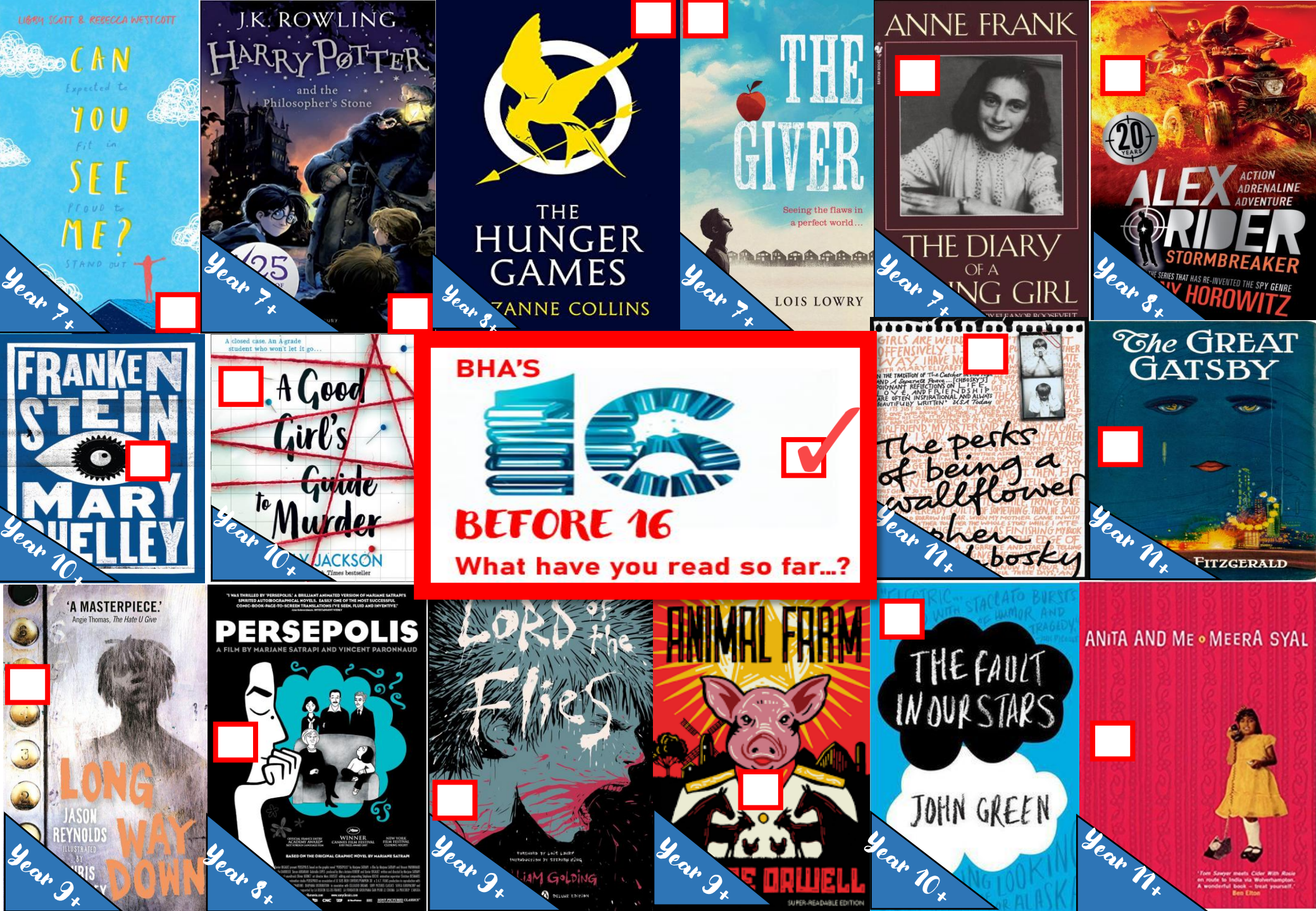
Use this page to record any homework this half term

Subject	**Date Due:**	**Additional Notes:**

	Look, Cover, Write, Check	Definitions to Key Words	Flash Cards	Self Quizzing	Mind Maps	Paired Retrieval
Step 1	Look at and study a specific area of your knowledge organiser. 	Write down the key words and definitions. 	Use your knowledge organiser to condense and write down key facts and or information on your flash cards. 	Use your knowledge organiser to create a mini quiz. Write down questions using your knowledge organiser. 	Create a mind map with all the information you can remember from your knowledge organiser. 	Ask a partner or family member to have the knowledge organiser or flash cards in their hands. 
Step 2	Cover or flip the knowledge organiser over and write down everything you remember. 	Try not to use your knowledge organiser to help you 	Add pictures to help support. Then self quiz yourself using the flash cards.. You can write questions on one side and answers on the other. 	Answer the questions and remember to use full sentences. 	Check your knowledge organiser to see if there were any mistakes with the information you have made. 	They can test you by asking you questions on different sections of your knowledge organiser. 
Step 3	Check what you have written down. Correct any mistakes in green pen and add anything you missed. Repeat. 	Use your green pen to check your work. 	Use a parent/carer or friend to help quiz you on the knowledge. 	You can also use family to help quiz you. Keep self quizzing until you get all questions correct. 	Try to make connections that links information together. 	Write down your answers. 



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Year 7+
Year 7+
Year 8+
Year 7+
Year 7+
Year 8+
Year 10+
Year 10+
BHA'S
BEFORE 16
What have you read so far...?
Year 11+
Year 11+
Year 9+
Year 8+
Year 9+
Year 9+
Year 10+
Year 11+

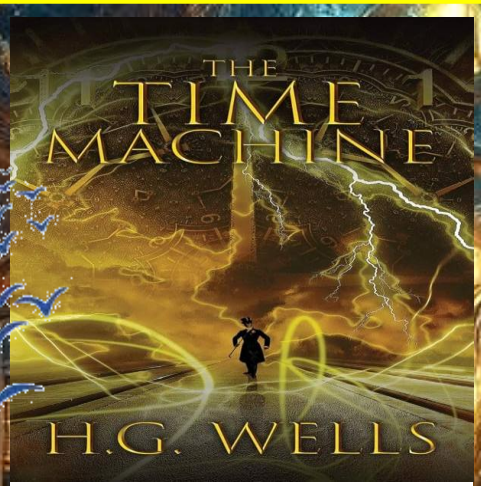
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MFL	8-10
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Art	17-18
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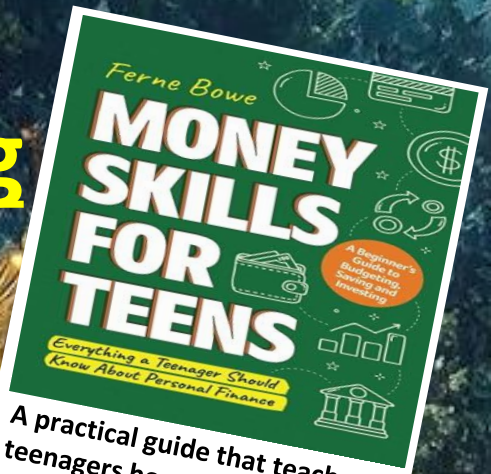
YEAR 9
Recommended Reading



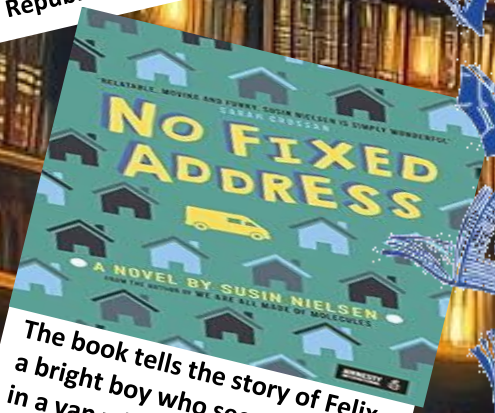
The book explores the rise of Nazi Germany through the diaries, letters and accounts of foreign visitors. By examining their experiences and observations, the book reveals how ordinary people witnessed Germany's transformation from the Weimar Republic into a totalitarian state.



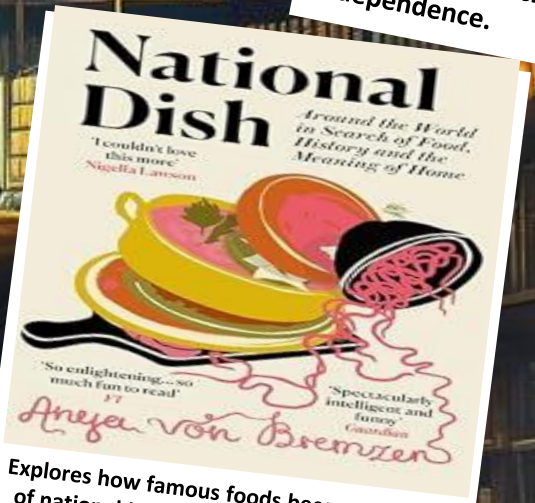
A scientist who travels far into the future using a Time Machine. There, he discovers a world divided between two very different societies and learns important lessons about humanity, progress and the consequences of social inequality.



A practical guide that teaches teenagers how to manage money wisely. Covering topics such as budgeting, saving, investing and avoiding financial mistakes, it helps young people build the skills and confidence needed for financial independence.



The book tells the story of Felix, a bright boy who secretly lives in a van with his mother after they become homeless. As he struggles to keep their situation hidden, Felix hopes that winning a television quiz show could change their lives, while learning the value of friendship, resilience and asking for help.



Explores how famous foods become symbols of national identity. Through travels across countries including France, Italy, Japan, Mexico and Turkey, von Bremzen combines food, history and culture to reveal how cuisine shapes our sense of place, heritage and belonging.

Challenge yourself by reading these topic-related books for this half term!

Year 9 Knowledge Organiser: *Make Your Voice Heard*: non-fiction speeches and the language of protest

English

Word/term	Definition	Example
alliteration	The repetition of usually initial consonant sounds in two or more neighbouring words or syllables	wild and woolly, threatening throngs
anadiplosis	Repetition of the last word in one phrase or clause at the beginning of the next	rely on his honour- honour such as his?
anaphora	Repetition of a word or expression at the beginning of successive phrases, clauses, sentences, or verses especially for rhetorical or poetic effect	we cannot dedicate—we cannot consecrate—we cannot hallow—this ground
epistrophe	Repetition of a word or expression at the end of successive phrases, clauses, sentences, or verses especially for rhetorical or poetic effect	of the people, by the people, for the people
hyperbole	Extravagant exaggeration	mile-high ice-cream cones
hypophora	When the writer answers their own rhetorical question.	How can we change this? We can change this by protesting for change.
metaphor	A figure of speech in which one thing is compared to another by saying it IS something that it cannot literally be	Drowning in money
oxymoron	Two contradictory words placed next to each other	Cruel kindness
imagery	Imagery is visual symbolism, or figurative language that evokes a mental image or other kinds of sense impressions, especially in a literary work.	So black no sky could squeak through
Direct address	Using 'you' or 'your' to directly address the reader or listener	The power is in your hands
allusion	Indirect references to well known things such as the Bible, a well known movement/event/person	We saw our country tear itself apart in a terrible conflict (allusion to apartheid)
Triple/tricolon	A three part sentence structure/list of three words of the same word class for effect.	Be sincere, be brief, be seated.
Antithesis	Balanced use of opposites in successive clauses or sentences	Write quickly and you will never write well, write well and you will soon write quickly. Fail to plan, plan to fail
Parallelism	Parallelism is a component of literary style in both prose and poetry, in which coordinate ideas are arranged in phrases, sentences, and paragraphs that balance one element with another of equal importance and similar wording.	You can fool all the people some of the time, and some of the people all the time, but you cannot fool all the people all the time.

Disciplined discussion

Why do you agree with this statement? **A**

In what way do you agree with the point? Explain why
I agree because…
I would argue the same because…
That is an interesting idea I like that idea because…
I feel the same as you…

What can you add to this point? **B**

Can you build on the point? Develop your reasons.
I would like to add…
I would like to develop the point by including…
Building on X's point…
I feel that I need to also include...
In addition, I think we should also consider…

Why might you disagree? **C**

How can you challenge the point? Offer an alternative.
I would like to challenge this because…
I have a different view about…
I don't agree because . . .
I think an alternative point…
I have to disagree with that point…
I take your point. but you need to look at…
I would like to invite you to see this differently…

Section of speech	Contents – key ideas, methods, message
Introduction	
1 Reason 1	
2 Reason 2	
SHUT DOWN!!!	
Solution	
Call to action	

Have you used DAFOREST?

- **D**irect address/Dynamic verbs
- **A**lliteration/anecdote
- **F**act/figurative language
- **O**pinion
- **R**hetorical question
- **E**motive language
- **S**tatistic/simile/satire
- **T**riple

Key word	Meaning
cohesion	the action or fact of forming a united whole.
sacrifice	give up (something valued) for the sake of something else.
unity	the state of being united or joined as a whole
democracy	a system of government in which power is held by elected representatives who are freely voted for by the people
discord	disagreement between people
indifference	lack of interest, concern, or sympathy
conformity	behaviour in accordance with socially accepted conventions or rules

LOGOS
Logic/Reason
Your writing must be logically structured and contain factual information as proof.

PATHOS
Emotions/Values
Your writing must contain language that makes an audience feel a particular emotion, stories and appeals to the audience.

ETHOS
Credibility/Trust
Your writing must present you as an expert on the topic with similar beliefs to your audience.

Page 2

YEAR 9 – CONSTRUCTING IN 2D/3D...

3D Shapes

Maths

What do I need to be able to do?

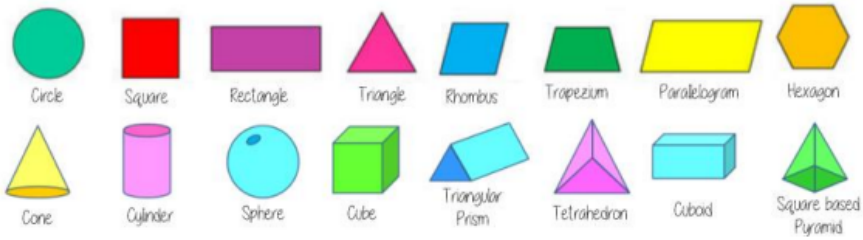
By the end of this unit you should be able to:

- Name 2D & 3D shapes
- Recognise Prisms
- Sketch and recognise nets
- Draw plans and elevations
- Find areas of 2D shapes
- Find Surface area for cubes, cuboids, triangular prisms and cylinders
- Find the volume of 3D shapes

Keywords

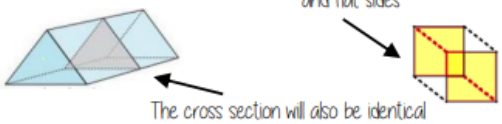
2D: two dimensions to the shape e.g length and width
3D: three dimensions to the shape e.g length, width and height
Vertex: a point where two or more line segments meet
Edge a line on the boundary joining two vertex
Face: a flat surface on a solid object
Cross-section: a view inside a solid shape made by cutting through it
Plan: a drawing of something when drawn from above (sometimes birds eye view)
Perspective: a way to give illustration of a 3D shape when drawn on a flat surface.

Name 2D & 3D shapes



Recognise prisms

A solid object with two identical ends and flat sides

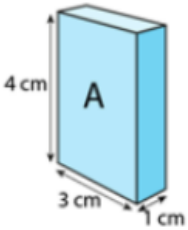


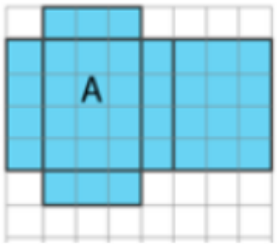
The cross section will also be identical to the end faces



A cylinder although with very similar properties does not have flat faces so is not categorised as a prism

Nets of cuboids

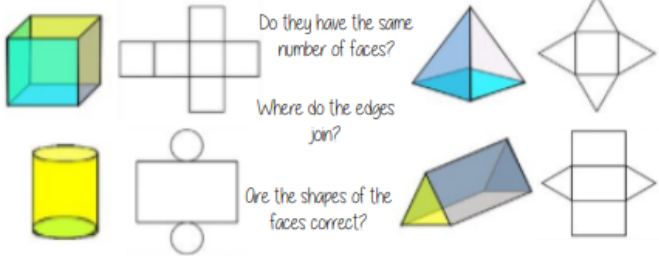




1cm grids help to draw accurately

Visualise the folding of the net. Will it make the cuboid with all sides touching

Sketch and recognise nets

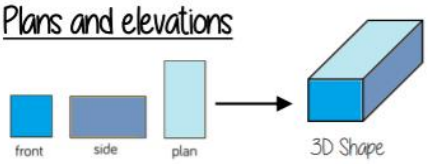


Do they have the same number of faces?

Where do the edges join?

Are the shapes of the faces correct?

Plans and elevations



The direction you are considering the shape from determines the front and side views

Area of 2D shapes

R

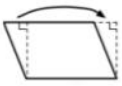
Rectangle
Base x Height



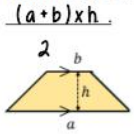
Triangle
½ x Base x Perpendicular height



Parallelogram/ Rhombus
Base x Perpendicular height



Area of a trapezium
$\frac{(a+b)\times h}{2}$

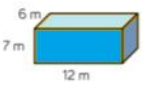


Area of a circle
π x radius^2



Surface area

Sketching nets first helps you visualise all the sides that will form the overall surface area



For cubes and cuboids you can also find one of each face and double it

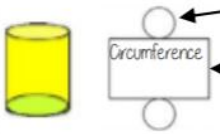
Sides	6 x 7 6 x 7	Sum of all sides is surface area
Front and back	12 x 7 12 x 7	
Top and Bottom	12 x 6 12 x 6	



For other shapes - not all the sides are the same, so calculate the individually

Surface area - cylinders

The area of the circle
π x radius^2



The width of this face is the same as the circumference
π x diameter x height

2 x π x radius^2 + π x diameter x height

Volumes

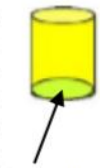
Volume is the 3D space it takes up – also known as capacity if using liquids to fill the space



Counting cubes
Some 3D shape volumes can be calculated by counting the number of cubes that fit inside the shape.

Cubes/ Cuboids = base x width x height

Remember multiplication is commutative



Prisms and cylinders = area cross section x height

Height can also be described as depth

Areas – square units
Volumes – cube units

Areas and volumes can be left in terms of pi π

YEAR 9 – REASONING WITH NUMBER...

Maths

Using Percentages

What do I need to be able to do?

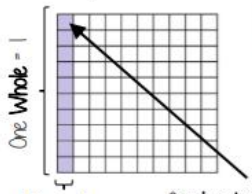
By the end of this unit you should be able to:

- Use FDP equivalence
- Calculate percentage increase and decrease
- Express percentage change
- Solve reverse percentage problems
- Solve percentage problems (calculator and non calculator problems)

Keywords

Percent: parts per 100 – written using the % symbol
Decimal: a number in our base 10 number system. Numbers to the right of the decimal place are called decimals
Fraction: a fraction represents how many parts of a whole value you have.
Equivalent: of equal value
Reduce: to make smaller in value
Growth: to increase/ to grow
Integer: whole number, can be positive, negative or zero
Invest: use money with the goal of it increasing in value over time (usually in a bank)
Multiplier: the number you are multiplying by
Profit: the income take away any expenses/ costs

FDP Equivalence (R)



Percentage
100% = a whole = 100 hundredths

10 hundredths
10 out of 100
10%

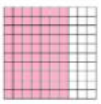
$\frac{10}{100} = \frac{1}{10} = 0.10$

One **hundredth** (one whole split into 100 equal parts)

ones	tenths	hundredths
	•	●

Converting FDP (R)

$\frac{70}{100}$ → This also means 70 ÷ 100 → 70 out of 100 squares → **70 "hundredths"** = **7 "tenths"** = 0.7



→ 70 hundredths = 70%

Using a **calculator**

$\frac{\blacksquare}{\square}$ → S⇔D Convert to a decimal

× **100** converts to a percentage

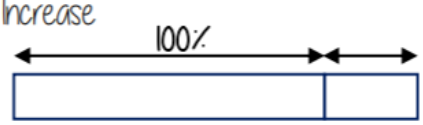
Be careful of recurring decimals
e.g. $\frac{1}{3} = 0.3333333$
$= 0.\dot{3}$
The dot above the 3

Percentage Increase/ Decrease (R)

Decrease



Increase

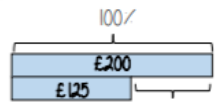


100 – 0.58 = 0.42 ← **Multiplier** Less than 1

100% + 12% = 112%
100 + 0.12 = 1.12 ← **Multiplier** More than 1

Percentage change (R)

I bought a phone for £200. A year later sold it for £125.



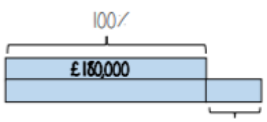
All values of change compare to the ORIGINAL value

Percentage loss

$\frac{75}{200} \times 100 = 37.5\%$

$$\frac{\text{Difference in values}}{\text{Original value}} \times 100$$

I bought a house for £180,000, I later sold it for £216,000.



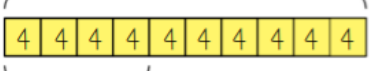
Percentage profit

Money made (profit value) → $\frac{36000}{180000} \times 100 = 20\%$

Reverse Percentages

40% of my number is 16. What am I thinking of?

Original Number (100%)

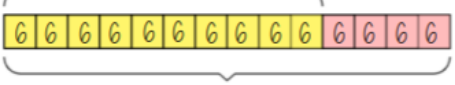


16

40% = 16
10% = 4
100% = 40

140% of my number is 84. What is the original number?

Original Number (100%)



84

140% = 84
10% = 6
100% = 60

Try to scale down to 10% or 1% and then scale back up to 100%

Within the 'brain dump', add all the knowledge you can remember from ***English*** and ***Maths*** without looking back at the sheets. Once you have added everything you can remember, look at these pages again and using a different colour pen, add in the knowledge that you missed out. This is the knowledge you should now continue to revise. Continue this process until you can remember everything on the page.



BRAIN DUMP

Science

AQA Combined Science: Physics Topic 3 Particle Model of Matter

Particles

Solids have strong forces of attraction. They are held together very closely in a fixed, regular arrangement. The particles do not have much energy and can only vibrate.



Liquids have weaker forces of attraction. They are close together, but can move past each other. They form irregular arrangements. They have more energy than particles in a solid.

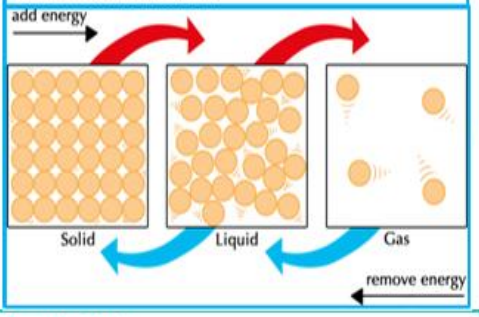


Gases have almost no forces of attraction between the particles. They have the most energy and are free to move in random directions.



The kinetic theory of matter

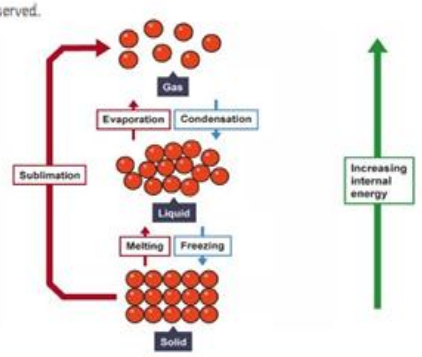
The level of energy of the particles in a material determines what state of matter that material is.



Changing State

If a system gains more energy, it can lead to a change in temperature or change in state. If the system is heated enough, then there will be enough energy to break bonds.

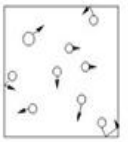
When something changes state, there is no chemical change, only physical. No new substance is formed. The substance will change back to its original form. The number of particles does not change and mass is conserved.



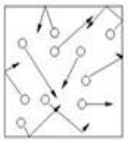
Particles

Gas particles can move around freely and will collide with other particles and the walls of the container. This is the pressure of the gas.

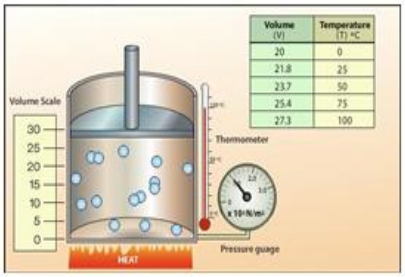
If the temperature of the gas increases, then the pressure will also increase. The hotter the temperature, the more kinetic energy the gas particles have. They move faster, colliding with the sides of the container more often.

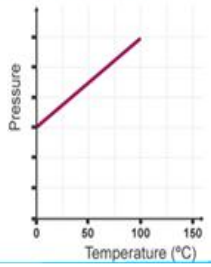


Cool gas, fewer and less energetic collisions



Hot gas, more and more energetic collision



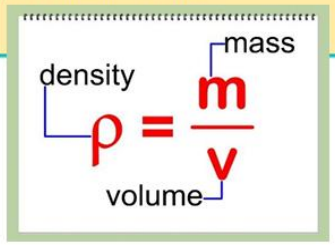


Density

Density is a measure of how much mass there is in a given space.

Density (kg/m³) = mass (kg) ÷ volume (m³)

A more dense material will have more particles in the same volume when compared to a less dense material.



Page 6

Density

The density of an object is 8050kg/m³ and it has a volume of 3.4m³ - what is its mass in kg?

8050 = mass ÷ 3.4

8050 × 3.4 = mass

27 370kg

Required Practical

Measuring the density of a regularly shaped object:

- Measure the mass using a balance.
- Measure the length, width and height using a ruler.
- Calculate the volume.
- Use the density (ρ = m/V) equation to calculate density.

Measuring the density of an irregularly-shaped object:

- Measure the mass using a balance.
- Fill a eureka can with water.
- Place the object in the water - the water displaced by the object will transfer into a measuring cylinder.
- Measure the volume of the water. This equals the volume of the object.
- Use the density (ρ = m/V) equation to calculate density.



Measuring the density of a liquid:

- Measure mass of the empty beaker with a balance
- Add the liquid and measure the mass of the liquid and beaker
- Calculate the mass of the liquid (mass of the liquid and beaker - mass of the empty beaker
- Measure volume of the liquid with the measuring cylinder

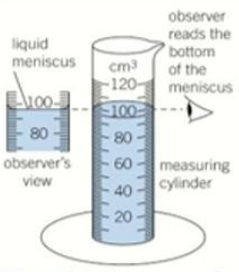


Figure 3 *Using a measuring cylinder*

Pressure in Gases SETS 1 AND 2 ONLY

Heating

Heating up the gas particles provides them with more energy to move more quickly. This means they are likely to collide more frequently with other particles. This, in turn, increases the pressure.

Volume

If the volume of the container is increased, the number of collisions will decrease. This causes an overall decrease in pressure.

The equation for a fixed mass and a constant temperature is as follows (you will be given this in the exam):

p × V = constant

p = pressure (Pa)

V = volume (m³)

If the volume increases, the pressure decreases.

If the volume decreases, the pressure increases.

If the pressure of a gas changes, the volume of the gas can also change. A helium-filled balloon, once released, will rise into the atmosphere; the pressure outside of the balloon will decrease. The volume of the balloon will increase (due to less pressure outside the balloon), meaning the pressure inside the balloon will decrease.

Work Done on a Gas (Higher Tier Only)

Work done on a gas causes it to gain internal energy and so will increase the temperature. Pumping up the tyre of a bicycle involves doing work and this will increase the temperature of the gas inside the bicycle tyre.

COPS AND ROBBERS

This **retrieval practice tool** will help you test and build your memory of a specific topic in ***Science.***







Cops: Write down everything you can remember about the topic from your long-term memory, without looking at notes.	**Robbers:** Now *"Steal"* missing facts or ideas from the KO you have been studying. This will give you information about the points you need to develop.

MFL

Opinions

j'adore – *I love*



j'aime bien – *I really like*



j'aime – *I like*



je n'aime pas – *I don't like*



je déteste – *I hate*



Justifications

car c'est – *because it's*
parce que c'est – *because it's*
car ce n'est pas – *because it's not*
*ce sera – *it will be*
*c'était – *it was*

Intensifiers

très – *very*
assez – *quite*
trop - *too*
vraiment - *very*

Connectives

et - *and*
aussi – *also*
mais – *but*
cependant - *however*

Reasons



amusant – *fun*
intéressant – *interesting*
fantastique – *fantastic*
excellent – *excellent*
chouette – *great*



nul – *rubbish*
horrible – *horrible*
ennuyeux – *boring*
affreux – *awful*
terrible - *terrible*

Instructions Ecrivez – *Write!* Ecoutez – *Listen!* Regardez – *Look!* Lisez – *Read!*
Faites correspondre – *Match up!* Traduisez – *Translate!* Répétez – *Repeat!* Copiez – *Copy!*

Questions Qu'est-ce que c'est…? *What is it…?*
Comment dit-on.. En anglais/français? *How do we say… in English/French?*

Classroom language

Bonjour monsieur / madame – *Hello Sir / Miss*
Oui / non – *Yes / No*
S'il vous plaît – *Please*
Merci – *Thank you*
J'ai besoin de… – *I need a/some…*
- stylo (vert) – *(green) pen*
- papier – *paper*
- dictionnaire – *dictionary*
- règle – *ruler*
- cahier – *exercise book*

Est-ce que vous pouvez répéter?
– *Can you repeat?*
Je ne comprends pas – *I don't understand*
Est-ce que vous pouvez m'aider?
– *Can you help me?*
Puis-je aller aux toilettes?
– *Can I go to the toilets?*
J'ai fini – *I have finished*
Puis-je enlever ma veste?
– *Can I take off my blazer?*
Qu'est-ce que c'est …. en francais / anglais?
– *What is … in French / English?*

Les numéros

0 Zero	11 Onze	30 Trente
1 Un	12 Douze	40 Quarente
2 Deux	13 Treize	50 Cinquante
3 Trois	14 Quatroze	60 Soixante
4 Quatre	15 Quinze	70 Soixante-dix
5 Cinq	16 Seize	80 Quatre-vingts
6 Six	17 Dix-sept	90 Quatre-vingt-dix
7 Sept	18 Dix-huit	100 Cent
8 Huit	19 Dix-neuf	
9 Neuf	20 Vingt	
10 Dix		

Year 9 French: Unit 2 Work & Future Plans Knowledge Organiser

MFL

Ways to practise vocabulary: *1. Look cover, write check 2. Getting people at home to test you 3. Log onto Language Nut*

Big Questions:

- How do I earn my pocket money?
- What do I buy with my pocket money?
- How do I talk about jobs?
- How do I make phone calls?
- How do I describe my ideal job?

Key vocabulary

les tâches ménagères – Chores	
j'aide chez moi	I help at home
je fais la vaisselle	I wash up
je garde ma petite sœur	I look after my sister
je mets la table	I set the table
je passe l'aspirateur	I do the vacuuming
je promène le chien	I walk the dog
je range ma chambre	I tidy my room
je sors la poubelle	I take out the bins
je vide le lave-vaisselle	I empty the dish washer

l'argent de poche – pocket money	
j'achète	I buy
des cadeaux	presents
du maquillage	make-up
du matériel scolaire	school equipment
des jeux de console	video games
les téléchargements	downloads
les billets pour…	tickets for
un concert/le cinéma	a concert/cinema
j'économise pour…	I save up for…

mon petit job – my part time job	
je fais du babysitting	I babysit
je livre les journaux	I deliver papers
je travaille dans…	I work in…
une épicerie	a grocer's
un salon de coiffeur	a hairdresser's
un centre de loisirs	a leisure centre

Intensifiers

très—very assez —quite

un peu—a little beaucoup—a lot

les emplois – Jobs	
mon père est	my dad is
je voudrais être	I would like to be
avocat(e)	a lawyer
boucher/-ère	a butcher
boulanger/-ère	a baker
chanteur/-euse	a singer
coiffeur/-euse	a hairdresser
comptable	an accountant
facteur/factrice	a postman/woman
fermier/-ière	a farmer
infirmier/-ière	a nurse
ingenieur(e)	an engineer
maçon(ne)	a builder
mécanicien(ne)	a mechanic
plombier/-ière	a plumber
serveur/-euse	a waiter
vétérinaire	a vet

les adjectifs – adjectives	
je suis	I am
je ne suis pas/jamais	I am not/never
barbant(e)	tedious
monotone	boring/monotonous
idiot(e)	idiotic
divertisant(e)	fun
travailleur/-euse	hard-working
ouvert(e)	open
compréhensif/-ive	understanding
fort(e)	strong
manuel(le)	manual
varié(e)	varied

au téléphone – on the phone	
allô	hello
puis-je parler à…?	may I speak to…?
peut-il me rappeler demain?	can he call me back tomorrow?
c'est de la part de qui?	who is calling?
ne quittez pas	hold the line
quel est votre numéro?	what is your number?
je suis désolé	I'm sorry

dans dix ans – aspirations	
dans deux/quatre ans	in 2/4 years
un jour	one day
je vais	I am going to
aller au Lycée	go to college
avoir un emploi	have a job
faire un apprentissage	to do an apprenticeship
aller à la fac	go to university
voyager/travailler	to travel/work

au boulot à l'avenir – Future Jobs	
Je voudrais être	I would like to be
directeur/directrice	manager
guide touristique	tour guide
jamais de la vie	no way on earth
je suis accro à	I am addicted to
c'est mon rêve	it's my dream
le métier	the career/job

Useful Grammar

Regular present tense verbs

present	-er	-ir	-re
Je (J') (I)	-e	-is	-s
tu (you)	-es	-is	-s
il/elle (he/she)	-e	-it	-
nous (we)	-ons	-issons	-ons
vous (you pl)	-ez	-issez	-ez
ils/elles (they)	-ent	-issent	-ent

Key Modal Verbs

	Devoir to have to	Vouloir to want
Je (J') (I)	dois	veux
tu (you)	dois	veux
il/elle (he/she)	doit	veut
nous (we)	devons	voulons
vous (you pl)	devez	voulez
ils/elles (they)	doivent	veulent

Key Questions	
Tu as un petit job?	Do you have a part time job?
Qu'est-ce que tu fais pour aider à la maison?	What do you do to help at home?
Tu reçois de l'argent de poche?	Do you receive pocket money?
Que-fait ton père dans la vie?	What job does your dad do?
Qu'est-ce que tu achètes avec ton argent de poche?	What do you buy with your pocket money?
Qu'est-ce que tu feras dans l'avenir?	What will you do in the future?

The perfect tense (passé composé)

- This is used to describe completed actions in a specific time period.

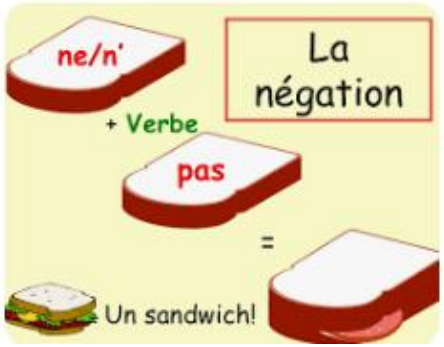
To form the past tense:
1. Take the infinitive of the main verb.
2. Choose the correct auxiliary verb (avoir/être)
3. Add the past participle.

	avoir	être
Je (J')	ai	suis
Tu	as	es
Il/elle	a	est
Nous	avons	sommes
Vous	avez	êtes
Ils/elles	ont	sont

Past Participles	
- er	- é
- ir	- i
- re	- u

False Friends

annonce	advert
expérimenté	experienced
patron	boss
pressé	hurried



Modal verbs of obligation

- These are verbs like could, would, should, must.
- a verb of obligation is always followed by the **infinitive.**

The Immediate Future Tense

- This corresponds to the English "going to do"
- It takes 2 parts.

a) the present tense of aller
b) the infinitive of the main verb.

aller – to go	
Je (J') (I)	vais
tu (you)	vas
il/elle (he/she)	va
nous (we)	allons
vous (you pl)	allez
ils/elles (they)	vont

Articles

When you talk about jobs in French you do not include the article.

E.g. Mon père est professeur

The Simple Future Tense

- This corresponds to the English "will"
- It takes 2 parts.

a) the infinitive of the main verb.
b) the endings of the auxiliary verb "avoir"

irregular future tense stems

verb	stem	example
aller (to go)	ir -	j'irai (I will go)
avoir (to have)	aur -	j'aurai (I will have)
devoir (to have to)	devr -	je devrai (I will have to)
être (to be)	ser -	je serai (I will be)
faire (to do/make)	fer -	je ferai (I will do)
pouvoir (to be able to)	pourr-	je pourrai (I will be able to)
vouloir (to want to)	voudr-	je voudrai (I will want to)

Knowledge Organiser: Stalin's Russia

Keywords:

Communism: Where all factors of production (industry, business and agriculture) are owned by **the Government** (USSR).
Capitalism: Where all factors of production (industry, business and agriculture) are owned by **private** individuals or firms who run them for their own **profit** (USA/UK).
Bolsheviks: A political party in Russia.
Revolution: Where a political or social change takes place.
Abdicate: To leave the throne or royal position.
USSR: Union Of Soviet Socialist Republic.
Gosplan: A government group set up to make targets for industry.
Kulak: A name given to a wealthy peasant farmer.



The Great Purge/Terror 1936-1939

Why did it happen?	**Paranoia** – Stalin was paranoid (seeing plots everywhere) and power-mad (he demanded continuous praise and applause whenever he walked into a room). In 1935, his wife even killed herself because she could not take his paranoid mood swings anymore.
What happened?	**Politicians.** More than 1100 of the 1966 people in the government were executed. Furthermore, three-quarters of the central committee (they agree decisions) were executed. **Scientists and engineers.** Stalin did not trust them. They were executed. Farmers that did not meet their targets were executed.
What impact did it have?	1. It removed all opposition to him. 2. Soviet people worked harder because they were scared. 3. The Red army lost a lot of its experienced officers. 4. The media was used to show the executions and trials. People were scared.

Stalin's Russia Timeline

1905 -Revolution, which forced Tsar Nicholas II to grant a new rules for Russia in Parliament.

1917– Rebellions in the Russian Army and the street force Tsar Nicholas to abdicate. The communist Bolsheviks under Vladimir Lenin take control in the October Revolution.

1924 - Lenin dies and Joseph Stalin becomes the new leader.

1928: The first 5 year plan to develop industry and farming. Stalin introduces collectivization – A way to control farming and production.

1929: Joseph Stalin becomes dictator

1933: second 5-year plan – focused on dealing with farming and food shortages.

1934 - Stalin's Great Purge begins. Stalin eliminates any opposition and up to 20 million people are killed.



5-year plans

1. **First five-year plan (1928-1933)** – Focused on heavy industry.
2. **Second five-year plan (1933 – 38)** – Continued to focus on heavy industry.
3. **Third five-year plan (1938 - interrupted by invasion from Hitler in 1941)** - Focused on preparation for war.

But the improvements in production between 1928 and 1937 were phenomenal:

- **Coal** - from 36 million tonnes to 130 million tonnes
- **Iron** - from 3 million tonnes to 15 million tonnes
- **Oil** - from 2 million tonnes to 29 million tonnes
- **Electricity** - from 5,000 million to 36,000 million kilowatts



Source A

A propaganda poster of 1934. It is titled: 'Peasants can live like a Human Being'. Study the poster - can you see how it is promising people the following:

- enough to eat,
- adequate clothing,
- the latest consumer goods,
- electricity,
- education,
- happiness.



Collectivisation

What was collectivised?	1. Collectivisation was when a group of farms came together to form one, big farms. Most common farm was the kolkhoz. 2. Everything in the farm was shared. Animals, tools and all the food was produced.
Why was it collectivised?	1. More efficient farming meant that more peasants could work in industry. 2. Stalin wanted to avoid such famines, as the winter famine of 1928-29.
How did he do it?	1. When Stalin realised that not many peasants were going to sign up, he sent Party officials and the secret police to 'persuade' them to join. 2. The kulaks had their machinery taken from them. It was given to the collectivised farms. 3. Kulaks in turn were shot, deported or sent to labour camps. This was known as the 'liquidation of the kulaks'.



The **Gulags** were concentration camps for people in Russia who opposed Stalin or did not do what he wanted them to. The work was hard and many people died. The conditions of the Gulags were unhygienic and overcrowded. The Gulags were used as a punishment and deterrent.

Knowledge Organiser: How did Germany change, 1918-39?

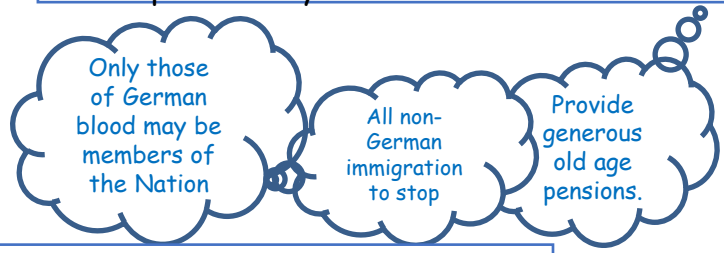
Germany after World War 1

Following the defeat in the First World War, Germany was forced to sign the hated **Treaty of Versailles**. The following are known as the legacy of WW1 in Germany:

- The Government runs out of money.
- Huge unemployment.
- The people in Germany no longer trusted the government as they felt stabbed in the back.

Hitler and the DAP:

Hitler joined the German Workers party (DAP) as he was not happy about the problems in Germany. They agreed a 25-point program (Plan) – Here are three points they wanted to achieve.



Keywords

NSDAP – National Socialist German Workers Party.
Passive resistance: A rich industrial area in Germany that contained factories and coal mines.
Ruhr - A rich industrial area in Germany.
Hyperinflation - Refusal to work which meant fewer goods were coming from the Ruhr.
Charisma – Leadership that makes people listen and follow.

How did Hitler create the NSDAP?

By 1921 Hitler had taken control of the DAP and renamed it the NSDAP – National Socialists German Workers Party. There were four ways he rose to power in the NSDAP.

The SA	Nazi Emblem	Charisma	Supporters
• The SA are known as storm troopers in English. • The SA was made up of violent ex-soldiers. • Hitler was able to remove any opposition he faced swiftly, and opposition quickly faded away due to fear the SA created.	• The flag and swastika emblem became associated with the Nazi party. • Hitler propelled the party in the popularity stakes, and membership rose quickly.	• He was also an excellent orator (public speaker) and drew large crowds to his Nazi speeches. • No other party at the time had such a 'hypnotic' speaker. • As a result, support for the party greatly increased	• He rewarded these men with positions of power in the party and many went on to become top Nazis in later years. • By surrounding himself with these supporters, he ensured his own position was safe, whilst being able to delegate most of his dirty work to them.

Occupation of the Ruhr:

The German government had not been able to makes its first reparations payment in 1922. Instead , it requested extra time for the payment, but France refused. Therefore, in January 1923, the French marched into the Ruhr industrial area of Germany, determined to get payment in kind, for the money owed.

1. Germany's first instalment of £50 million was paid in 1921, but in 1922 nothing was paid.
2. In January 1923, French and Belgian troops entered the Ruhr (quite legally under the Treaty of Versailles) and began to take back what was owed to them in the form of raw materials and goods.
3. Germany responded to the invasion in a disastrous way, the government ordered the workers to go on strike. This was called **passive resistance.**
4. The French reacted to this very harshly by setting up gun points in the streets. They killed over 100 workers and expelled over 100,000 protesters from the region.
5. Germany had no money left. The Government decided to print out more. This led to **hyperinflation** and the eventual collapse of the German currency.

Stresemann – How did Gustav Stresemann help build the problems in Germany 1924 - 1929

Action Taken	Details	Effects
The Dawes Plan (1924)	Germany loaned 800 million marks from America.	Therefore, the French agreed to leave the Ruhr. Reduced the effects of hyperinflation.
The Locarno Pact (1925)	Germany, France, and Belgium agreed not to attack each other. The UK and Italy promised to help any of the three countries if an attack ever occurred.	It helped other countries begin to trust Germany again.
Kellogg- Briand Pact (1928)	An agreement between 65 countries, including Germany, that they would not use war to settle disputes.	This helped countries further their trust in Germany.
The Young Plan (1929)	Reparations reduced from 6.6 billion to 2 billion. Germany are given an extra 59 years to pay in small instalments.	German government were able to reduce taxes and therefore people had more money to spend. Contributed to the recovery of Germany's economy.

April 1932: Presidential election. Hitler came second to Hindenburg, who won 53 per cent of the vote to Hitler's 36.8 per cent.

May 1932: Brüning resigned as Chancellor. Hindenburg appointed Franz Von Papen, a conservative, as his replacement.

July 1932: Reichstag elections. The Nazis became the largest single party with 230 seats, but still did not have a majority. Hitler demanded to be made Chancellor but Papen remained.

November 1932: Reichstag elections called by Von Papen to try to win a majority in parliament. Nazis lost 34 seats but remained the largest party with 196 seats.

December 1932: Von Papen resigned. Hindenburg appointed Kurt Von Schleicher, an army general, as Chancellor. Von Schleicher tried to split the Nazis by asking a leading Nazi called Gregor Strasser to be his Vice Chancellor. Hitler forced Strasser to decline.

January 1933: Von Papen and Hindenburg turned to Hitler, appointing him as Chancellor with Von Papen as Vice Chancellor. They believed they could control Hitler and get him to do what they wanted.

How did Hitler become Fuhrer

Oath of Loyalty After Hidenburg's death August 1934. → **The Night of the Long Knives June 1934.** → **The Enabling Act: 23rd of March 1933.** → **The Reichstag Fire February 1933.** → **Hindenburg Dies August 1934.**





Boys	Girls
• Pimpfen – 5 Years old; • German Youth (Deutsches Jungvolk **DJ**) – 10 Years Old – 14 years Old; • Hitler Youth (Hitler Jugend **HJ**)– 14 Years Old; • Labour Service (6 months) – 18 Years Old; • Army conscription - 18+.	• Young Girls' league (**Jungmädelbund**) - 10 Years Old; • German League of Maidens (Bund Deutscher Mädel **BDM**) - 14 to 21 Years Old.



Hitler was able to control Germany in the following ways.

1. Propaganda and censorship;
2. Workplace and Trade unions;
3. The Gestapo;
4. The SS;
5. The legal System;
6. The Church and Religion.

Climate Change Year 9

Climate change: Changes in climate (temperature, rainfall) as a result of natural causes or human activity.
Global warming: The recent increase in global temperatures.
Sustainable: Actions that meet the needs of the present without reducing the ability of future generations to meet their needs.
Quaternary period: The **quaternary period** began 2.6 million years ago and extends into the present.
Greenhouse effect: Warming of the lower atmosphere by heat released from Earth.
Greenhouse gases: Gases such as carbon dioxide and methane, which absorb heat from Earth.
Mitigation: Aim strategies to reduce the causes of climate change.
Adaptation: Strategies responding to changes caused by climate change.
Strategy: A plan of action designed to achieve a long-term or overall aim.

Mitigation strategies aimed to reduce climate change

Geography

Carbon Capture

Although not yet economically viable, carbon capture and storage (CC) uses technology to capture CO^2 that is produced by burning fossil fuels in electricity generation and industrial processes. Once captured, the CO^2 is compressed, piped and injected underground for long-term storage in suitable geological reservoirs, such as depleted oil and gas wells.

Planting trees

Trees act as carbon sinks, removing CO^2 from the atmosphere by the process of photosynthesis. They also release moisture, producing more cloud and so reducing incoming solar radiation. Tree planting is established in many parts of the world. Plantation forests can absorb CO^2 at a faster rate than natural forests and can do so effectively for up to 50 years.

International Agreements

Climate change is a global issue requiring global solutions. Governments are negotiating towards a more sustainable future. For example, the Paris Agreement (2015) was the first legally binding global climate deal. It aims to limit global temperature increases to 1.5°C above pre-industrial levels.

Alternative Energy Sources

The burning of fossil fuels accounts for 87% of all CO^2 emissions. Alternative sources of energy such as hydroelectric power (HEP), nuclear power, solar, wind and tides represent sustainable, low carbon alternatives.
The UK aims to produce 15% of its energy from renewable energy sources by 2020.

Natural causes of climate change

Orbital Changes

Three distinct cycles increase (cooling) or decrease (warming) the distance from the Sun

- **Eccentricity**- every 100,000 years or so the orbit changes from almost circular, to mildly elliptical (oval) and back again.
- **Axial tilt**- every 41,000 years the tilt of the Earth's axis moves back and forth between 21.5° and 24.5°.
- **Precession**- over a period of around 26,000 years the axis wobbles from one extreme to another.

Solar Activity

The surface of the Sun has dark patches called sunspots which mark short-term regions of reduced surface temperature. They are usually accompanied by explosive, high-energy solar flares increasing hear output.

Over a period of around 11 years, sunspots increase from a minimum to a maximum, and back again.

Volcanic Activity

Volcanic ash can block out the Sun, reducing temperatures on the Earth. This is a short-term impact.

Sulphur dioxide is also blasted out which converts to droplets of sulphuric acid, and acts like mirrors to reflect solar radiation back into space. This long-term impact (over many years) also reduces temperatures.

What are the global impacts of climate change?

- Stronger tropical storms.
- More heat-related illness and disease such as malaria.
- Increased risk of natural hazards, such as droughts and floods.
- Economic impacts, such as lower crop yields and damage to infrastructure.
- Rising sea levels threaten low-lying coastal areas.
- Wildlife at risk as habitats and ecosystem change.
- Environmental impacts, such as desertification
- Higher globa.l temperatures affect food production and water supply.



Adaptation strategies aimed to reduce climate change

Agricultural Adaptation

Scientists believe that climate change will have a huge impact on agricultural systems across the world.

- Patterns of rainfall and temperature will change.
- Extreme weather events such as heatwaves, droughts and floods will become more common.
- The distribution of pests and diseases will change.

Farmers need to adapt to these changes.

Agriculture adaptation in low latitudes

Scientists think that the greatest changes to agriculture will occur in low latitudes. Southern Africa's maize crop could fall by 30 per centre by 2030 and the production of rice in South Asia could fall by 10%

Agricultural adaptation in middle latitudes

A warmer climate in Europe and North America could lead to an increase in production of certain crops such as wheat. In the UK, Mediterranean crops such as vines and olives may thrive.

Managing Water Supply

Climate change is already causing more severe and more frequent droughts and floods. Unreliable rainfall and periods of water shortage require careful management.
Future climate change will affect the current patterns of water supply, impacting on the quantity and quality of our water.
It is the most vulnerable, particularly in rural parts of poorer countries, who are likely to be affected the most.

Managing water supply in the Himalayas

Millions of people in Asia depend on rivers fed by snow and glacial melt for their domestic and agricultural water supply.
In the Himalayas most of the 16,000 glaciers are receding rapidly due to global warming. This threatens the long-term security of water in supply in the region.

Reducing risk from rising sea levels

Did you know that average sea levels have risen by 20cm since 1900? By 2100 sea levels are expected to rise by a further 26-82cm. This will flood important agricultural land in countries such as Bangladesh, India and Vietnam.

As sea levels rise, rates of coastal erosion will increase. Fresh water supplies will become contaminated by saltwater and coastal areas will be prone to damage from storm surges.

Management in the Maldives

The Maldives are a group of tiny islands in the Indian Ocean. The highest point on the islands is just 2.4m. Some climate models suggest that they will be submerged by 2070. The 380,000 inhabitants have a very uncertain future as sea levels rise.

- Construction of sea walls- 3m wall is being constructed around he capital Male with sandbags.
- Building houses that are raised off the ground on stilts.
- Construction of artificial island up to 3m high so that people most at risk could be relocated.
- Restoration of coastal mangrove forests- their tangled roots trap sediment and offer protection from storm waves.

Geog your memory/ Hi-story Lane

Use the LANES to recall key information about a particular topic, in ***History*** and ***Geography*** without looking at the sheets. Once you have added everything you can remember, look at these pages again and using a different colour pen, add in the knowledge that you missed out. This is the knowledge you should now continue to revise. Continue this process until you can remember everything on the page.

Creative Paper

Ideas on how to produce more interesting backgrounds to create your artwork on.

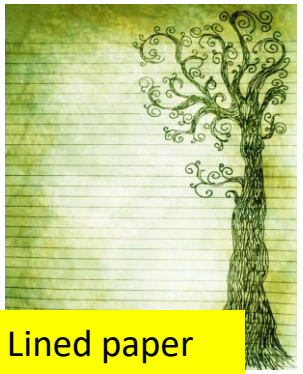




Scrap paper



Tracing paper



Lined paper





Newspaper



Wallpaper



Old envelopes



Maps

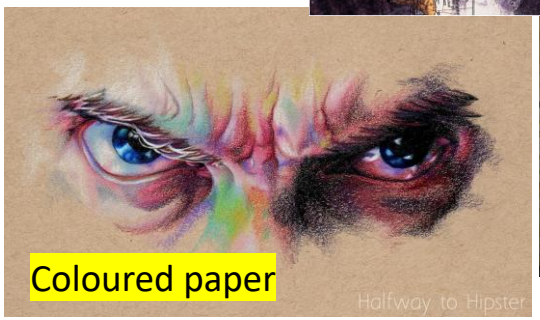




Maths paper

Collage and water colour wash.





Coloured paper



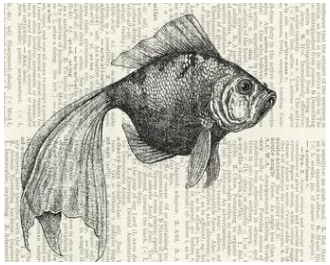
Coffee wash

Monoprinting is the process of making a print using 'mark making'.
Mark making is any mark made using any material on any surface, such as:
•pencil on paper
•photoshop brush mark on a screen
•scratch in clay
•paint on a canvas.
A mark can be a line, a dot, a scratch, a curve, a thumbprint and so on. Using different tools can help create different thicknesses and types of marks.
The colour used to create monoprints is usually water-based ink. A roller is used to apply the ink evenly over the a printing sheet. This is usually an acrylic sheet or other washable flat surfaces.



Etching is the process of printing produced by 'etching' patterns, shapes and designs into the surface of a metal or acrylic plastic plate.
1.Scratch your image or design into the surface of the plate.
2.Apply colour by rolling ink onto the etched surface.
3.Wipe the surface so that only the ink collected in the in the scratched areas is left.
4.Carefully place paper on top of the inked sheet.
5.Use a printing press to apply pressure and lift the image onto your paper.





Collograph Printing is a type of printmaking, traditionally made from a collaged printmaking plate.
Shapes and textures are layered on a plate (usually metal, masonite or plexiglass) and sealed with a gloss varnish. After the sealed assemblage dries, the surface is inked, and wiped, intaglio style, with tarlatan, which is starched cheese cloth.
The wiping removes ink from the uppermost surface area, but leaves plenty of pigment embedded around the textural elements and caught against the curbs of layered shapes on the collage.
When the inked and wiped collagraph plate is pressed against paper, usually on a press, the resulting collagraph print is richly textured and wonderful.

PRINTING TECHNIQUES

There is a wide variety of printing techniques to explore… here are some examples.







Silkscreen Printing

A print is made using a or **acetate** placed over a mesh cloth stretched over a heavy frame. A stencil can be created by carefully cutting out a design from paper and then attaching it to the silkscreen. The design is printed by having a **squeegee** force colour through the pores of the material in the areas that are not blocked out by the stencil.
Silkscreen prints are usually made with acrylic paint that is mixed with a **binder,** to allow the colour to flow easily through the pores and to fix the design.
The most successful silkscreen prints use bold, simple shapes and designs with limited colours. For example, Andy Warhol's *Cow* .

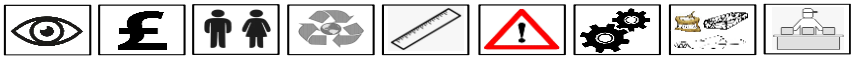




The Great Wave, Katsushika Hokusai, 1830-32, woodblock print.

Block Printing Is the process of carving patterns, shapes and designs into a 'block'. The 'block' could be made of wood, acrylic plastic sheet, lino or metal.
Different materials are suited to different results:
•Wetal or **acrylic** sheets can produce much finer lines with 'sharper' detail.
•Wood and lino are more suited for bolder images.
The drawback with all of these materials is that each mark you make on the printing sheet will be printed – you cannot afford to make any mistakes.
Block prints are usually made with oil-based ink.

Year 9: User centred
Passive Amplifier



Aesthetic Cost Client Environment Size Safety Function Material Manufacture





So, who are the users? What do they do?



Manufacturer -
Responsible for making the product.



Retailer -
Responsible for selling an advertising the product.

Consumer –

- YOU!
- The person who the product is targeted at;
- The person who will buy the product.

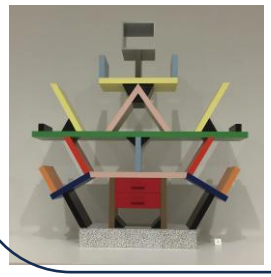




Memphis Design, is an influential postmodern style that emerged from the celebrated Memphis Design collective of Milan-based designers in the early 1980s. It was spearheaded by the legendary Italian designer Ettore Sottsass (1917-2007).









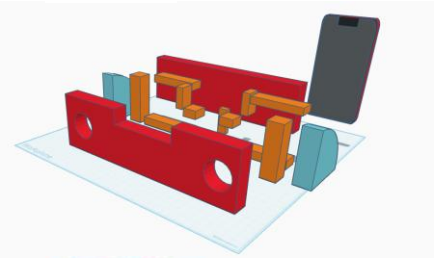
Production methods

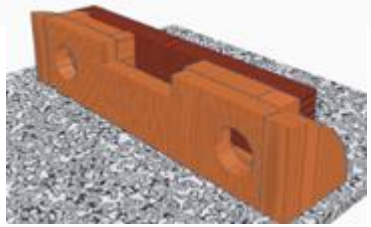
One off production – a single unique manufacture of a bespoke item.
Batch production - is a manufacturing method where sets of identical goods go through production stages together.
Just in time production - is system of production that makes and delivers just what is needed, just when it is needed, and just in the amount needed.
Mass production - the production of large quantities of a standardised article by an automated mechanical process.

Sustainable design: The 6 R's

Recycle	Reprocess the material and make something else.
Reuse	Take a product and use for a different purpose without reprocessing it.
Repair	If something breaks, try to fix it.
Refuse	Refuse to buy or use something that is not needed.
Reduce	Consider making the item small or using less materials, and less impact on the environment.
Rethink	Look for alternative ways of making something or improving a design.

TINKERCAD





Manufacturing processes

Vacuum forming is a simplified version of thermoforming, whereby a sheet of plastic is heated to a forming temperature, stretched onto or into a single-surface mould, and held against the mould by applying a vacuum between the mould surface and the sheet. The vacuum forming process can be used to make most product packaging and speaker casings.

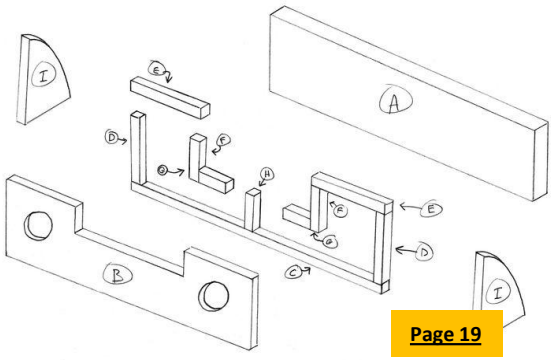
Laser Cutting is a technology that uses a laser to vaporize materials, resulting in a cut edge.

3d Printing process of making a physical object from a three-dimensional digital model, typically by laying down many thin layers of a material

Line Bending It involves passing an electric current through a conductive wire creating a low heat. The plastic to be formed is then placed over the wire at the precise place where the bend is required.

Injection moulding
the shaping of rubber or plastic articles by injecting heated material into a mould.

Die Cutting is a manufacturing process where a die is customised through cutting, forming or shearing to craft a desired shape



Engineering Vocabulary: Talk like an Engineer

Year 9: Passive amplifier User centred design

A client profile is a summary of a specific customer type that is based on available statistical information. It helps businesses to identify which potential clients are good prospects and which ones aren't. A client profile is part of a sales strategy that allows businesses to create marketing materials and form valuable connections with clients. The ideal client profile is a very clear description of the type of client you are targeting. A designer will use a client profile to ensure their work is successful and commercially viable.

Practical/workable/suitable for retail

Guarantee

Target Market

['tär-gət 'mär-kət]

A group of people that have been identified as the most likely potential customers for a product because of their shared characteristics such as age, income, and lifestyle.



Felling- the process of cutting down trees.
Veneer-a thin decorative covering of fine wood applied to a coarser wood or other material.
Seasoning-process of drying out or removing moisture from natural wood.
Prototype- a draft model to test an idea.
Smart materials-materials that have one or more properties that react to stress, moisture, electric or magnetic fields, light, temperature, pH, or chemical compounds.
Resin –synthetic substance used in glues and varnishes.
Adhesive- glue.
Crating- a technique for drawing accurately using boxes.
Isometric- horizontal lines are at 30 degrees. A technique for drawing in 3D.
CAD- Computer Aided Design.
Tri-Square- used for marking straight lines parallel to a straight edge- not measuring.
Coping Saw- cuts curves and is used for think wood or plastic.
Tenon Saw- cuts straight edges on wood only.
Glass Paper- smooths wooded surfaces to prepare for painting.
Working drawing – an accurate drawing of a design with all the measurements used in manufacturing.
Finger Joint- used for box joints. Interlocking fingers.
Butt Joint- pushing two ends of a material together.
Dowelling Joint- small wooden rods used to join wood.
Iterative Design- circular design process, continued development and improvement with testing.
Sustainable –renewable, green design. **Sustainable design** is the intention to reduce or eliminate negative environmental impacts through design.

Jigs and Templates enable more than one part to be made several times, quality control in batch production.
Bench Hook is for steadying and supporting work, it hooks into the bench vice.
Vice: Used to clamp work to the bench to keep it steady.
Glass Paper is for smoothing work.
Flat Files are also use for smoothing.
M.D.F. Medium Density Fibreboard (Manufactured wood made from wood fibres and glue).
Pine: A natural softwood.
Acrylic: A type of plastic.
Copper: A conductive metal wire used for electronic circuits.
Conductive: allows electrical current to travel or 'flow' through it.
Risk Assessment a process of evaluating the potential risks that may be involved in a projected activity or undertaking.
L.E.D: Light Emitting Diode (a small light to indicate power in a circuit).
Resistor: In electronic circuits, resistors are used to reduce current flow.
U.S.B: Univeral Serial Bus; electrical connector.
Design Situation: A problem that has been identified.
Design Brief: A statement to explain how you will solve the problem (design situation).
Design Specification: A list of requirements your product must have or include to be successful and solve the design situation.
Prototype: a fully functional, full size working product. A test model or first draft, sometimes in cheaper materials.

Ferrous
These are metals that contain iron. This means the metal will rust.

Non-Ferrous
These are metals that do not contain iron and therefore do not rust.

Alloy is a metal (parent metal) combined with other substances resulting in superior properties such as; strength, hardness, durability, ductility, tensile strength and toughness.

Thermoplastic
These plastics can be re-heated and re-shaped in various ways. They become moldable after reheating as they do not undergo significant chemical change

Thermoset
Once heated and moulded, these plastics cannot be reheated and remoulded. The molecules of these plastics are cross linked in three dimensions, and this is why they cannot be reshaped or recycled.

ERGONOMICS
Using data to make a product comfortable and easy to use for the user.

ANTHROPOMETRIC
Data is used to determine the size, shape and/or form of a product, making it more comfortable for humans to use and easier to use.

Year 9: Passive amplifier User centred design
Dual Coding

Technology Push is when new developments in materials and technologies improve existing products/create new ones.
Market Pull is when consumers demand improvements/new products. Often found by conducting market research.



Analyse



Function



Market Research



Commercially viable

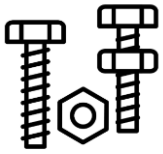




Technology Push



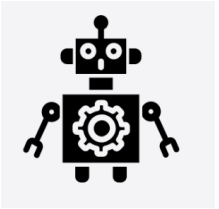
Market Pull



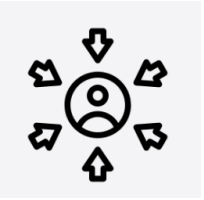
Standard component



Sustainable



Automation



User centred design

Sentence starters:

Point: I agree/ disagree to some extent with the statement because…

Evidence: I know this because...for example I learnt that…another example

Explain: This means that…However, some may agree/disagree because

Link: In conclusion, I think

Textiles

Year 9 Rotation Textiles Knowledge Organiser: Methods of fabric decoration

Annotating design ideas and work of other designers:

Use the following questions to help you annotate your work:

1. What colours do you use a lot of? What effect does this give?
2. Who do you think your designs are aimed at? Why?
3. Explain what you like/dislike about your work and why that is.
4. What techniques will you use to create your design and why?
5. Could different techniques be used to create different effects?
6. How does your design fit into the theme?

Batik

Batik is a traditional Textile technique which combines painting and dyeing. This is traditionally made by dipping a specially designed Tjanting tool into melted wax and painting various patterns onto pieces of white fabric.

The wax stays on the fabric and often cracks after it hardens. The fabric is then dyed, the dye seeps the cracks and makes fine lines.

When the wax is removed, beautiful patterns appear on the cloth.

Batik fabric can be made into garments, scarves, bags, table-cloths, bedspreads, curtains and other decorative items.

Equipment needed:




Fabric
Dye
Paintbrush
Dye container




Wax kettle

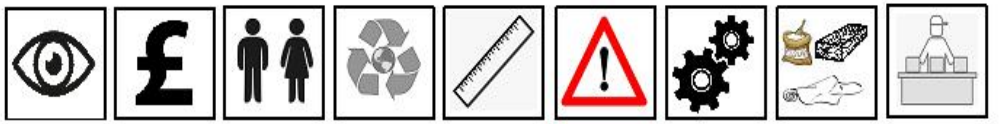



Wax



Tjanting tool







Decorative machine embroidery



KEY POINTS TO REMEMBER

There is a difference between Analysing and Stating. Analysing will always get you more marks than Stating.

Denotation: Literally stating what something is

Connotation: Explaining the meaning of something, what it represents.

See example below:

This is a pink heart.

It represents, love and friendship.







Stitch selector:
A = straight stich
B = Zig-zag stitch



Bobbin



Foot peddle

Parts of a Sewing machine



Thread take-up-lever

Reverse lever

Thread holder



Stitch width dial

Hand wheel

Tension dial

Lever for presser foot

Stitch length dial

Needle

Stitch selector



Presser foot



Power switch – 2 speeds



Stitch length dial



Reverse Lever

Important points to remember when using a sewing machine:

1. Put both threads under the presser foot and to the back of the machine.
2. Lower the presser foot down onto your fabric.
3. When lowering the needle and taking it out of your work always turn the hand wheel towards you.
4. When taking your work out of the machine make sure the take-up-lever is at the top and you can see it.

Decorative hand embroidery



Different types of embroidery thread



Different size embroidery needles



Different size embroidery rings



Embroidery scissors



Range of different embroidery stitches



Year 9 Food Studies Rotation

Most food poisoning can be traced to one of three major causes: bacteria, parasites, or viruses. These pathogens can be found on almost all of the food humans eat. However, heat from cooking usually kills pathogens on food before it reaches our plate. Foods eaten raw are common sources of food poisoning because they don't go through the cooking process.

Occasionally, food will come in contact with the organisms in faecal matter or vomit. This is most likely to occur when an ill person prepares food and doesn't wash their hands before cooking. Meat, eggs, and dairy products are frequently contaminated. Water may also be contaminated with organisms that cause illness.

Sources of food poisoning

Food can become contaminated during production, preparation and retailing. The main sources are:

- Raw food-for example meat, poultry, shellfish and eggs.
- People- food-poisoning bacteria are found on the skin, in septic wounds, in the nose and sometimes in the gut.
- Pests- for examples rats, mice, cockroaches, ants, wasps and flies.
- Animals- domestic pets and farm animals can carry *E.coli* in their intestines.
- Air and dust- food must be covered as bacteria in the air can settle on the surface.
- Water- bacteria such as *Salmonella* are carried in untreated water.
- Soil- bacteria and spores can survive in soil, so can be found on unwashed vegetables.
- Food waste-waste needs to be disposed of correctly as it could be a source of contamination and may attract pests.







Conditions necessary for food poisoning

Visible symptoms	Non-visible symptoms
Shivering Diarrhoea Vomiting	Feeling tired or weak Stomach ache Headache Feeling nauseous (sick)

Bacteria can grow rapidly in the correct conditions. A single **bacterium** can divide into two by the process called **binary fission.** A single bacterium can produce 16 million bacteria in only 12 hours.

Food poisoning bacteria have four essential requirements for growth:

- **Food-** bacteria grow rapidly in high risk foods that are good sources of protein; such as cooked meat and poultry, shellfish, and seafood, undercooked or lightly cooked eggs, unpasteurised milk and cheeses, cooked rice and pasta, and salads.
- **Moisture-** bacteria cannot multiply without moisture, which means that they do not usually affect dried foods or products with high quantities of salt or sugar, which absorb water.
- **Warmth-** most bacteria multiply at **ambient temperature** -normal room temperature. This falls within the danger zone between 5°C and 63° C. Below 5°C most bacteria are unable to multiply rapidly, and below -18°C they become **dormant**. Cooking food at high temperatures above 63°C will destroy most bacteria; when cooked, the food should reach 75°C for at least two minutes.
- **Time-** in the right conditions the number of bacteria can double every 20 minutes.

The acidity and alkalinity of a food can influence the growth of bacteria. If conditions are too acidic or to alkaline, bacteria can not grow.

Symptoms of food poisoning

- A symptom is a sign or indication of a disease.
- The body reacts to bacteria or toxins by developing symptoms such as diarrhoea, vomiting, stomach pains, headache and sweating.
- Some of these symptoms are visible and some are non-viable

Symptoms of food allergies

A food allergy is a serious reaction to a food or ingredients in food. It is caused by the body's immune system reacting to an allergen. If the reaction to a food is a bad one, it could give the following symptoms:

- Skin rash
- Itchiness of skin, eyes and mouth.
- Swollen lips, face, eyes
- Difficulties in breathing.

In severe cases, it can bring about anaphylactic shock- the person develops swelling in their throat and mouth, making it difficult to speak or breathe. This can lead to death if appropriate treatment, such as an EpiPen, is not used quickly.

Symptoms of food intolerances and coeliac disease

Some people have a sensitivity to certain foods, which can cause symptoms such as nausea, abdominal pain, joint aches and pains, tiredness and weakness. This is called a food intolerance- this is not an allergic reaction and it does not involve the immune system.

Coeliac disease is neither a food allergy nor a food intolerance but an autoimmune disease caused by a reaction of the immune system to gluten- a protein found in wheat, rye and barley. The symptoms of coeliac disease vary from person to person and can range from mild to severe.

Symptoms of coeliac disease include:

- Severe diarrhoea, excessive wind and/or constipation
- Persistent or unexplained gastrointestinal symptoms, such as nausea and vomiting.
- Recurrent stomach pain, cramping or bloating.
- Iron, vitamin B12 or folic acid deficiency.
- Anaemia
- Tiredness
- Sudden or unexpected weight loss.

Symptoms of lactose intolerance include:

- Abdominal pain
- Nausea
- Diarrhoea
- flatulence

Environmental Health Officers (EHOs) are responsible for carrying out measures to protect public health and to provide support to minimise health and safety hazards.

Role of EHOs

- They look after the safety and hygiene of food through all stages of the manufacture or production from distribution to storage and service.
- They help develop, co-ordinate and enforce food safety policies.
- They have the right to enter and inspect food premises at all reasonable hours and can visit without advance notice.
- They carry out routine inspections of all food premises in their area; the frequency of routine inspections depends on the potential risk posed by the type of business and its previous record- some high-risk premises may be inspected at least every six months, others much less often.
- They visit premises as a result of a complaint.
- They have powers of enforcement and can close businesses in extreme cases.

Responsibilities of EHOs

- They check that food producers handle all food hygienically so as not to give customers food poisoning.
- They check that food is being kept at the specific temperatures at which it should be stored or held.
- They check that staff are properly dressed, with clean nails, no jewellery, hair covered or tied back, and showing good hygiene habits.
- Thy review processes in the workplace, such as the handling of food, use of equipment, use of colour coded chopping boards, washing-up and disposal of waste.
- They inspect food stores-fridges, freezers and dry stores.
- They check stock rotation and temperature logs.
- They check that equipment is clean, well maintained and with safety notices if appropriate.
- The check the temperature of the food when it is cooked with probes to ensure that it is at the correct temperature.
- They ask questions to check compliance with the law or good practice.
- They identify potential hazards.
- They review safety management systems and plans.
- At the end of an inspection they give verbal feedback, discuss any problems and advise on possible solutions. They complete a report of inspection findings, which tells the business what **enforcement action** is to be taken.





Enforcement action

Enforcement action is required by law following an inspection from an EHO.
Enforcement action can range from verbal advice, informal or formal letters, and notices through to prosecution.

Formal Inspection letters- tells the food business which issues must be addressed to comply with the law. The EHO may revisit the business to check that the issues have been resolved.

Hygiene Improvement Notices- An EHO can serve a Hygiene Improvement Notice when they believe that a food business is failing to comply with food hygiene regulations. This notice will specify what s going wrong and what needs to be done by which date. The EHO will visit again to see if the required work has been done. If it has not improved, it can lead to a fine or imprisonment.

Hygiene Emergency Prohibition Notices- If an EHO believes that there is a significant risk to health and injury, a Hygiene Emergency Prohibition Notice may be served. The notice stops the use of the unsafe equipment, processes or premises immediately. It can only be removed by an EHO once the issues have been addressed.

Voluntary closure- A food business may elect to close voluntarily to carry out improvements. However, should the business reopen before the improvements are completed, the EHO will serve a Hygiene Emergency Prohibition Notice.

Seizure and detention of food- EHOs have the power to inspect and seize food suspected of not meeting food safety regulations. Food is taken if there is suspicion that it is contaminated and is likely to cause food poisoning or disease. Seized food may undergo microbiological examination and testing.

Condemnation of food- In order to condemn or seize food, the EHO must present their findings to a court. They will consider the information and decide whether the food poses a risk to human health and whether or not to condemn it.

Voluntary surrender of food- The owner of a business may surrender unfit food to the EHO voluntarily. This would avoid the involvement of the court.

Food Safety Act 1990

- This act is concerned with all aspects of food production and sale.
- If affects everyone involved in the production, processing, storage, distribution and sale of food.
- It ensures that all food produced is safe to eat.
- The act states that it is an offence to make food sold for human consumption unsafe to eat.
- A food producer or retailer may not add any substances to food, or subject food to any process or treatment, which will make it harmful to health.
- An EHO may inspect any food intended for human consumption at any reasonable times. If the food is regarded as unfit for human consumption, it may be seized.
- The legislation also provides a defence for foo producers, processors and retailers. They must prove that all reasonable precautions were taken to prevent a food safety incidence. This is called **due diligence**.
- Failure to take reasonable precautions can result in prosecution.
- Magistrates' courts may impose a fine, prison sentence or both for offences committed.

Hazard analysis and critical control points (HACCP)

This is a process that is designed to help look at how you handle food and to put procedures in place to ensure that the food you produce is safe to eat.
Every business that produces, sells or serves food is required to have a HACCP plan in place with a written **food safety plan.** It is the responsibility of the owner of the business to develop an appropriate food safety management system based on HACCP.
HACCP systems should apply the following principles:

1. Create a flow chart or table showing each step in the preparation, making, serving and storing of each dish.
2. Each step should be analysed to identify the hazards. Hazards can be:
    - Physical- foreign materials can cause injury to the consumer; these might be metal or plastic, or natural hazards such as bones in fish.
    - Biological- food can become infected by bacteria, which might lead to food poisoning
    - Chemical- potentially dangerous chemicals such as cleaning fluids can contaminate food.
3. Identify what can be done to control (prevent) the hazard.
4. Set guidelines on how to ensure food is going to be safe to eat- these are known as critical limits- and keep a record of this.
5. When new dishes are made, there needs to be a HACCP review to ensure that they are safe to eat.
6. All the documentation relating to the HACCP needs to be kept safe.

Love Food Hate Waste

BEST BEFORE

'Best before' refers to quality: your food will be at its best before the date given. After this date, it might not be at its best, but it will still be safe to eat. Use your senses to make a judgement.

Depending on how your food is stored, it has the potential to be good enough to eat for a long time after this date. Here's a guide to a few key food items and how long after the date they can be eaten:

- Crisps – one month;
- Biscuits – six months;
- Cereals – six months;
- Canned food – 12 months;
- Confectionary – 12 months;
- Pasta sauce – 12 months;
- Dried pasta – three years!

USE BY

'Use by' refers to safety: you must not eat food past the 'use by' date. You cannot always smell the bacteria that causes food to spoil, so after the 'use by' date, the food may appear perfectly fine to eat, but could still lead to food poisoning. Let's be absolutely clear: you should NOT eat food after the 'use by' date - even if it looks and smells OK.

Top tip: you can freeze food right up to and including the 'use by' date. If you're not sure you will eat it in time, freeze it for another day!

DISPLAY UNTIL / SELL BY

These dates are for the retailers – not us at home. You don't need to worry about these.

Some products, such as uncut fruit and vegetables and wine, for example, aren't required to have a date label, and there are specific regulations referring to hen's eggs, which require the use of a Best Before date.

An average family of four can save £60 a month simply by reducing the amount of food they throw away. There are lots of simple food hacks and tips on this website to help you learn how to be smarter with handling food from the moment you start thinking about shopping through to when you are cooking, preparing and serving your meals.

Leftover food recipes – not sure what to do with the odd bits of food left in your fridge? Take a look at the love food hate waste website leftover recipes to find something to create with your leftovers. Tip: type in two or three of your leftover foods in the search bar to find relevant recipes to make.

Freeze leftovers – cooked or prepared too much? No problem – just pop them in a container or sealed bag, write the date and what the food is on a label and place it in your freezer. You can freeze most food. **Planning how to be a smarter shopper** – not everyone likes to plan, however, being ahead of the game with your weekly shopping will help you save a few pounds so it's worth it. Here are a few tips to think about:

•**Make planning your meals a fun family activity –** ask your younger folk to choose something they would like to help you make during the week. If you have some fussy eaters this might also save some food from the bin too as they are more likely to eat food they've helped to make.

•**If you live with friends –** share an evening meal once a week and make it a social affair. Decide what you'll cook before you go shopping.

•**Plan some one-pot meals** – so meal cooking is simple and you can use up what's left in your fridge too. You can switch the ingredients to use up the food you already have. **Plan the rest of your meals around your favourites** – remember that you can include frozen food or staples from your cupboard. Mixing up the types of food you buy and use for your meals means there's less chance of having too much fresh food that is likely to go off before you can use it.

Top tip – why not write each of your favourite recipes onto one small piece of card per recipe (suggestion: cut up an old cereal box) plus one card for each day of the week. Stick the days of the week onto your fridge or cupboard door in a row. Then you can easily play around with your meals for the week under each day until you are happy. Plus – you can easily swap meals around if you don't fancy one on the planned day. Encourage your family, partner or housemates to join in too.

Know what you need before you get to the shop by making a list – and stick to it. We know that this is harder than it seems, however, it's worth finding a way that works best for you. Make it easy and simple by following some of these ideas:

•**Fridge/cupboard/freezer shelfies** – take a snap of the food you have left in your fridge, cupboard and freezer before you hit the shop to remind you what you have already got. This will save you from buying more than you need.

•**Keep an ongoing list on your phone** - using your notes app or send a text message to yourself.

•**Pop some note paper on your fridge door -** and make a note of things you are running out of.

•**Prepare your list in the layout of your supermarket** – this will enable you to spend less time shopping and more time at home enjoying your food.

•**Plan weekly shops –** by reducing the number of times you visit a supermarket you will reduce the temptation to buy extras!





Based on the DT subject you are studying, pick 7 words; draw the dual code for it; write a simple definition then an example sentence in the table provided.

Year 9 Subject specific Vocabulary in Technology

Engineering	Food	Textiles
•Target market •User centered design •Commercially viable •Sustainability •Market research •Standard component •Scale •Automation •ACCESSFM	•Food poisoning •Symptom •Hazard •Control •Inspection •Food Law	•Embroidery •Analyse •Batik •Tjanting tool •Seam •Hem •Construction Techniques

Dual code/ definition	Example sentence

What Makes a Good Song?

Exploring Popular Songs and Musical Arrangements



A. Popular Song Structure

SONG STRUCTURE – How a song is made up of or divided into different sections (see below) and the order in which these sections occur. To work out the structure of a song, it's helpful to analyse the **LYRICS and** listen to a recording for the song (for instrumental sections). **INTRO** – often shortened to 'intro', the first section of a song which sets the mood of the song and is sometimes, but not always, an instrumental section using the song's chord pattern.

VERSES – songs normally have several verses. Verses introduce the song's theme and have the same melody but different lyrics for each verse which helps develop the song's narrative and story. Songs made up entirely of verses are called **STROPHIC**.

LINK – a optional short section often used to join different parts of a song together, often instrumental, and sometimes joins verses together or appears at other points within a song.

PRE-CHORUS – an optional section of music that occurs before the **CHORUS** which helps the music move forward and "prepare" for what is to come.

CHORUS – occurs several times within a song and contains the most memorable **HOOK/RIFF**. The chorus relays the message of the song and is repeated with the same melody and lyrics each time it is heard. In popular songs, the chorus is often repeated several times towards the end of the song.

MIDDLE 8/BRIDGE – a section (often 8 bars in length) that provides contrasting musical material often featuring an instrumental or vocal solo using new musical material allowing the performer to display their technical skill on their instrument or voice. **CODA/OUTRO** – The final section of a popular song which brings it to an end (Coda is Italian for "tail"!)

Homework- Create an information leaflet on pop music song structure.

B. Key Words

LYRICS – The words of a song, usually consisting of **VERSES** and a **CHORUS**.

HOOK – A 'musical hook' is usually the 'catchy bit' of the song that you will remember. It is often short and used and repeated in different places throughout the piece. Hooks can be either **MELODIC, RHYTHMIC** or **VERBAL/LYRICAL**.

RIFF – A repeated musical pattern often used in the introduction and instrumental breaks in a song or piece of music. Riffs can be rhythmic, melodic or lyrical, short and repeated.

MELODY – The main tune of the song often sung by the **LEAD SINGER**.

COUNTER-MELODY – An 'extra' melody often performed 'on top of' the main melody that 'fits' with it a **DESCANT** or **INSTRUMENTAL SOLO**.

TEXTURE – The layers that make up a song *e.g., Melody, Counter-Melody, Hooks/Riffs, Chords, Accompaniment, Bass Line*.

C. Lead Sheet Notation and Arrangements

A **LEAD SHEET** is a form of musical **NOTATION** that contains only the essential elements of a popular song such as the **MELODY, LYRICS, RIFFS, CHORDS** (often as guitar chord symbols) and **BASS LINE**; it is not as developed as a ***FULL SCORE ARRANGEMENT*** and is open to interpretation by performers who need to use and adapt the given elements to create their own musical **ARRANGEMENT:** their "version" of an existing song.



COVER (VERSION) – A new performance, remake or recording by someone other than the original artist or composer of the song.

D. Conjunct and Disjunct Melodic Motion

CONJUNCT MELODIC MOTION – Melodies which move mainly by step or use notes which are next to or close to one another.

DISJUNCT MELODIC MOTION – Melodies which move mainly by leap or use notes which are not next to or close to one another.

MELODIC RANGE – The distance between the lowest and highest pitched notes in a melody.



E. Song Timbre and Sonority (Instruments that are used to Accompany Songs)



Pop Bands often feature a **DRUM KIT** and **PERCUSSION** to provide the rhythm along with **ELECTRIC GUITARS (LEAD GUITAR, RHYTHM GUITAR** and **BASS GUITAR)** and **KEYBOARDS**. Sometimes **ACOUSTIC INSTRUMENTS** are used such as the **PIANO** or **ACOUSTIC GUITAR**. **ORCHESTRAL INSTRUMENTS** are often found in pop songs such as the **STRINGS, SAXOPHONE, TROMBONE** and **TRUMPET.** Singers are essential to a pop song - **LEAD SINGER** – Often the "frontline" member of the band (most famous) who sings most of the melody line to the song. **BACKING SINGERS** support the lead singer providing **HARMONY** or a **COUNTER-MELODY** (a melody that is often higher in pitch and different, but still 'fits with' the main melody) and do not sing all the time but just at certain points within a pop song e.g. in the chorus.



YEAR 9 DANCE

Developing creativity, confidence and performance skills through a range of dance styles and contexts

1. DEVISING DANCE USING A WRITTEN BRIEF

Devising means creating original dance.
A written brief gives you a starting point or focus for your ideas.

THE PROCESS

1. UNDERSTAND THE BRIEF
Read the brief carefully. Highlight key words and clarify what the focus is.

2. RESEARCH & EXPLORE IDEAS
Explore different stimuli (images, music, words, themes, objects).
Note down ideas, thoughts and feelings.

3. EXPLORE MOVEMENT
Experiment with a range of movement ideas using the elements of dance to respond to the brief.

4. SELECT & DEVELOP
Choose the best ideas. Develop movement phrases and link them together.
Consider structure and transitions.

5. REFINE & IMPROVE
Rehearse and refine your dance.
Ask for feedback and make improvements to strengthen your work.

6. PERFORM & EVALUATE
Perform your dance with confidence.
Evaluate your work and the work of others using key criteria.

KEY CONSIDERATIONS

- **Purpose** – What is the intention of your dance?
- **Audience** – Who is your dance for?
- **Mood/Atmosphere** – What mood are you trying to create?
- **Theme/Idea** – What is your dance about?
- **Style/Genre** – What style or influences will you use?
- **Structure** – How will your dance be organised?
- **Choreographic devices** – How will you use unison, canon, levels, repetition, contrast, formations and motif?

ELEMENTS OF DANCE TO CONSIDER

- Action – what the body does
- Dynamics – how the movement is done
- Space – where the movement happens
- Relationships – how dancers interact
- Motif – a movement idea that is repeated or developed

KEY KNOWLEDGE

- A clear response to the written brief makes your dance focused and effective.
- Using a range of choreographic devices and the elements of dance improve your work.
- Evaluating throughout the process helps you refine and improve your dance.

2. CRITICAL APPRECIATION OF PROFESSIONAL WORK – *EMANCIPATION OF EXPRESSIONISM*

Emancipation of Expressionism is a professional dance work by Alesandra Seutin (2019).
It is a fusion of Expressionist dance style and street dance, exploring themes of freedom, identity and breaking barriers.

ABOUT THE WORK

- **Choreographer:** Alesandra Seutin
- **Style:** Fusion of Expressionist dance and street dance (hip-hop, breaking)
- **Year:** 2019
- **Performed by:** Seutin Dance Company
- **Themes:** Freedom of expression, individuality, breaking boundaries, social influence
- **Set/adaptation:** Uses a large cube-like structure representing confinement and control.
- **Costumes:** Dancers wear similar neutral costumes (symbolising conformity) which change as the work progresses.
- **Music:** Strong, driving electronic score that builds in intensity.
- **Structure:** The work has a clear journey from confinement to freedom.

KEY FEATURES

EXPRESSIONIST INFLUENCE
Strong, angular, and exaggerated movement to show emotion and inner conflict.

STREET DANCE INFLUENCE
Use of isolations, grooves, sharp actions, footwork and acrobatic skills.

CONTRAST
The dance contrasts controlled, restricted movement with freedom and release.

FORMATION & SPACE
Dancers often start in unison and close formations, then break away to use the space individually.

DYNAMICS
The work uses a range of dynamics from sudden, sharp movements to powerful, flowing movement.

NARRATIVE/INTENTION
Tells a story of breaking free from rules and expectations to find your own identity and voice.

THINGS TO CONSIDER WHEN WATCHING THE WORK

- ✓ What is the main idea or message of the dance?
- ✓ How do the dancers use movement to communicate this?
- ✓ How are the elements of dance used to create meaning?
- ✓ How does the choreography develop throughout the work?
- ✓ What effect does the set, lighting, costume and music have?
- ✓ How effectively does the dance engage the audience?
- ✓ What did you like or dislike and why?

KEY KNOWLEDGE

- Understanding professional work helps you gain ideas for your own choreography.
- Using subject-specific language allows you to analyse and evaluate dance accurately.
- Considering choreographic intent, style, context and impact develops your critical appreciation skills.

SUBJECT-SPECIFIC LANGUAGE

• Motif	• Unison	• Dynamics	• Isolation	• Fusion
• Canon	• Levels	• Contrast	• Formation	• Intention
• Structure	• Timing	• Narrative	• Expressive	• Impact

KEY VOCABULARY

Devising	Creating original dance.	**Expressionism**	A dance style using exaggerated, angular movements to express strong emotion.
Stimulus	Something that inspires ideas.	**Fusion**	Combining two or more dance styles.
Choreographic device	A tool used to create and structure choreography.	**Intent**	The purpose or meaning behind the choreography.
Motif	A movement idea that is repeated or developed.	**Interpret**	To explain or understand the meaning of a dance.

ACROSS ALL TOPICS, YOU WILL...

THINK CREATIVELY
Use imagination to generate ideas and solve problems.

WORK TOGETHER
Collaborate, communicate and support others.

REFLECT & IMPROVE
Evaluate your strengths and set targets.

BUILD CONFIDENCE
Take risks, challenge yourself and celebrate progress.

ENJOY DANCE!
Express yourself and develop a lifelong passion for dance.

Rugby – Year 9

Rugby Tackling Technique



- Approach attacker low to tackle their legs and waist.
- Keep head to the side of the attacker's hip to avoid damage to neck, face or head.
- Create 'lock' around the back of attacker's knees by clasping hands together to collapse opponent's legs.
- Drive the player backwards with power coming from legs, forcing them to the ground.

Rules

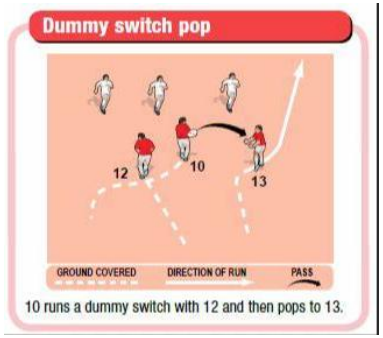
Games start with a kick off.
Passing must be sideways or backwards.
Ball can be kicked forwards.
Teams aim to score a try-in oppositions area.
Any player in front of a player kicking must wait for the kicker to pass or they will be offside.
Try = 5 pts
Conversion = 2 pts

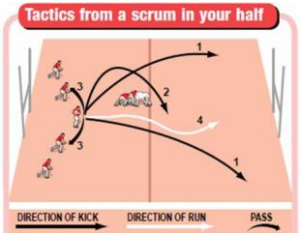


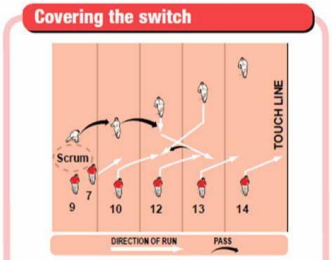
Tactics/ Strategies

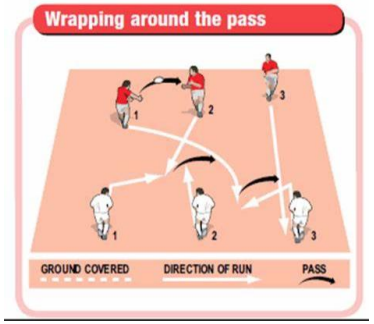
Strategies – Your teams overarching approach to being successful within the game.
Tactics - Specific actions or steps that a team takes to achieve their strategy, e.g. passing the ball to fast wingers.

Strategies and tactics are a great way in helping a team to outwit their opposition.









Health & Safety

Players engaging in contact rugby must wear their PPE (mouthguard) at all times.



Physical Education Y9 Table Tennis

Key Skills

Backhand - a stroke done directly in front of the body, with the racket turned so that the back of the hand faces the opponent

Backspin - a type of spin where, if struck with a normal racket position, the ball would not make it over the net

Drop shot - a surprise shot where the ball is placed precisely near the net

Forehand - a stroke done to the right-front (for right-handers) of the body, with the racket in a normal position (palm of hand facing opponent)

Lob - a defensive shot used against high-speed balls, where the ball (usually with unpredictable spin) is returned very high in the air, causing difficulty in timing and technique

Loop - an offensive shot that carries a tremendous amount of topspin

Serve - the beginning of a point where one player strikes the ball after tossing it. Usually used tactically to set up a strong attack

Sidespin - a type of spin where, if struck with a normal racket position, the ball would travel either to the right or left without landing on the table

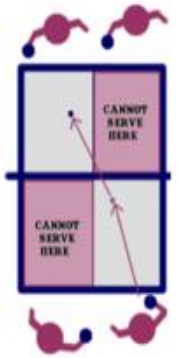
Smash - an offensive, high-speed shot used against high balls, where the racket is in a normal position to generate the most speed possible. Also called a kill

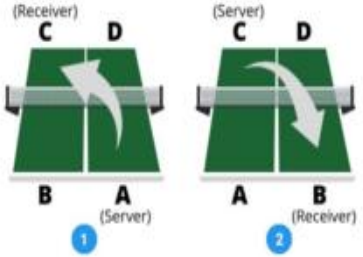
Topspin - a type of spin where, if struck with a normal racket position, the ball would travel over the opposite side of the table without hitting the surface

Serving Doubles

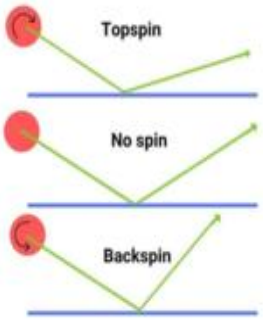
1.In doubles, your service must go **diagonally.** The first drop of your service must be on the **right-hand side** of your board and after crossing over the net, it must bounce on the **right-hand** side of the receiver's board.

2.After the completion of your service, the **receiver will be the server** and your doubles partner will be the receiver.





Types of Spin



How to Hit a Forehand Topspin in 4 Steps

1. Hold the bat as if you were shaking hands with it. Slide your index finger down the back of the bat to improve your control. **The bat angle should be facing down**
2. **Preparation:** Feet are shoulder width apart with your leg holding the bat is behind the other further away from the table. **Your knees should be slightly bent**. Rotate your shoulders away from the table.
3. **Contact:** Strike the ball **brushing up the back of it**. Transfer the weight from your back to front foot. Twist your shoulders back towards the table.
4. **Follow through.** Continue moving the bat up on a **90 degree angle finishing with it next to your head**. Move your back leg so it is square with the table in the ready position ready for the next shot.









Computing

KS3 Knowledge Organiser — Cyber Security

What is Cyber Security

Is protecting networks, computers, programs and data from attack, damage or unauthorised access through the use of technologies, processes and practices.



The difference between Data and Information

Data is raw facts and figures. For example, a lists of test results for a class. Without any context or analysis, the data may be of limited use on its own.

Information is created when that data has been processed and becomes meaningful: For example, these are scores from a test where the pass mark was 35.

Social Engineering

Manipulating individuals so they give away personal information (e.g. bank account).

Blagging - inventing a scenario to target someone into divulging info. Companies can give employees security training.

Phishing - fraudulently obtaining personal info (using e.g. email or SMS). Beware of links in emails!

Pharming - Cyber-attack to redirect a website's traffic to another, fake site. Check the http address has http's'

Shouldering - observing a person's private info over their shoulder (e.g. ATM)

Name Generator Attacks
These are attacks in which the victim is asked in an app or a social media post to combine a few pieces of information or complete a short quiz to ***produce a name.*** Attackers do this to find out key pieces of information that can help them to answer the security questions that protect people's accounts.







Protection methods

Measures can used to make it more difficult for attackers.



Firewalls
A firewall checks incoming and outgoing network traffic. It scans the data to make sure it doesn't contain anything malicious and that it follows the rules set by the network.





Anti-malware
The anti-malware will have a list of **definitions** of sequences of code that they are aware are malicious. If the code in your files matches the definitions, the files are quarantined.



Auto-Updates
Software that automatically checks for available updates

Malicious code and attacks

Malware - umbrella term to describe a variety of hostile or intrusive software. **Six categories: Virus, Trojans, Worms, Adware, Spyware and Ransomware.**

- **Computer virus** - installed on your computer without your permission with the intention to do harm. Viruses spread through email attachments or IM services OR through files/programs downloaded
- **Trojan** - pretends to have a legitimate purpose. Spread by email
- **Spyware** - gathers info without user knowing (e.g. bank account details).
- **Adware** - internet usage analysed and then advertising targeted.
- **Hacking** – Gaining unauthorised access of a computer.
- **Script kiddie –** Are hackers who use tools downloaded from the internet that allow them to hack with little technical knowledge.
- **Denial of Service Attack (Dos)** – Floods a targeted computer or website with lots of requests and internet traffic in an attempt to overload the system.
- **Distributed Denial of Serve Attack. (DDos)–** This uses the same concept as a DoS attack but this time it is multiple computers making the attack at the same time.
- **Brute Force Attack** – This makes multiple attempts to discover something, for example a password.

Key Vocabulary







Key Word	Definition
Botnet	A large collection of malware infected devices.
Hacking	This can be Ethical or Un-ethical hacking
User permissions	Users on a network can be put into groups, with each group having a unique set of privileges.
User Authentication	Secure passwords, maximum number of attempts, CAPTCHA, Biometrics, Two-factor identification.
Internet bot	Automated programs that perform tasks repeatedly. Bots ca have a malicious intent. .
Ransomware	Self-replicating virus – Locks a computer, encrypts files and demands a ransom paid before they decrypt the files and unlock the computer.
Viruses	Malicious from of self-replicating software.

Legislation

Data Protection Act 2018

All organisations and people using and storing personal data must abide by the following principles.



Your rights

As a **data subject**, you have the right to find out what information the government and other organisations store about you.

Computer Misuse Act 1990

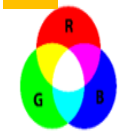
Designed to make hacking into computer systems a criminal offence with a potential jail sentence of up to 10 years and an unlimited fine.





Key Terminology

Word	Meaning/Description
Digital Graphics	A graphic is an image or visual representation of an object. Therefore, computer graphics are simply images displayed on a computer screen.
Bitmap	Pixel based images. This type of image is resolution based. Stretching them, stretches the pixels and **loses quality**.
Vector	Mathematically based pictures. Made up of lines, shapes etc. (objects). **Easily scalable** (as they are not pixel based).
Colour mode	RGB: Colours displayed on a computer screen using these three colours (Red, Blue and Green). CMYK Model: Cyan Magenta Yellow and Black (K). CMYK are the range of colours used for printing.

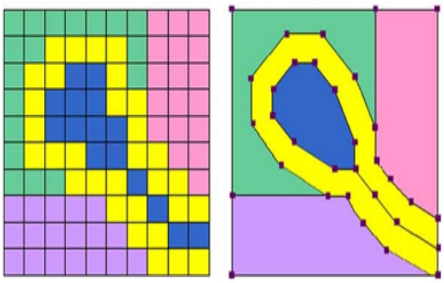


- Images are represented **pixels** (**P**icture **El**ements).
- TVs and monitors produce pixel colours using Red, Green and Blue light (RGB)
- All screen colours can be produced just from RGB



- Printed media pixel colours are produced from Cyan, Magenta and Yellow ink (CMY).
- It is very difficult to colour match between CMY and RGB

Bitmap vs Vector



Examples of Image Software

Adobe Photoshop: Leading software for editing and creation of bitmap images.

Adobe Lightroom: Leading software for developing digital photographs.

Capture One: Professional photographer image capture and editing of large digital photographs.

Adobe Illustrator: Leading software for editing and creation of vector images.

Common **bitmap (raster) image** file types		
File Type	Advantages	Disadvantages
.JPG (bitmap)	Compresses well, so creates smaller files sizes. Reproduces millions of colours Good for web and printing Common format, used by common software	Lossy file format; Variable picture quality Cannot be used for animation
.GIF (bitmap)	Lossless file format Enables animations (very popular use) Sharp edges to images Good for web use	Larger file size Only 256 colours can be reproduced
.PNG (bitmap)	Lossless file format Reproduces millions of colours Excellent transparency in images	Compresses well Not suitable for digital photos No animation

Common **vector image** file types		
File Type	Advantages	Disadvantages
.EPS (vector)	Most common vector type Standard for sharing in print publishing industry	Not widely supported in editing software Generally, Adobe only software
.SVG (vector)	Scalable without image quality reduction International standard for vector graphics High quality printing possible	Not widely supported in software Files sizes can be large wit many elements
.PDF (vector)	Widely supported by many devices Free to view PDF files Small file size	Not free to edit PDF files Text difficult to edit, text is treated as images

Have a read through the information on your ***PE/ Dance*** and ***Music/ Computing*** pages and then use the information below to help you create knowledge maps.

THE KNOWLEDGE MAP

Visualise what you know

1. KEY VOCABULARY

2. KEY IDEAS

TOPIC

3. IMPORTANT FACTS

4. EXAMPLES

THE KNOWLEDGE MAP

Visualise what you know

1. KEY VOCABULARY

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TOPIC

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4. EXAMPLES

Year 9: How do Sikhs practice their religion in modern society?

Knowledge organiser

Key vocabulary

atma The soul
Bandi Chhor Diwas A festival where Sikhs celebrate the release of Guru Hargobind from prison
chauri A fan traditionally used by rulers but now waved over the Guru Granth Sahib as a sign of respect
dhan Material sewa
Diwan Hall The main hall in a gurdwara, where worship services take place
Gurmukh Someone who puts God and the teachings of the Gurus at the centre of their life
Gurpurb A festival to mark the birth or death of a Guru
Hola Mohall A Sikh adaption of the Hindu spring festival of Holi, involving military displays
karma The forces that influence people's future rebirths
Kirtan Sohila An evening prayer that is also said during a Sikh funeral
man Mental sewa
Manmukh Someone who is self-centred and does not put God at the centre of life
Maya The temporary and illusory nature of the world
mukti Union with Waheguru; to escape the world of illusion and the cycle of life, death and rebirth
Nishan Sahib A flag that flies over every gurdwara
pilgrimage A journey taken to a place of religious importance
sarovar The pool of water that surrounds the Golden Temple
Sewa Selfless service to others
Sikh Council The largest organisation representing Sikhs in the UK
takht The throne on which the Guru Granth Sahib is placed each day for services in the gurdwara
tan Physical sewa
Vaisakhi The Sikh festival marking the start of the new year; it also remembers the foundation of the Khalsa by Guru Gobind Singh in 1699
Zafarnama A letter written by Guru Gobind Singh to the Mughal emperor; it is the basis of many Sikh beliefs about war

Key people

Jarnail Singh Bhindranwale A Sikh leader leader who with his supporters occupied the Golden Temple in 1984, demanding rights for Sikhs
Indira Gandhi An Indian Prime Minister who ordered the army to clear Sikh protesters from the Golden Temple in 1984; she was later murdered by two of her Sikh bodyguards
Mahatma Gandhi An Indian Hindu leader who campaigned for Indian independence from Britain in non-violent ways
Duleep Singh The first Sikh to live in the UK
Manmohan Singh The first Sikh Prime Minister of India
Ravinder Singh A British Sikh who founded Khalsa Aid in 1999



The first Sikh Prime Minister of India meeting The Queen at Buckingham Palace.

Key facts

- Sikhs believe that we are all in a cycle of birth, death and rebirth. We can influence our rebirth by our actions in this life (karma). Performing good deeds creates good karma; living selfishly creates bad karma.
- The ultimate goal is to achieve mukti – freedom from this cycle and union with God.
- The Sikh place of worship is called a gurdwara. An orange flag called a Nishan Sahib always flies above a gurdwara.
- During Sikh worship services, the Guru Granth Sahib is placed on a throne in the Diwan Hall; the people all sit on the floor during the service.
- The langar is a communal place for cooking and eating; every gurdwara must have a langar, which is open to everyone, whatever their gender, ethnicity or religion.
- In recent years, many non-Sikhs living in poverty have started to visit langars to have a meal each day. This has led to Sikh organisations such as SWAT taking langar on to the streets to help even more people.
- Sewa, serving others, is a key Sikh belief. There are three forms of sewa: tan (physical service), man (mental service) and dhan (material service, which includes giving to charity).
- The Harmandir Sahib, or Golden Temple, at Amritsar is the holiest place in the world for Sikhs. It receives 5.5 million visitors a year.
- The Golden Temple has been the site of two violent events in its history: the Amritsar Massacre in 1919 and Operation Blue Star in 1984.
- The Sikh festival of Vaisakhi marks the start of the new year and is also a celebration of the founding of the Khalsa.
- The festival of Bandi Chhor Diwas is on the same day as the Hindu festival of Diwali and commemorates the release of Guru Hargobind from prison.
- Gurpurbs are festivals held throughout the year to mark the births and deaths of the Ten Gurus.
- Sikhs believe it is acceptable to fight as long as this is a last resort and is in self-defence or in defence of innocent people. Rules for fighting state that civilians cannot be deliberately harmed and that no religious building – of any faith – should be damaged.
- Many Sikhs fought for Britain during the First and Second World Wars, and recently Sikhs have become members of the Queen's Guard at Buckingham Palace.
- Most Sikhs in the UK today are descendants of people who left the Punjab after the partition of India in 1949. However, there were Sikhs in the UK beforehand, and the first gurdwara was built in London in 1911.
- In recent years there has been controversy over marriages between Sikhs and people of other faiths, with some Sikhs concerned that this may lead to the extinction of the Sikh religion in the long term. Other Sikhs stress the idea of equality that Sikhism embraces and say that Sikhs should be free to marry whomever they love.



Sikhs light candles at the Golden Temple at Amritsar to celebrate the anniversary of Guru Nanak's birth.

KEYWORD REVISION

Copy some of the definitions of the ***RE*** key vocabulary into the boxes below from your knowledge sheet and then see if you can add in the keywords without looking back at your work. Alternatively, you can do it the other way round and see if you can add in the correct definitions without looking.

Keyword:	Definition:

Fancy some additional Class Charts points? Impress your teachers with any of these BHAmazing pieces of vocabulary, and they will award you extra CC points. Challenge: Can you use them in any sentences and show a member of the Senior Leadership Team?

Word List 1	Word List 2	Word List 3	Word List 4	Word List 5	Word List 6	Word List 7
Myriad (adjective) – many	**Caustic** (adjective) – mean / harsh	**Tension** (noun) – feeling of anxiety or nervousness	**Omniscient** (adjective) – all-knowing	**Sentimental** (adjective) – emotional	**Oppressed** (adjective) – subjected to cruel mistreatment	**Metamorphosis** (noun) – a change / transformation
Assert (verb) – state a fact confidently or forcefully	**Elucidate** (verb) – to make clear	**Oblivious** (adjective) – unaware	**Gullible** (adjective) – believes things easily	**Bawdy** (adjective) – rude or vulgar	**Subservient** (adjective) – obedient / submissive	**Abhorrent** (adjective) – repulsive
Egregious (adjective) - outstandingly bad	**Esoteric** (adjective) – likely to only be understood by a small number or people / obscure	**Naïve** (adjective) – Inexperienced / unaware	**Supercilious** (adjective) – arrogant	**Hypermasculine** (adjective) – overly masculine	**Exploit** (verb) – to use someone for your own good	**Abhor** (verb) – to hate
Erroneous (adjective)- wrong	**Tenuous** (adjective) – weak or fragile	**Pretentious** (adjective) – arrogant	**Tyrannical** (adjective) – a cruel dictator	**Atavistic** (adjective) – has characteristics of an earlier generation	**Epiphany** (noun) – a sudden realization	**Fate** (adjective) – destiny
Engender (verb) – to cause	**Perfunctory** (adjective) – carried out with minimal effort	**Pompous** (adjective) – arrogant	**Brazen** (adjective) – bold, shameless	**Troglodytic** (adjective) – like a caveman	**Façade** (noun) – a front (to 'wear a façade' means you wear a metaphorical mask, covering your true emotions or character)	**Integral** (adjective) – important
Employ (verb) – to make use of	**Moral** (noun) – a lesson	**Privileged** (adjective) – having an advantage over other, usually wealth	**Elusive** (adjective) – mysterious	**Apathetic** (adjective) – indifferent / lazy	**Microcosm** (noun) – a smaller community which represents a larger one	**Demise** (noun) – a person's downfall or death
Salient (adjective) – most noticeable and important	**Autonomy** (noun) – independence	**Compassionate** (adjective) – sympathetic	**Chauvinistic** (adjective) – has an attitude of superiority to opposite sex	**Segregated** (adjective) - separated	**Aloof** (adjective) – stand-offish	**Ridicule** (verb) – to make fun of
Advantageous (adjective) – providing an advantage / beneficial	**Assertive** (adjective) – confidence	**Vindictive** (adjective) – spiteful, cruel	**Materialistic** (adjective) – cares for objects and commodities	**Misogynistic** (adjective) – hateful towards women	**Degenerate** (adjective) – disgusting	**Deride** (verb) – to mock
Galvanize (verb) – to shock or excite someone into action	**Conceited** (adjective) – excessively proud / vain	**Duplicitous** (adjective) – having two sides	**Prophetic** (adjective) – able to accurately predict	**Choleric** (adjective) – quick-tempered, angry	**Depraved** (adjective) – immoral / evil	**Contempt** (noun) – hate
Substantiate (verb) – to provide evidence	**Superior** (adjective) – better than	**Narcissistic** (adjective) – self-obsessed	**Impulsive** (adjective) – rash / careless	**Secular** (adjective) – not religious	Feral (adjective) – wild	**Hysterical** (adjective) – uncontrolled emotion

My BHAmazing vocabulary, written in sentences:

1.

2.

3.

4.

5.

6.

7.