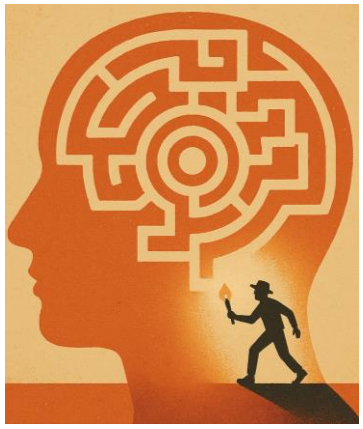
YEAR 9



BHA's Knowledge Quest

Autumn 1
(Sept - Oct)
2025-2026

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 Sparx 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. Flip learning in Graphics and Textiles.

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										

Dates to remember this half term:

September

October

Attendance record

Term	Attendance %
Autumn 1	
Autumn 2	
Spring 1	
Spring 2	
Summer 1	
Summer 2	

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:	Sparx Science Points:
Week 1			
Week 2			
Week 3			
Week 4			
Week 5			
Week 6			
Week 7			
Week 8			
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.

	English Assignments:	History Assignments:	Geography Assignments:
Week 1			
Week 2			
Week 3			
Week 4			
Week 5			
Week 6			
Week 7			
Week 8			
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	
Week 8	
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?

_____

_____

_____

_____

_____

Homework Log

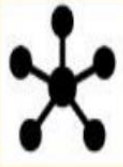
Use this page to record any homework this half term

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

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. 


WORLD MAP
1. Netherlands
2. Belgium
3. Luxembourg
4. Switzerland
5. Slovenia
6. Croatia
7. Bosnia and Herzegovina
8. Czechia
9. Slovakia
10. Austria
11. Hungary
12. Serbia
13. Moldova
14. North Macedonia
15. Albania
16. Cyprus
17. Lebanon
18. Guinea-Bissau
19. Guinea
20. Ghana
21. Togo
22. Benin
23. Cameroon
24. Equatorial Guinea
25. Rwanda
26. Cambodia
27. Panama
28. Malawi
29. Liechtenstein
30. Montenegro
31. Kosovo
32. Palestinian Territories
33. St. Vincent & the Grenadines
0 2,000 4,000 Miles
0 2,000 4,000 6,000 8,000 Kilometers
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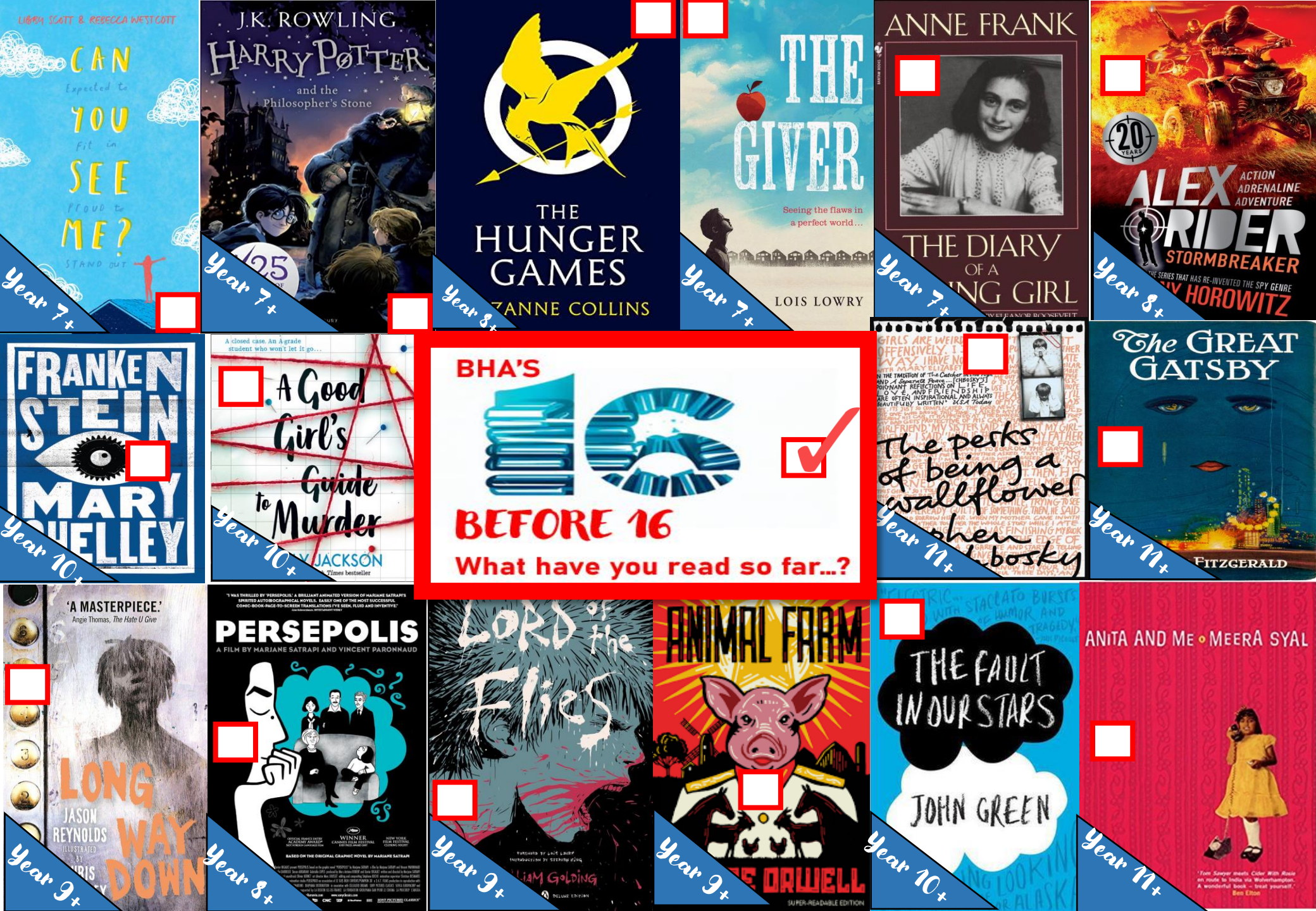
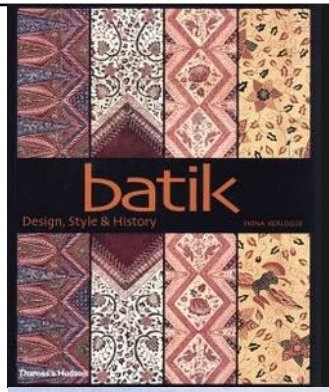
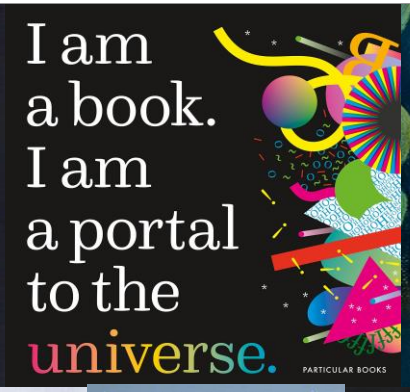

CAN YOU SEE ME?
Year 7+
J.K. ROWLING
HARRY POTTER and the Philosopher's Stone
Year 7+
THE HUNGER GAMES
Year 8+
THE GIVER
Seeing the flaws in a perfect world...
LOIS LOWRY
Year 7+
ANNE FRANK
THE DIARY OF A YOUNG GIRL
Year 7+
20 YEARS
ALEX RIDER
ACTION ADRENALINE ADVENTURE
STORMBREAKER
Year 8+
FRANKENSTEIN
MARY SHELLEY
Year 10+
A closed case. An A grade student who won't let it go...
A Good Girl's Guide to Murder
Year 10+
BHA'S
BEFORE 16
What have you read so far...?
The perks of being a wallflower
Year 11+
The GREAT GATSBY
FITZGERALD
Year 11+
'A MASTERPIECE.'
Angie Thomas, The Hate U Give
LONG WAY DOWN
JASON REYNOLDS
Year 9+
PERSEPOLIS
A FILM BY MARJANE SATRAPI AND VINCENT PARONNAUD
Year 8+
LORD of the Flies
Year 9+
ANIMAL FARM
Year 9+
THE FAULT IN OUR STARS
JOHN GREEN
Year 10+
ANITA AND ME • MEERA SYAL
Year 11+

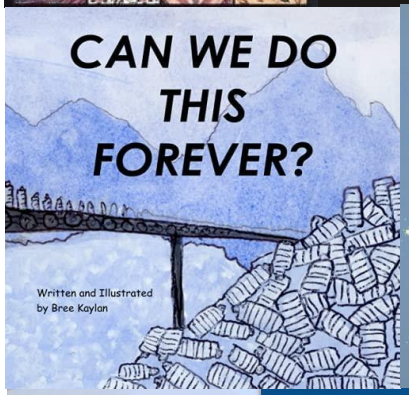
Contents page

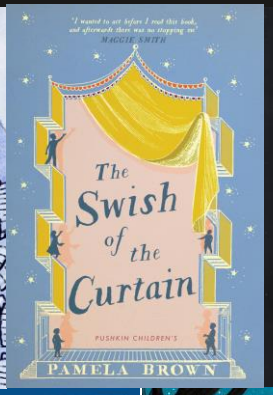
Further Reading List

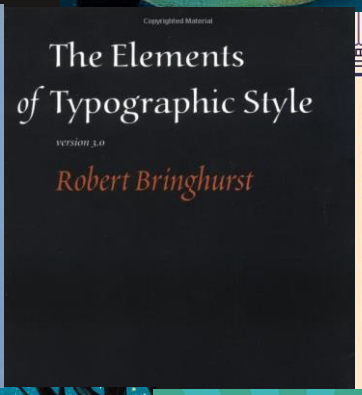
Year 9

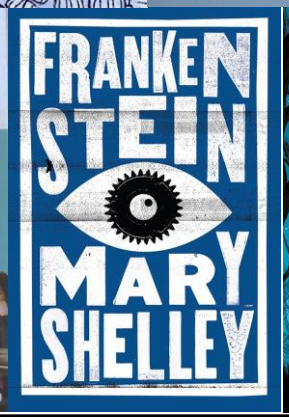


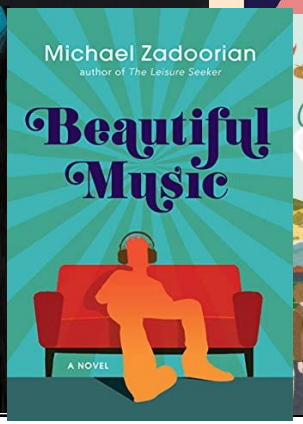


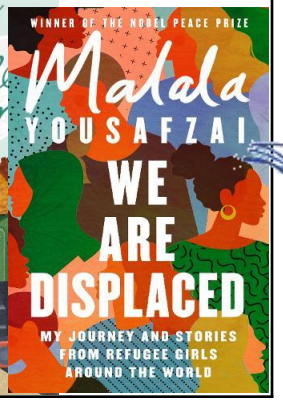




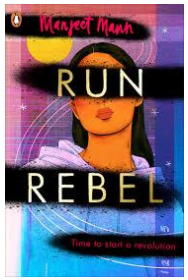








Challenge yourself by reading these topic-related books!



Run Rebel by Manjeet Mann

The novel explores the **conflict of cultures** between her challenging, and at times, abusive family life at home. Her school life is filled with friendships, teen crushes and a passion for athletics. Throughout the novel, Amber must learn to navigate these two opposing cultures and develop the strength to grow and build her own identity in the face of these major obstacles.

Themes

- **Revolution and rebellion**
- **Women and sport**
- **Domestic abuse**
- **Cultural stereotypes**
- **Friendships and relationships**

Key words	Definition
Culture	The shared beliefs, values, customs, behaviours and traditions, characterised by a particular group of people or society.
Duality	Refers to the presence of two contrasting or opposing ideas, characters, or themes within a single narrative or character.
Revolution	A forcible overthrow of a government or social order, in favour of a new system.
Liberation	The action of setting someone free from imprisonment, slavery or oppression.
Oppression	Prolonged cruel or unjust treatment or exercise of authority.

This book is written in prose.
Prose: a form of written or spoken language that follows natural speech patterns and grammatical structure, without the rhythmic or metrical patterns found in poetry.

PEZEL

POINT: Make a clear statement that answers the question.

EVIDENCE: Use a quotation from the book that proves the point you have made, imbed them in and include quotation marks.

ZOOM: Zoom in on a key word/ phrase, identify what TYPE of word it is OR identify any language features and analyse the meaning. Provide at least two interpretations.

EXPLORE: Use your quote explosion/rainbow analysis to explain the effects on the reader. What/ how will it make think, feel, understand?

LINK: Explain why the writer has done this and link back to the context of the novella OR link to another part of the text, how is it developed, emphasised or contrasted

***PEZEL is a structure to ensure you cover all aspects of a mark scheme.**

Characters

- **Amber Rai** – The protagonist.
- **Amber's Father** – A controlling and abusive man.
- **Amber's Mother** – Submissive and silent for much of the story.
- **Ruby**-Amber's sister who is married to **Jas.**
- **David** – A classmate and love interest.
- **Tara**-a friend.

Using **critical verbs** helps you to explore your ideas more clearly.
The writer uses_____ to:
Explores
Teaches
Criticises
Warns
Personifies

Run Rebel is written in **eight sections**, following each stage of the Anatomy of a Revolution:

1. Restlessness
2. Dissatisfaction
3. Control
4. Momentum
5. Honeymoon
6. Terror
7. Overthrow
8. Peace

YEAR 9 – REASONING WITH ALGEBRA...

Straight Line Graphs

Maths

What do I need to be able to do?

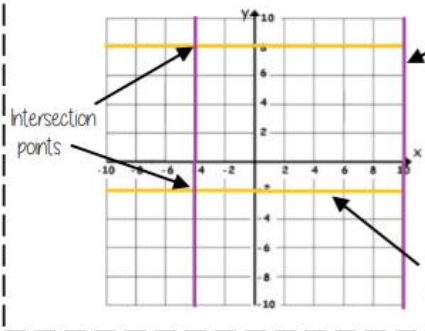
By the end of this unit you should be able to:

- Compare gradients
- Compare intercepts
- Understand and use y= mx + c
- Find the equation of a line from a graph
- Interpret gradient and intercepts of real-life graphs

Keywords

Gradient: the steepness of a line
Intercept: where two lines cross. The y-intercept: where the line meets the y-axis.
Parallel: two lines that never meet with the same gradient.
Co-ordinate: a set of values that show an exact position on a graph.
Linear: linear graphs (straight line) – linear common difference by addition/ subtraction
Asymptote: a straight line that a graph will never meet.
Reciprocal: a pair of numbers that multiply together to give 1.
Perpendicular: two lines that meet at a right angle.

Lines parallel to the axes (R)



All the points on this line have a x coordinate of 10

"a" can be ONY positive or negative value including 0

Lines parallel to the **y axis** take the form **x = a** and are **vertical**

Lines parallel to the **x axis** take the form **y = a** and are **horizontal**

All the points on this line have a y coordinate of -2

e.g (3, -2) (7, -2) (-2, -2) all lay on this line because the y coordinate is -2

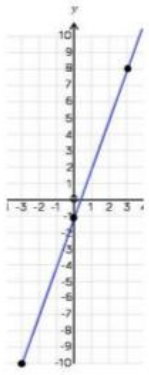
Plotting y = mx + c graphs (R)

$y = 3x - 1$ → 3 x the x coordinate then – 1

x	-3	0	3
y	-10	-1	8

Draw a table to display this information

This represents a coordinate pair (-3, -10)



You only need two points to form a straight line

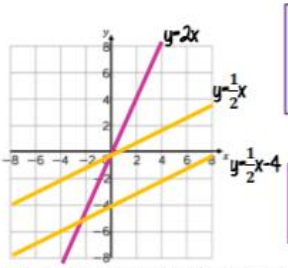
Plotting more points helps you decide if your calculations are correct (if they do make a straight line)

Remember to join the points to make a line

Compare Gradients

$y = mx + c$

The **coefficient** of x (the number in front of x) tells us the gradient of the line



The **greater** the gradient – the **steeper** the line

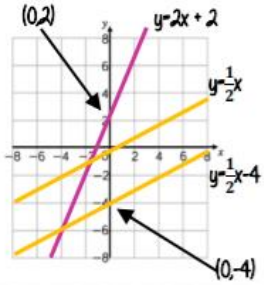
Parallel lines have the **same** gradient

Positive gradients

Negative gradients

Compare Intercepts

$y = mx + c$ ← The value of **c** is the point at which the line crosses the y-axis **Y intercept**



The coordinate of a y intercept will always be (0,**c**)

Lines with the **same** y-intercept cross in the **same** place

y = mx + c

The **coefficient** of x (the number in front of x) tells us the gradient of the line

$y = mx + c$ ← The value of **c** is the point at which the line crosses the y-axis **Y intercept**

y and x are **coordinates**

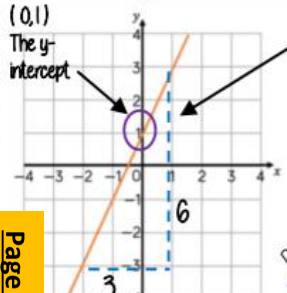
The equation of a line can be rearranged. E.g

y = c + mx

c = y – mx

Identify which coefficient you are identifying or comparing

Find the equation from a graph



$y = 2x + 1$

The direction of the line indicates a positive gradient

Positive gradients

Negative gradients

Real life graphs

A plumber charges a £25 callout fee, and then £12.50 for every hour. Complete the table of values to show the cost of hiring the plumber.

Time (h)	0	1	2	3	8
Cost (£)	£25				£125

The y-intercept shows the minimum charge. The gradient represents the price per mile

In real life graphs like this values will always be positive because they measure distances or objects which cannot be negative.

Direct Proportion graphs To represent direct proportion the graph must start at the origin.

When you have 0 pens this has 0 cost. The gradient shows the price per pen

A box of pens costs £2.30
Complete the table of values to show the cost of buying boxes of pens.

Boxes	0	1	2	3	8
Cost (£)		£2.30			

YEAR 9 — REASONING WITH ALGEBRA...

Maths

Forming and Solving Equations

What do I need to be able to do?

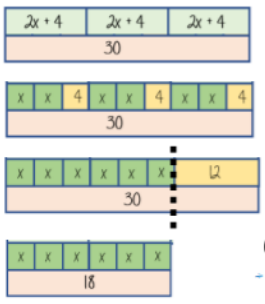
By the end of this unit you should be able to:

- Solve inequalities with negative numbers
- Solve equations with unknowns on both sides
- Solve inequalities with unknowns on both sides
- Substitute into formulae and equations
- Rearrange formulae

Keywords

Inequality: an inequality compares who values showing if one is greater than, less than or equal to another
Variable: a quantity that may change within the context of the problem
Rearrange: Change the order
Inverse operation the operation that reverses the action
Substitute: replace a variable with a numerical value
Solve: find a numerical value that satisfies an equation

Solve equations with brackets (R)



$3(2x + 4) = 30$

Expand the brackets

$6x + 12 = 30$

$-12 \quad -12$

$6x = 18$

$-6 \quad -6$

$x = 3$

Form and solve inequalities (R)

Two more than treble my number is greater than 11

Find the possible range of values

$3x + 2 > 11$

Solve

$x \leftarrow -3 \leftarrow -2 \leftarrow 11$

$x > 3$

Inequalities with negatives

Method 1 Make x positive first

$2 - 3x > 17$

$+3x \quad +3x$

$2 > 17 + 3x$

$-17 \quad -17$

$-15 > 3x$

$\div 3 \quad \div 3$

$-5 > x$

x is true for any value smaller than -5

Smaller ... Bigger

-7 -5 -3

✓ CHECK IT!
$2 - 3(-6) = 20$
TRUE/ CORRECT

Method 2 Keep the negative x

$2 - 3x > 17$

$-2 \quad -2$

$-3x > 15$

$\div -3 \quad \div -3$

$x > -5$

x is true for any value bigger than -5

This cannot be true...

$x < -5$

When you multiply or divide x by a negative you need to reverse the inequality

Equations with unknown on both sides

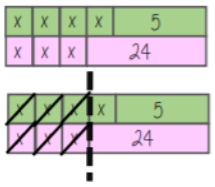
$4x + 5 = 3x + 24$

$-3x \quad -3x$

$x + 5 = 24$

$-5 \quad -5$

$x = 19$



Inequalities with unknown on both sides

Solving inequalities has the same method as equations

$5(x + 4) < 3(x + 2)$

$5x + 20 < 3x + 6$

$2x + 20 < 6$

$2x < -14$

$x < -7$

Check it!

$5(-8 + 4) < 3(-8 + 2)$

$5(-4) < 3(-6)$

$-20 < -18$

✓ -20 IS smaller than -18

Formulae and Equations

Formulae — all expressed in symbols

Substitute in values

Equations — include numbers and can be solved

Rearranging Formulae (one step)

$x = y + z$

Rearrange to make y the subject

$y = x - z$

$y \rightarrow +z \rightarrow x$

$y \leftarrow -z \leftarrow x$

Using inverse operations or fact families will guide you through rearranging formulae

Rearranging can also be checked by substitution

Language of rearranging...

Make XXX the subject

Change the subject

Rearrange

Rearranging Formulae (two step)

In an equation (find x)

$4x - 3 = 9$

$+3 \quad +3$

$4x = 12$

$\div 4 \quad \div 4$

$x = 3$

In a formula (make x the subject)

$xy - s = a$

$+s \quad +s$

$xy = a + s$

$\div y \quad \div y$

$x = \frac{a + s}{y}$

The steps are the same for solving and rearranging

Rearranging is often needed when using $y = mx + c$

e.g Find the gradient of the line $2y - 4x = 9$

Make y the subject first $y = \frac{4x + 9}{2}$

Gradient $= \frac{4}{2} = 2$

YEAR 9 – REASONING WITH ALGEBRA...

Maths

Testing conjectures

What do I need to be able to do?

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

- Use factors, multiples and primes
- Reason True or False
- Reason Always, sometimes never true
- Show that reasoning
- Make conjectures about number
- Expand binomials
- Make conjectures with algebra
- Explore the 100 grid

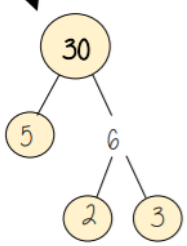
Keywords

Multiples: found by multiplying any number by positive integers
Factor: integers that multiply together to get another number.
Prime: an integer with only 2 factors.
HCF: highest common factor (biggest factor two or more numbers share)
LCM: lowest common multiple (the first time the times table of two or more numbers match)
Verify: the process of making sure a solution is correct
Proof: logical mathematical arguments used to show the truth of a statement
Binomial: a polynomial with two terms
Quadratic: a polynomial with four terms (often simplified to three terms)

Factors, Multiples and Primes

R

Multiplication part-whole models



All three prime factor trees represent the same decomposition

HCF – Highest common factor

HCF of 18 and 30

18: 1, 2, 3, 6, 9, 18

30: 1, 2, 3, 5, 6, 10, 15, 30

Common factors are factors two or more numbers share

LCM – Lowest common multiple

LCM of 9 and 12

9: 9, 18, 27, 36, 45, 54

12: 12, 24, 36, 48, 60

Common multiples are multiples two or more numbers share

True or False?

Conjecture

A pattern that is noticed for many cases

1, 2, 4, ...
The numbers in the sequence are doubling each time.

Counterexamples

This sequence isn't doubling it is adding 2 each time

Only **one** counterexample is needed to disprove a conjecture

Always, Sometimes, Never true.

Always – Every value always supports the statement

Sometimes – Examples show the statement being true and counter examples to show when it is false.

Never – No example supports the statement

Examples to try
- 0 and 1
- Fractions
- Negative numbers

Show that

Numerical verification – Show the stages to a solution with numerical values

Algebraic verification – Show algebraic properties of the solution. You may want to use pictorial images to support this

Proof – Simple proofs using algebra

Compare the left hand side of an equation with the right hand side – are they the same or different?

Conjectures

Even $(2n)$ – Multiple of 2

Odd $(2n + 1)$ – One more than any even

Use numerical verification first
Use pictorial verification – the representations of numbers of odd and even

Expanding binomials

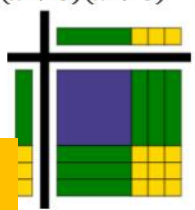
$2(x + 2) \equiv 2x + 4$

Algebra tiles can represent a binomial expansion
Has two terms

Algebra tiles

Positive values

$(x + 3)(x + 3) \equiv x^2 + 6x + 9$



This is a quadratic
It has four terms which simplified to three terms

The order of the binomial has no impact on the outcome
e.g. $(x + 3)(3 + x)$

Exploring the 100 square

In terms of 'n' is used to make generalisations about relationships between numbers

Positions of numbers in relation to n form expressions
E.g. one space to the right of n
$n + 1$

E.g. One row below n
$n + 10$

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

The size of the grid for generalisation changes the relationship statements

Knowledge organiser: Separating techniques

Mixtures

- **Mixtures** are different **substances** which are together, they are not chemically bonded and so are easy to separate
- The substances which make up a mixture keep their own **properties** unlike those in a compound
- A mixture is an **impure** substance as it does not have a fixed melting point, instead it has a range

---

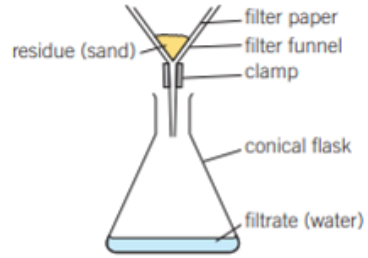
- A **solution** is a type of mixture which is made up of two parts
- A **solute** is the part which has dissolved in the solution
- A **solvent** is the liquid part which the solute has dissolved into

---

- The **solubility** of a substance is a measure of how much of it will **dissolve**
- Not all solutes will dissolve in all solvents
- Solutes which do not dissolve are known as **insoluble**
- Substances which do dissolve are known as **soluble**
- The **solubility** of a substance can be increased by increasing the temperature of the solution or by stirring the solution
- A **saturated solution** is one where the maximum amount of solute has dissolved in it, no more solute will be able to dissolve

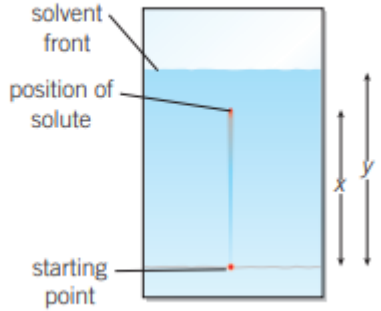
Separating Mixtures

Filtration

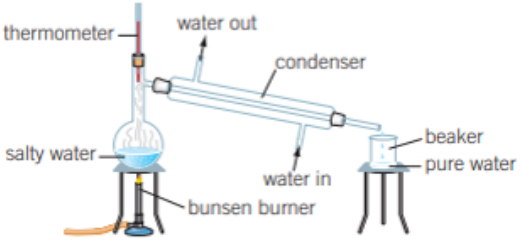


Crystallisation or Evaporation

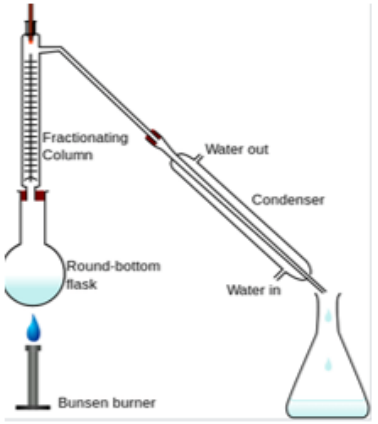
Chromatography



Simple distillation



Fractional distillation



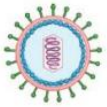
Notes

Infection and Response Knowledge Organiser – Foundation and Higher

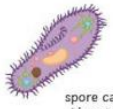
Communicable Disease

Pathogens are **microorganisms** that enter the body and cause communicable disease (infectious). Plants and animals can be infected by them.

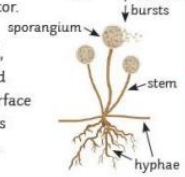
Bacteria are small cells that can reproduce very quickly in the body. They produce **toxins** that make you feel ill, damaging your cells and tissues.



Viruses are much smaller than bacteria; they can also reproduce quickly in the body. Viruses live inside your cell where they replicate. They then burst out of the cell, releasing new viruses.



Protists are eukaryotes (multicellular). Some are parasites which live on or inside other organisms, often carried by a vector.



Fungi are sometimes single celled, others have hyphae that grow and penetrate human skin and the surface of plants. They can produce spores which can spread to other plants.

How Pathogens Are Spread

Pathogens can be spread in many ways, for example:

Water – by drinking dirty water, e.g. cholera.

Air – carried by air and breathed in, e.g. influenza.

Direct contact – touching contaminated surfaces including the skin, e.g. athlete's foot.

Viral Diseases

Measles is spread by droplets of liquid from sneezes and coughs etc., symptoms include a red rash on the skin and a fever. Measles can be serious or even fatal, it can lead to pneumonia. Most people are vaccinated against measles when they are very young.

HIV is spread by sexual contact or exchanging body fluids. HIV can be controlled be antiviral drugs; this stops the viruses replicating. The virus attacks the cells in the immune system. If the immune system is badly damaged, the body cannot cope with other infections. This is the late stage and is called aids.

Tobacco mosaic virus affects plants, parts of the leaves become discoloured. This means plants cannot carry out photosynthesis; this will affect the plants growth.

Fungal and Protist Diseases

Fungal

Rose black spot shows as black spots on the leaves of the plant, this means less photosynthesis occurs. As a result, the plant does not grow as well. It is spread by the wind or the water. They can be treated by using fungicides and taking the leaves off the infected plant.

Protists

Malaria is caused by a protist, mosquitoes are the vectors. They become infected when they feed on an infected animal. The protist is inserted into the blood vessel. Malaria can cause fever, it can also be fatal.

Bacterial Diseases

Salmonella bacteria causes food poisoning. Symptoms include fever, stomach cramps, vomiting and diarrhoea. The symptoms are caused by the toxins produced by the bacteria. Food contaminated with salmonella can give you food poisoning. Most poultry in the UK will have had a vaccination against salmonella.

Gonorrhoea is a sexually transmitted bacterial disease, passed on by sexual contact. Symptoms include pain when urinating and thick yellow/green discharge from the vagina or penis. To prevent the spread, people should be treated with antibiotics and use a condom.

How to prevent the spread:

Being hygienic –

washing hands thoroughly.

Destroying vectors –

killing vectors by using insecticides or destroying their habitat.

Isolation –

isolating an infected person will prevent the spread.

Vaccination –

people cannot develop the infection and then pass it on.

Infection and Response Knowledge Organiser – Foundation and Higher

Fighting Diseases

Defence System

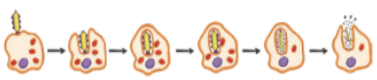
1. The skin acts as a barrier to pathogens.
2. Hairs and mucus in your nose trap particles.
3. The trachea and bronchi secrete mucus to trap pathogens. They also have cilia which move backwards and forwards to transport the mucus towards the throat. This traps any pathogens and the mucus is usually swallowed.
4. The stomach contains hydrochloric acid to kill any pathogens that enter the body via the mouth.

The Immune System

This kills any pathogens that enter the body.

White blood cells:

- **Phagocytosis** is when white blood cells engulf pathogens and then digest them.
- They produce **antitoxins** to neutralise the **toxins**.
- They also produce **antibodies**. Pathogens have **antigens** on their surface, antibodies produced by the white blood cells lock on to the antigen on the outside of the pathogen. White blood cells can then destroy the pathogens. Antibodies are specific to one antigen and will only work on that pathogen.



Vaccinations

Vaccinations have been developed to protect us from future infections. A vaccination involves an injection of a **dead** or **weakened** version of the pathogen. They carry antigens which cause your body to produce antibodies which will attack the pathogen. If you are infected again, the white blood cells can produce antibodies quickly.

Pros	Cons
Helps to control communicable diseases that used to be very common.	They don't always work.
Epidemics can be prevented.	Some people can have a bad reaction to a vaccine – however, that is very rare.

Fighting Disease – Drugs

Painkillers relive the pain and symptoms, but do not tackle the cause.

Antibiotics kill the bacteria causing the problem, but do not work on viruses. Viruses are very difficult to kill because they live inside the body cells.

Developing Drugs

There are three main stages in drug testing:

Pre-clinical testing:

1. Drugs are tested on human cells and tissues.
2. Testing carried out on living animals.

Clinical testing:

3. Tested on healthy human volunteers in clinical trials. Starts with a very low dose, then tested on people with the illness to find the optimum dose.

Placebo is a substance that is like the drug, but does not do anything.

Placebo effect is when the patient thinks the treatment will work even though their treatment isn't doing anything.

Blind trial is when the patient does not know whether they are getting the drug or the placebo.

Double-blind trial is when both the doctor and the patient do not know whether they are getting the drug.

Drugs from Plants

Chemicals produced by plants to defend themselves can be used to treat human diseases or help with symptoms.

Drug	Plant/Microorganism
aspirin	willow
digitalis	foxglove
penicillin	mould - penicillium

New drugs are now made by chemists, who work for the pharmaceutical industry, in laboratories.

Key Vocabulary

antibodies
antigens
antitoxins
bacteria
blind trial
double-blind
fungus
microorganism
phagocytosis
placebo
protist
toxins
vaccination
vector
virus

MFL

Opinions

Me encanta – *I love*

Me gusta mucho – *I really like*

Me gusta – *I like*

No me gusta – *I don't like*

odio / detesto – *I hate*

Justifications

porque es – *because it's*
dado que es – *because it's*
porque no es – *because it's not*
*será– *it will be*
*fue – *it was*

Intensifiers

muy – *very*
bastante – *quite*
demasiado - *too*
un poco – *a little bit*

Connectives

y - *and*
también – *also*
pero – *but*
sin embargo - *however*

Reasons

divertido – *fun*
interesante – *interesting*
fantástico – *fantastic*
guay – *cool*
genial – *great*

horrible – *horrible*
aburrido – *boring*
difícil – *difficult*
terrible - *awful*

Instructions

Escribe – *Write!* Escucha – *Listen!* Mira – *Look!* Lee – *Read!*
Empareja – *Match up!* Traduce – *Translate!* Repite – *Repeat!* Copia – *Copy!*

Questions

Que/Cual es…? *What is it…?*
Como se dice… en ingles / en español? *How do we say… in English/Spanish?*

Classroom language

Hola señor / señorita – *Hello Sir / Miss*
Sí / no – *Yes / No*
Por favor – *Please*
Gracias – *Thank you*
Necesito… – *I need*
- un bolígrafo (verde) – *a (green) pen*
- el papel – *some paper*
- un diccionario– *a dictionary*
- una regla – *a ruler*
- un cuaderno – *an exercise book*

¿Puede usted repetir?
– *Can you repeat?*
No entiendo – *I don't understand*
¿Puede usted ayudarme?
- *Can you help me?*
¿Puedo ir al baño?
– *Can I go to the toilets?*
He terminado – *I have finished*
¿Puedo quitarme la chaqueta?
– *Can I take my blazer off?*
¿Cómo se dice…. en español / ingles?
– *How do I say …. in Spanish / English?*

Los Números

uno	1	treinta	30
dos	2	treinta y uno	31
tres	3	treinta y dos	32
cuatro	4	treinta y tres	33
cinco	5	treinta y cuatro	34
seis	6	treinta y cinco	35
siete	7	treinta y seis	36
ocho	8	treinta y siete	37
nueve	9	treinta y ocho	38
diez	10	treinta y nueve	39
once	11	cuarenta	40
doce	12	cuarenta y uno	41
trece	13	cuarenta y dos	42
catorce	14	cuarenta y tres	43
quince	15	cuarenta y cuatro	44
dieciséis	16	cuarenta y cinco	45
diecisiete	17	cuarenta y seis	46
dieciocho	18	cuarenta y siete	47
diecinueve	19	cuarenta y ocho	48
veinte	20	cuarenta y nueve	49
veintiuno	21	cincuenta	50
veintidós	22	sesenta	60
veintitrés	23	setenta	70
veinticuatro	24	ochenta	80
veinticinco	25	noventa	90
veintiséis	26		
veintisiete	27	ciento	100
veintiocho	28		
veintinueve	29		

MFL

Year 9 Spanish Unit 1 Somos Así

Ways to practise vocabulary: *1. Look cover, write check 2. Log onto Memrise 3. Getting people at home to test you 4. Log onto Quizlet*

Key vocabulary

Mi tiempo libre—Free Time	
me chifla (n)	I love
me mola (n)	I love
el deporte	sport
el dibujo	art/drawing
los videojuegos	video games
los artes marciales	martial arts
soy miembro de	I'm a member of
un club/grupo	a club/group
no suporto	I hate
el racismo	racism
la violencia	violence
los deberes	homework
los insectos	insects

¿cuándo? When?	
los lunes	on Mondays
a veces	sometimes
a menudo	often
los fines de semana	on the weekend
siempre	always
(casi) todos los días	(nearly) every day
todos los fines de semana	every weekend

Organizando mi semana—organising my week	
durante la semana	in the week
bailo Zumba	I do Zumba
cocino para mi familia	I cook for the family
escribo canciones	I write songs
leo cómics/libros	I read books/comics
monto en bici	I ride my bike
toco el teclado	I play the keyboard
veo un partido	I watch a match

Las películas—film genres	
veo	I watch
me gusta ver	I like to watch
una comedia	a comedy
una película de acción	an action film
una película de animación	an animated film
una película de aventuras	an adventure film
una película de ciencia-ficción	a sci-fi film
una fantasia	a fantasy
una película de super-héroes	a super-hero film
una película de terror	a horror film

Future Time markers	
Mañana	Tomorrow
La semana que viene	Next week
El mes que viene	Next month
El nueve de febrero	9th February

Mi próximo cumpleaños—my next birthday	
voy a	I'm going to
hacer Karting	go Karting
ir a la bolera	go bowling
ir a un parque de atraciones	go to a theme park
jugar al paintball	go paintballing
pasar la noche en la casa de mi amigo/a	spend the night at my friend's house
sacar muchos fotos	take lots of photos
montar en una montaña rusa	go on a roller coaster
ver películas de terror	watch horror films
tomar un desayuno especial	have a special breakfast
abrir mis regalos	open my presents
dar una fiesta	have a party

Big Questions Somos Así

What are my hobbies?

What am I doing this weekend?

How do I discuss my film tastes?

What is the future tense and how does it work?

What shall we do for my birthday?

What did I do last birthday?

How do I discuss my favourite celebrity?

Mi cumpleaños—my birthday	
el año pasado	last year
fui/fuimos a	I / we went to
un centro de Laser-Tag	Laser-tag centre
invité mis amigos para…	I invited my friends to…
fue	it was….

Los opiniones—Opinions	
mi película favorita es	my favourite film is
mi actor favorito es	my favourite actor is
mi actriz favorita	my favourite actress

Intensifiers

muy—very
bastante—quite
un poco—a little
mucho —a lot

MFL

Key verbs and grammar

ir	To go (present)
voy	I go/am going
vas	you go/are going
va	he/she/it goes/is going
vamos	we go/are going
vaís	you go/are going
van	they go/are going

ir	To go (preterite)
fui	I went
fuiste	you went
fue	he/she/it went
fuimos	we went
fuisteis	you went
fueron	they went

Forming the preterite tense.
Step 1: find the infinitive.
Step 2: Remove the –ar/-er/-ir .
Step 3: Add the appropriate preterite endings.

Preterite Tense Regular verb endings			
Subject	-ar	-er	-ir
yo (I)	-é	-í	-í
tú (you)	-aste	-iste	-iste
él/ella (s/he)	-ó	-ió	-ió
nosotros (we)	-amos	-imos	-imos

Forming the near future tense.

Step 1: Choose the correct conjugation of 'ir'
Step 2: Add the infinitive

Examples:
voy a ver una película- I am going to watch a film
voy a sacar fotos—I am going to take photos

The future tense		
voy		jugar
vas		pasar
va		invitar
vamos	a	abrir
vaís		recibir
van		

Gustar and similar verbs
Verbs like "me gusta" work in a particular way.
They have to agree with the number of the noun you like.
e.g. I like sweets (plural) for plurals, we simply add an –n to the end of the verb.
Example:
Me gusta el deporte
Me gustan los deberes
To say a friend's opinion, you change ***me*** to ***le***
le gusta el deporte
le gustan los deberes

Adjectives
Adjectives agree with gender and number of the noun.
They are positioned AFTER the noun.
for example: una pelicula divertida (a fun film)
un deporte peligroso (a dangerous sport)

False Friends

emocionante	exciting

Key Questions	
¿Qué tipo de películas (no)te gustan?	what sort of films do you (not) like?
¿Qué cosas (no) te gustan?	what sort of things do you (not)like?
¿Qué típo de película es?	what sort of film is it?
¿Cómo organizas tu semana?	how do you organise your week?
¿Cómo vas a celebrar tu próximo cumpleaños?	how will you celebrate your next birthday?
¿Cómo fue tu último cumpleaños?	how was your last birthday?
¿Qué hiciste?	what did you do?

Key verbs for the unit			
Infinitive	past (I)	present (I)	future (I)
ver (to see)	ví	veo	voy a ver
bailar (to dance)	bailé	bailo	voy a bailar
tocar (to play)	toque	toco	voy a tocar
escribir (to write)	escribí	escribo	voy a escribir
leer (to read)	leí	leo	voy a leer
cocinar (to cook)	cociné	cocino	voy a cocinar
hacer (to do)	hice	hago	voy a hacer
jugar (to play)	jugué	juego	voy a jugar

Tricky spelling

atracciones	double -c

Remember: you can only double the consonants in "Carolina"

PARENT/CARER QUIZZES

Ask your parent or carer to quiz you on some of the knowledge from ***English, Maths, Science*** or ***MFL***. Record your scores below and see if you improve each time.

Date	Subject	Score /10	Did you improve from last time?

Keywords	Definition
Modern World/20th Century	The period between 1900-2000.
Significance	Why the individual, place or event is important.
WSPU	Women's Social and Political Union.
Cat and mouse law.	A law that allowed release from prison until a person was healthy again.
Martyr	Someone who gives up their life for a cause.
Suffragette	More aggressive e.g. Emmeline Pankhurst.
Suffragist	Peaceful e.g. Millicent Fawcett.
Suffrage	To fight for the right to vote.

Suffragettes protest for votes for women 1903
Titanic Sinks 1912
First World War starts 1914
Battle of the Somme 1916
First World War ends 1918
Second World War starts 1939
Japan attacks Pearl Harbour 1941
Atom bomb dropped and end of World War Two 1945
Malcolm X assassinated 1965
Martin Luther King assassinated 1968
Man walks on the moon 1969
Falklands War 1982
Nelson Mandela released from prison 1990
9/11 terrorist attack 2001

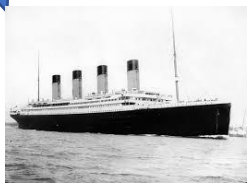
The Rich Passengers:

1. Like a 5-star hotel.
2. Had a gym, swimming pool and tennis courts.
3. £27,000 for ticket.
4. Only 322 in first-class

The Poor Passengers

1. 709 poor passengers.
2. Most had bought a one-way ticket.
3. Not just British there were Spanish and French too.
4. £95.00 a ticket.

The Titanic



Events of the Titanic: Captain Smith wanted to break the transatlantic speed record. He was close to top speed and decided to ignore the warnings. As a result, he hit an iceberg. There were several people at fault. The Titanic was made by Harland and Wolff, and Thomas Andrew designed the Ship.

Suffragists

Used protests and petitions in the street. They would persuade politicians to agree with their fight for the vote.

Suffragettes

They would starve themselves in prison to protests for women's votes. Emily Davison threw herself in front of a horse and died as a martyr for Women's right to vote.

Women's Suffrage

Knowledge Organiser: WW1 (1914-1918)

M	Militarism
A	Alliances
I	Imperialism
N	Nationalism

Schlieffen Plan - Schlieffen's plan involved using 90% of Germany's armed forces to attack France. Fearing the French forts on the border with Germany, Schlieffen suggested an attack through Holland, Belgium and Luxembourg. The rest of the German Army would be sent to defend against the Russians. Once France had been overrun, the German Army could focus on Russia. Failed because the British and Belgians were stronger than they thought, and the Russians mobilised quicker.

Long-term	A cause that happened a long time before an event.
Short-term	A cause that happened a short time before an event.

28th June 1914 – Archduke Franz Ferdinand assassinated.

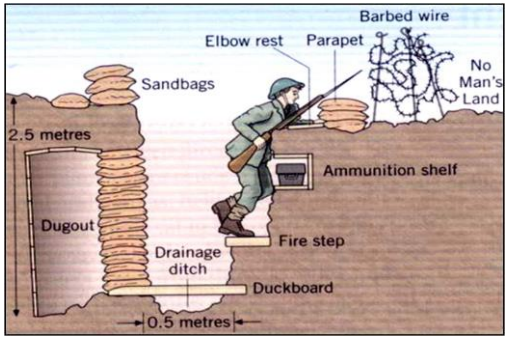
28th July 1914 – Serbia declares war.

1st August 1914 – Germany declares war on France.

4th August 1914 – Germany invade Belgium.

12th August 1914 – France and Britain declares war on Austria-Hungary.

Trenches



Why did men join the war?

Patriotism- fight for country

The war would be over by Christmas- a quick victory

Propaganda- posters, leaflets

N	Nature
O	Origin
P	Purpose

Living in the Trenches

"Cold nights, the discomfort of wet clothes, dragging minutes of fear on patrol, the sufferings of men … but most of all the memory of tiredness. The chances of becoming ill were made greater because of the lack of clean water and proper washing and cleaning"

Battle of the Somme (1916)

1,738,000 shells were fired at the Germans. It was hoped that the artillery guns would destroy the German trenches and barbed wire placed in front of the trenches. When the bombardment stopped, the Germans would have known that this would have been the signal for soldiers to advance. They moved from the safety of their dugouts and manned their machine guns to face the British and French. By the end of the battle, the British had lost 420,000 soldiers. The French lost nearly 200,000 men and the Germans 500,000. They had gained less than 8 miles of land.

The Christmas truce was a name given to a series of unofficial ceasefires upheld by both sides in the week running up to Christmas 1914.

It was initiated by the Germans, and saw both sides exchanging gifts of brandy and cigarettes, swapping addresses and photos, singing carols and playing gan

How did WW1 end?

German Ports were blockaded by the British Royal Navy causing severe food shortages. An estimated quarter of a million people died of hunger.

In April 1917, the USA came into the war against Germany

The German population demanded peace and the Kaiser fled the country – German leaders had no choice but to ask for an Armistice.

Homefront

During **WWI,** the **Home Front** was very important to help Britain win the war in Europe.
It wasn't just the soldiers affected by war- **<u>everyone</u> in Britain** had to help if they wanted to survive.
The **Home Front** during **World War One** refers to life in **Britain** during the war itself.

Terms of the Treaty of Versailles (1919)

1. **G**UILT
2. **A**RMY
3. **R**EPARATIONS
4. **G**ERMANY LOST LAND
5. **L**EAGUE OF NATIONS
6. **E**XTRAS

What were the aims of the Big 3 at Versailles?

Country	Aims at the Paris Peace Conference
Britain 	The Prime Minister, David Lloyd George thought it was unwise to be too harsh on Germany but some of the British people wanted to get revenge. They were angry about the war.
France 	France was keen on getting revenge on Germany because much of North East France was ruined. They wanted money to pay for the damage.
USA 	The President Woodrow Wilson thought that everyone should discuss their problems rather than fight. He wanted a League of Nations. This would let everyone meet to discuss issues.

Russian Revolution

February 1913	**Tsar Nicholas II** celebrates **300 years** of **Romanov** rule of Russia.
August 1914	Start of **World War One**. Russia does badly against Germany. Millions of Russians are killed and there are **severe shortages** on the home front.
March 1917	In **St. Petersburg** there are **mass protests** against the food shortages and the war. When the Tsar's troops refuse to fire on the crowds and join in the demonstration it becomes a **revolution**. The Tsar **abdicates** and a new **Provisional Government** takes over. However the new government decides to carry on the war.
April 1917	**Lenin**, the leader of the **Bolshevik Party**, returns to Russia. He declares everyone should have an equal share of Russia's wealth, peasants should have a share of the land, workers should have a share of the factory where they worked and the war should end immediately.
October 1917	Lenin and the Bolsheviks seize power using force from the Provisional Government. They set about transforming Russia into the world's first **communist** state.
March 1918	The Bolsheviks sign the **Treaty of Brest Litovsk** ending the war with Germany. Many felt it was a shameful peace with Russia forced to give up a huge amount of territory.
July 1918	The **Tsar** and his family are **murdered** in **Ekaterinberg** by the Bolsheviks.
1921	The Bolsheviks rename Russia the **'Union of Soviet Socialist Republics' (U.S.S.R.)** and rename themselves the **Communists.**

History

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 was 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 it's 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.

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% of the vote to Hitler's 36.8%.

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

History

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 new rules for Russia in Parliament.

1917 March – 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.

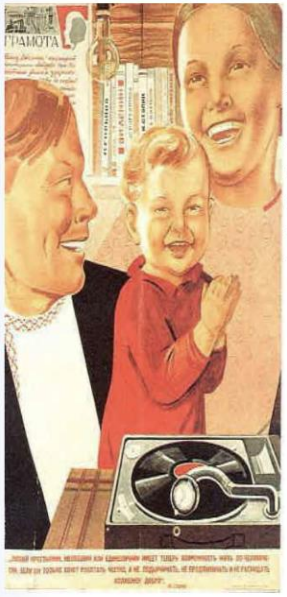
1934 - Stalin's Great Purge begins. Stalin eliminates any opposition and up to 20 million people are killed.

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.

Urban Trends Year 9

Urban: In a town or city.
Rural: In the countryside.
Migration: Moving to live somewhere else, either temporarily or permanently.
SOL: Standard of Living is used to measure wealth.
QOL: Quality of life is used to measure happiness.
Urbanisation: When an increasing percentage of a country's population comes to live in towns and cities.
-Urban Greening: Process of increasing and preserving open space in urban areas.
ITS: Integrated Transport Systems- Different forms of transport are linked together to make it easy to transfer from one to another.
Greenfield site: A plot of land, often in a rural or on the edge of an urban area that has not been built on before.
Brownfield site: Land that has been used before and now awaits reuse; often found in urban areas.
Urban sprawl: Unplanned growth of urban areas into the surrounding rural areas.
Regeneration: The act of improving a place or system, especially by making it more active or successful.
Investment: Investing money for profit.
Sustainable: Actions that meet the needs of the present without reducing the ability of future generations to meet their needs.

4 R schemes to reduce the amount of waste in the Birmingham

Reduce	Reuse	Recycle	Recover
• Ensuring info is available in Brum to prevent waste. • By 2020, Brum aims to reduce the amount of waste generate PP by 10% .	• Using material repeatedly by sharing information on how items can be repaired or donated to organisations sometimes with cash incentives.	• By 2030, Brum aims to recycle 70% of all household and municipal waste • Proving a high quality and reliable service that makes it easier for residents to recycle a wide range of materials, green and food waste.	• Recovering energy from waste. • Managing waste in a more sustainable way can reduce climate change, aim to eliminate waste sent to landfill by 2035

Integrated Transport	Advantages	Disadvantages
HS2	• The north and south will be connected- It will be easier for people to travel between northern cities and London. • Businesses & services will be spread more evenly around the country. • Provide 50,000 additional jobs (26k in Brum). • £4 billion increase in the economy. • Reduced travel time.	• It is estimated to the cost the Government £56 billion, this figure keeps increasing. • Fares are expected to be expensive. • Some people have had to move as they lived along the route. • Some businesses will have to move as their factories are along the route. • Wildlife will be affected as the tracks will run though rural areas
Midland Metro	• Metro operation on battery power removes the need to fix electric wires to the listed buildings along the route • Supports economic growth by improving accessibility in the west of Brum • Improved air quality & reduction in noise	• Limited destinations unlike other ITS schemes. • Building work will be noisy on the extension. • Certain roads will be closed to allow to construction, this may increase traffic.

Geography

Developing Brownfield Sites

Advantages:
- Existing buildings can be put to a range of uses.
- The land is often disused or in a state of dereliction, so any changes are usually an improvement.
- Sites are usually in urban areas, so urban sprawl and also car use for commuting is reduced.

Disadvantages:
- Expensive to build on and building may need demolishing.
- You may need to encourage people back into the area.
- Sites may be contaminated from previous use.

Ladywood: an area containing urban deprivation

Housing:
- Homes are owner-occupied or rented from the council.
- Many homes are poorly insulated.
- 42.5% of children live in poverty 20.1% higher then national average.

Health
- Loses more years of life than Birmingham for infant mortality, lung cancer; and pneumonia.
- During 2013/15 under 75 death rate was 59.4% higher than the rate for England .

Education
- The school census 2016 showed that 65% of pupils of school age had a first language other than English.

Employment & economic
- 6,590 people claim unemployment benefit.

Sutton Coldfield: a very affluent suburb

Housing:
- Homes are owner-occupied or rented from the council.
- Many homes are poorly insulated.
- 12.4% of children are defined as being in poverty.
- None of the population live in deprived neighbourhoods, compared to 40% for the city as a whole.

Health
- Life expectancy is 83.8 years.

Education
81% over pupils gained Grades A*-C in 5 GCSEs, including Maths and English.

Employment & economic
- Unemployment 1.1% and falling.
- English is the main language of 97% of the working age population, and almost 100% can speak it well.

DUAL CODING

Based on some key knowledge from your ***History*** and ***Geography*** knowledge organisers, can you assign different parts of this knowledge to images to help you remember this in the future? Consider your images carefully.

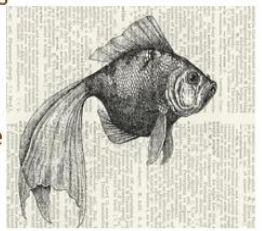
Image	Key Knowledge

Image	Key Knowledge

PRINTING TECHNIQUES

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.

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

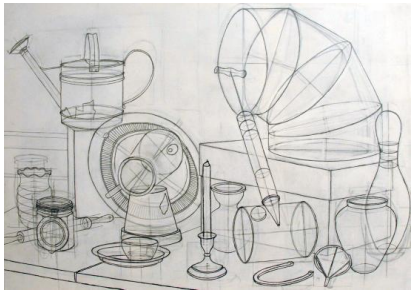
The Great Wave, Katsushika Hokusai, 1830-32, woodblock print.

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*

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:
•metal 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.

What makes a great drawing?



1) PROPORTION:

Your first stage is to ensure that you get good proportion. Proportion is the size of shapes in relation to others.

This should be achieved using universal shapes as a starting of point. While considering the position and size of the shapes in relation to each other.

2) LIGHT LINES:

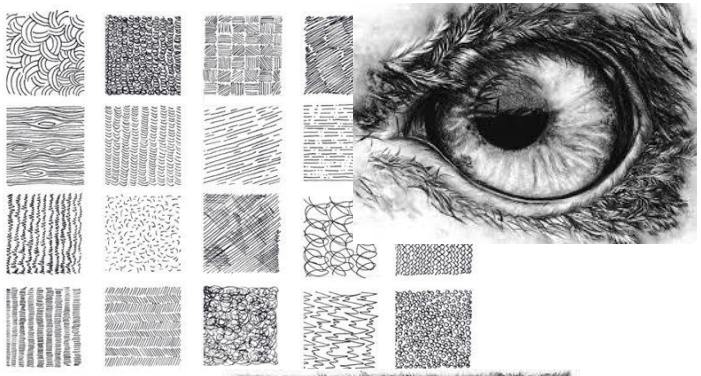
- Draw lightly and delicately to allow modifications.
- Never create dark cartoon like outlines.

3) STRONG TONAL VARIATION:

- There must be strong tonal variation from very light all the way through to very dark.
- Build up darker tones by layering light delicate layers.

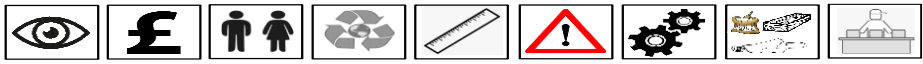
4) TEXTURE:

- Where necessary and appropriate, you need to develop the textures that you see.
- Use appropriate mark-making techniques to create accurate textures.
- Thing about how to move your pencil to create marks that record the textures you see.



5) REFINE YOUR WORK

- Never be satisfied, build into your work, develop your work.
- Keep striving for perfection.
- Practice in this case really does make perfect.



Year 9: Photo Frame User centred design

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

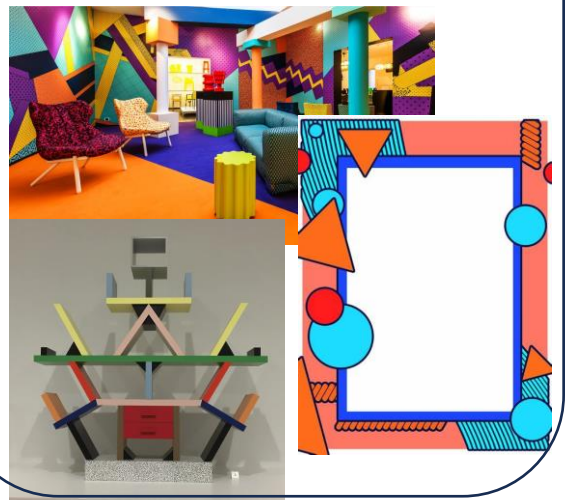
Manufacturer -
Responsible for making the product.

Retailer -
Responsible for selling and 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)



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

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.

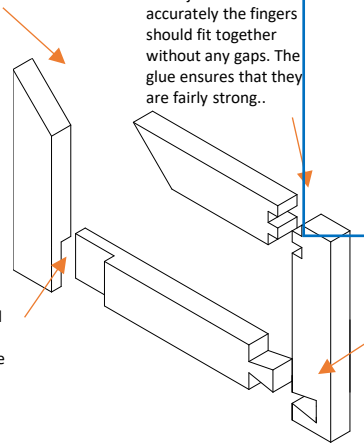
Technology Push is when new developments in materials and technologies improve existing products/create new ones.
Market Pull is when consumers demand improvements/new products. Often found by conducting market research.

Mitre

It is made by cutting 2 pieces of timber at angle of 45 degrees to ensure they fit into each other

Finger

If the joint is cut accurately the fingers should fit together without any gaps. The glue ensures that they are fairly strong..



Half lap

This can be used in the construction of picture frames, windows and doors. Half the thickness of the wood is removed from the 2 pieces to be joined. The wood is then fitted together with a resulting joint that is the same thickness as the rest. This can be reinforced by dowels or fasteners.

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

Dovetail

The joint is very strong because of the way the 'tails' and 'pins' are shaped. This makes it difficult to pull the joint apart and virtually impossible when glue is added. This type of joint is used in box constructions such as drawers, jewellery boxes, cabinets and other pieces of furniture where strength is required. It is a difficult joint which requires practice. There are different types of dovetail joint and when cut accurately they are very impressive and attractive

Year 9: Photo Frame User centred design

Engineering Vocabulary: Talk like an Engineer

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.

Guarantee

Practical/workable/suitable for retail

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.

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


Bobbin | Foot peddle

Parts of a Sewing machine

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


Thread holder
Thread take-up-lever
Reverse lever
Stitch width dial
Hand wheel
Tension dial
Lever for presser foot
Stitch length dial
Stitch selector
Needle
Presser foot
Power switch – 2 speeds

Reverse Lever

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.

Different size embroidery needles

Decorative hand embroidery

Different types of embroidery thread

Different size embroidery rings

Embroidery scissors

Range of different embroidery stitches

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.

Graphics

Vocabulary:

Illustration: a picture illustrating a book, newspaper, etc...

Visualisation: the representation of an object, situation, or set of information an image.

Depiction (depict): represent by a drawing, painting, or other art form

Thumbnail: incredibly rough initial sketch

Initial Idea: Refined more accurate idea, improving the quality and making it look much cleaner

Developed Idea: refine an initial idea to better meet the design brief.

Rendering: adding colour or shade to create texture and depth
Elucidate:make (something) clear; explain.

Depiction (depict): represent by a drawing, painting, or other art form

Satirical: from the word sarcastic, to be critical or mock others

An illustration is a decoration, interpretation or visual explanation of a text, concept or process, designed for integration in print and digital published media, such as posters, flyers, magazines, books, teaching materials, animations, video games and films. An illustration is typically created by an illustrator. Illustrations can also represent scientific images of flora, medicine or different processes, a biological or chemical processes or technical illustrations to give information on how to use something.

What is the purpose of illustration?

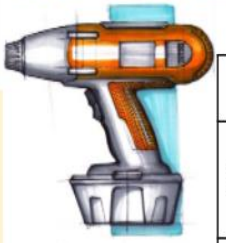
Examples of where you might find illustration might be in picture books, advertising, magazines, newspapers, instruction manuals, posters for gigs or movies, products like T-shirts or greeting cards and even in fashion and film. An illustrator is responsible for taking an idea and turning it into something visual.

What is the difference between an illustration and a drawing?

An illustration is a drawing (or painting, collage, engraving, photo, etc.) that explains something. The illustration doesn't have to be drawn—a photo in an encyclopaedia is also an illustration, because it explains what is written. So, if your drawing is not explaining something, it is a work of art, not an illustration.

Onomatopoeia

visual artwork



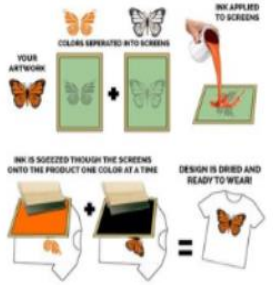
Markers are a great way to make 2D drawings look 3D by adding light and dark tones. With practice they are more realistic and vibrant than painting and pencil crayons. Many product designers and illustrators use this method.

Jon Klassen is a Canadian illustrator and cartoonist specialising in children's picture books, editorial cartoons and caricatures.

What is Pop Art?

Pop art is a fun form of art. Artists takes their images from **everyday culture**, from the objects that surrounded them in their daily lives.

Pop art works also include elements of popular culture such as newspapers, magazines or comics. The designs use cartoon styles with bright vibrant colours and repetitive patterns. A famous pop artist who worked in this comic strip style is called Roy Lichtenstein. Some of Lichtenstein's designs are shown below:



Planography- prints drawn onto the surface e.g., Mono-printing and Lithographic Printing

Relief- prints the surface e.g., Block printing

Intaglio- prints below surface e.g., Etching and Engraving

Stencil- through open areas e.g., Screen Printing

Printing Technique	Outline of process	Uses/Examples
Screen Printing (Stencil)	Images are printed through a screen mesh using stencilling techniques.	•fine art prints •posters •textiles (fabric, t-shirts) •interiors (wallpapers, curtains
Block Printing (Relief) 	Carving patterns, shapes and designs into a 'block'. The 'block' could be made of wood, acrylic plastic sheet, lino (linoleum) or metal.	• fine art prints •printing lengths of fabrics •greetings cards
Engraving (Intaglio) 	**Making incisions or grooves in a plate, covering the plate with ink, and wiping the surface, so that the ink remains in the grooves.**	**• Fine art prints** **•Posters** •Books illustrations
Mono Printing (Planograph hic) 	**Draw designs directly onto an inked surface lay a piece of paper on top of the inked surface to pick up the design.**	**Mono-printing is mainly used for fine art prints and textiles work. It is used for single prints or very small 'runs'.** **Lithographic is used for magazines and posters which are printed in high volumes.**

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.

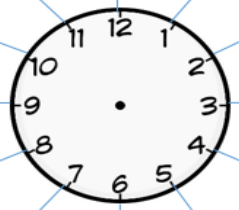
•**Prepare your list in the layout of your supermarket** – this will enable you to spend less time shopping and more time at home enjoying your food.

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

REVISION CLOCK

Based on your current ***DT*** rotation, complete a revision clock which revises a number of the key pieces of knowledge included both on your knowledge organiser sheet and from your lessons. For each 5 minute section, add a new title and key information.

Page 30



Dance Music

Exploring Rhythm, Chords and Metre in Music for Dance

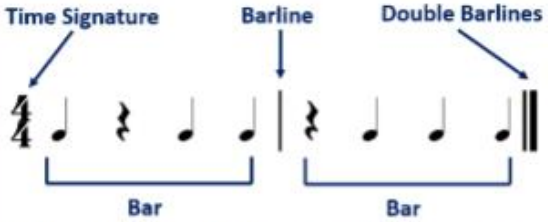
The **RHYTHMS** of dance music always match the **STEPS** of the dance: the two are inter-related. Dance music is based on **CHORD PATTERNS**: mainly **PRIMARY CHORDS (I, IV & V[7])** and has a clear **MELODY** with an **ACCOMPANIMENT (HOMOPHONIC TEXTURE)**. Different dances and their music use different **METRES/TIME SIGNATURES**.

A. Pulse, Time and Metre in Dance Music

The **BEAT** or **PULSE** of dance music is always **REGULAR**. Here is a regular crotchet pulse of 12 beats:

A single **BEAT** is a basic unit of musical time. In dance music, beats are grouped together to make a repeating pattern – normally made up of either twos, threes or fours.

The repeating pattern of beats gives us the **METRE** or the **TIME** of the music, shown by the **TIME SIGNATURE** at the start of a piece of music. Each repetition of the beat-pattern is called a **BAR** and bars are separated by vertical lines called **BARLINES**. A **DOUBLE BARLINE** always comes at the end of a piece of music or section of music.



The **TOP NUMBER** of a time signature tells you how many beats there are in each bar. The **BOTTOM NUMBER** tells you what types or note values these beats are (as divisions of a semibreve = 1):

1 = Semibreve
2 = Minim
4 = Crotchet
8 = Quaver
16 = Semiquaver

4/4 can also be shown by a "C" meaning **COMMON TIME**

B. Simple Time in Dance Music

SIMPLE DUPLE METRE: Two beats to a bar

Dance music such as **MARCHES**, the **TANGO** and **IRISH REEL** often use simple duple metre.

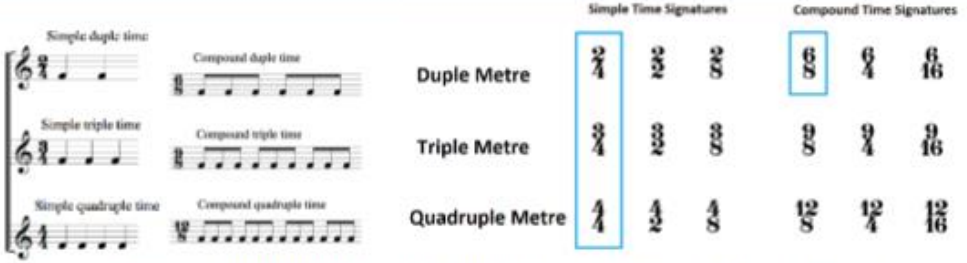
SIMPLE TRIPLE METRE: Three beats to a bar

Dance music such as **WALTZES** and the **MINUET, COURANTE** and **SARABANDE** from the Baroque Dance Suite often use simple triple metre.

SIMPLE QUADRUPLE METRE: Four beats to a bar

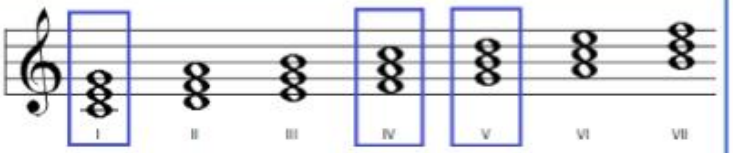
Dance music such as the **TANGO**, the **IRISH REEL**, the **ALLEMANDE** from The Baroque Dance Suite, **AMERICAN LINE DANCE MUSIC** (Country and Western), **DISCO** and **CLUB DANCE** often use simple quadruple metre.

C. Simple and Compound Time



Dance music such as the **IRISH JIG** and the **GIGUE** from the Baroque Dance Suite often use compound duple metre (6/8) with a "**ONE** and a **TWO** and a" feel to the music.

D. Chords in Dance Music



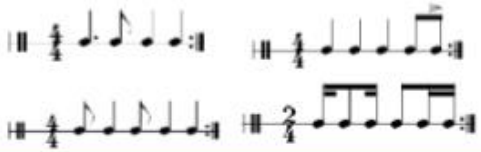
Dance music is based on **CHORD PATTERNS**. **PRIMARY CHORDS**: **CHORD I**, **CHORD IV** and **CHORD V** are most commonly used in dance music with **SEVENTH CHORDS** featuring in popular dance music such as **DISCO** and **CLUB DANCE** (adding a note seven notes above the root of a chord, such as and **DOMINANT SEVENTH CHORD**). All seventh chords have 4 notes. Chords are often performed in different ways as an **ACCOMPANIMENT** in dance music.

E. Characteristic Rhythms in Dance Music

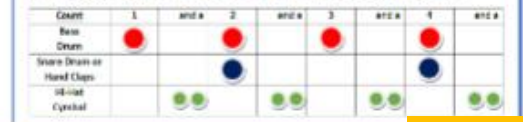
The **MARCH** has a strong **LEFT**, right, **LEFT**, right rhythm:

The **WALTZ** has a strong **OOM**-cha-cha, **OOM**-cha-cha rhythm:

The **TANGO** has several rhythms:



FOUR-ON-THE-FLOOR is a common rhythm in **DISCO** and more modern dance music:



F. Marches

Often with military connections or performed at ceremonies by large groups together.

SIMPLE DUPLE METRE (2/4 time signature), although some marches can be in 4/4).
Strong emphasis on the first beat of the bar (**LEFT**, right, **LEFT**, right).
Clear **MELODY** and **ACCOMPANIMENT** (**HOMOPHONIC TEXTURE**).
Uses mainly **PRIMARY CHORDS (I, IV & V)**.
Often performed by **MARCHING BANDS** featuring **BRASS**, **DRUMS** and **PERCUSSION**.

G. The Waltz

A **PAIRED DANCE** with couples close, arms around and facing each other. Popular in Vienna and became a fashionable **BALLROOM DANCE**.
SIMPLE TRIPLE METRE (3/4 time signature).
Emphasis on first beat of the bar.
Clear **OOM**-cha-cha, **OOM**-cha-cha rhythm. Clear **MELODY** and **ACCOMPANIMENT** (**HOMOPHONIC TEXTURE**).
REGULAR 4-BAR PHRASES.
Slow **HARMONIC RHYTHM** using **PRIMARY CHORDS (I, IV & V)**.
Performed by **ORCHESTRAS**.
STRINGS (occasionally **WOODWIND**) normally have the **MELODY LINE**.

H. Latin Dance: The Tango

Originated in Argentina and became a popular **LATIN BALLROOM DANCE**. A dramatic and sensual **PAIRED DANCE** with close contact, serious expressions, and quick, jerky movements.
Characteristic crisp "**TANGO RHYTHMS**" (see E.) often **DOTTED/SYNCOPATED RHYTHMS**.
SIMPLE DUPLE METRE (2/4) or **SIMPLE QUADRUPLE METRE** (4/4).
Often **MINOR TONALITY** (sometimes **MAJOR** for contrast).
Clear **MELODY** and **ACCOMPANIMENT** (**HOMOPHONIC TEXTURE**).
Uses mainly **PRIMARY CHORDS (I, IV & V)**.
Instruments such as **BANDONEON, VIOLIN, CELLO, DOUBLE BASS** (often plucked – **PIZZICATO**), **SPANISH/ACOUSTIC GUITAR, PIANO**.

I. The Baroque Dance Suite

Popular between 1600-1750, a collection of shorter dances (**MOVEMENTS**) grouped together to form a **SUITE**.
Dances included:

- **ALLEMANDE** (German, 4/4, Stately)
- **COURANGE** (French, 3/4, Lively, Dotted Rhythms and Disjunct melody)
- **SARABANDE** (Spanish, 3/2, Slow and Stately, emphasis on 2nd bear of bar)
- **MINUET** (3/4, Elegant, Stately)
- **GIGUE** (6/8, Fast, Lively, Triplet Rhythms)

All dances in **BINARY FORM (AB)** with each section repeated **(AABB)**.
Performed by a group of instruments such as **HARPSICHORD, LUTE, VIOLIN, CELLO, OBOE, RECORDER, FLUTE**.

J. American Line Dance

GROUP SYNCHRONISED DANCE.
All dancers face same way standing in lines performing steps at the same time without touching.
Accompanied by **COUNTRY AND WESTERN MUSIC:**
CATCHY MELODY, CROTCHET BASS LINE, SIMPLE HARMONY (CHORDS I & V) in crotchets.
SIMPLE QUADRUPLE METRE (4/4)
POPULAR SONG FORM
MAJOR TONALITY
Instruments such as **GUITARS (Electric and Acoustic), STEEL GUITAR, DRUMS, BANJO, FIDDLE, HARMONICA, ACCORDION**.

K. Irish Jig and Reel

Traditional **FOLK DANCES** from Ireland with intricate footwork and arms by sides.
REEL: COMPOUND TIME (6/8); **JIG: SIMPLE TIME** (2/4 or 4/4) both with "two in a bar" feel, continuous bouncy quaver or semiquaver rhythms, fast tempo and **DECORATED** melodies. **BINARY FORM**.
MAJOR/MINOR or **MODAL**.
Folk Instruments include: **FIDDLE, FLUTE, TIN WHISTLE, ACCORDION, BODHRAN, UILLEANN PIPES, HARP**.

L. Disco

Appeared in 1970's as an individual, **IMPROVISED DANCE** in clubs from a mix of jazz, funk and soul.
SIMPLE QUADRUPLE METRE (4/4)
FAST TEMPO (around 120 BPM)
FOUR-ON-THE-FLOOR RHYTHM (see E.)
SYNCOPATED bass line parts.
Simple **CHORD PATTERNS** using **CHORDS I** and **V** and **SEVENTH CHORDS.**
POPULAR SONG FORM with a strong **GROOVE** (long repeated rhythm section) and fade out endings, and catchy **HOOKS/RIFFS**.
GUITARS, VOCALS, DRUMS, STRING/BRASS SOUNDS, SYNTHESISERS, SAMPLES.

M. Club Dance

Influenced by **MUSIC TECHNOLOGY:** samplers, synthesisers, sequencers and drum machines.
Various genres: House, Techno, Drum and Bass, Garage, Trance, Ambient. Dancing in individual and **IMPROVISED** on one spot.
SIMPLE QUADRUPLE METRE (4/4).
Use of **ELECTRONIC SOUNDS.**
A **STRONG BEAT** emphasised by the **DRUM** and **STRONG BASS LINES**.
SHORT PHRASES and **REPETITIVE SECTIONS**.
FAST TEMPO (Ambient is slower/chilled)
Complex, layered drum patterns.
Inclusion of **SAMPLES**.

Year 9 Dance

What Is Contemporary Dance?

Contemporary dance blends elements of multiple dance styles and lets dancers express emotionally through movements and breath. Learn about the importance of contemporary dance as an art form through a brief exploration of its history, influences, and techniques.

Question and Answer = is a **strategy of dancing in a 'question and answer' way**. It works in the same way as in a normal dialogue, but the relationship between dancers is created through movement. If there are two people dancing. For example, one dancer moves first with some choreographic intention towards the other. The second dancer waits and when the first one has finished. He/She moves with some choreographic intention that replies to the partner's first choreographic message.

Swan Song Christopher Bruce

CONTEXT OF THE WORK AND ITS SIGNIFICANCE:

Swan song is concerned with political oppression. A deliberately disturbing dance showing a victim being tortured by a variety of means. It shows both the aggressive and sadistic element of interrogation and how brainwashing, humiliation and playing with emotions may all be part of a long, nerve wracking game. Swansong is all about hooliganism amongst corrupt authorities, about the injustice towards the defenseless. The guards end off as losers, as they beat up the prisoner and are left looking at the chair where the dead body must be imagined. The victim's spirit escapes and is free at last. Bruce uses different popular dance styles to sinister effect. The interrogators perform tap routines to indicate the questioning of the victim, and to allow him to join in and dance with them. The dance was originally created for three males, but has been performed since with a mix of genders.

MIND MAPS

HOW TO TAKE NOTES — **MIND MAPPING AND BRAINSTORMING**

ABOUT

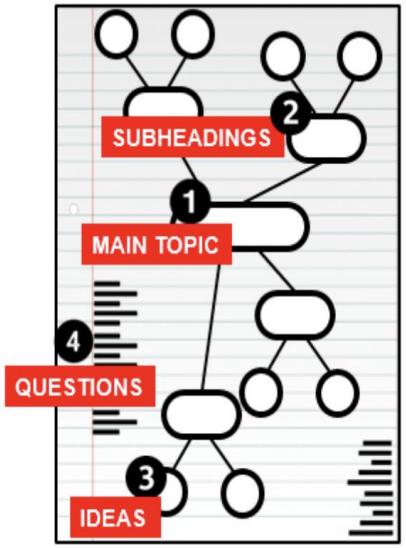
Mind Mapping and Brainstorming is a highly visual method of representing information

- Establishes links and relationships between ideas and concepts
- Can be used to take notes as part of the Cornell Method
- Effective when working from textbooks or written notes

HOW

- This works far better on paper then as a digital method
- Make sure you start in the centre of the page

1. TOPIC
2. SUBHEADINGS
3. IDEAS
4. QUESTIONS



1

- Determine **the overall topic** or theme
- Write this in **the centre of your page** and **circle it**
- If the main focus of your mind map changes – create an **additional mind map** – do not add the new focus to the mind map that you are already working on.

2

- You will need to add **major facts** (**subheadings**) that relate to your main topic

3

- Each subheading will have at **least one idea** related to it.
- Make sure that your **ideas are visually distinct** from your subheadings

4

- Use the edges of your document to **write questions**
- These should **relate to the ideas** in your mind map
- You could also use these areas to **expand on points** that need additional clarification on the main mind map

Mind maps are a great way to revise key information. Have a read through the information on your ***Dance*** and ***Music*** pages and then use the information below to help you create mind maps.

Physical Education Year 9 Football

PE

Types of shot

Driven shot - A powerful shot that usually goes straight and has a direct trajectory.

Curl shot - A shot involving spin on the ball which makes the ball move in a curved direction.

Chip shot - A shot kicked high into the air in order to score a goal over the goalkeeper.

Volley - When the ball is struck in the air by the foot of any player before it hits the ground.

Creating an overload

The basis of this technique is to overload one side of the pitch in order to drag the opposition to that side, thereby opening up space on the opposite side of the pitch.

One reason a team may overload an area of a pitch is to help keep possession of the ball.

A second reason a team may create an **overload** is to draw in the opposition players to one side of the pitch and then **switch the play** to where there is more space and less defenders.

E.g., The team in blue **overload** one area of the pitch to help them keep the ball and draw in opposition players. They then **switch the play** to create a 1v1 attacking scenario for their winger.

Football terminology

Down the line – The 'line' refers to the touchline and this phrase means passing the ball forwards as close to the line as possible.

Pressing – When teams try to win the ball off the opposition quickly.

Sitting back – When teams concede position and call most, if not all teammates back to defend.

Man-on – This phrase is called when a teammate is being quickly closed-down by an opposing player.

First time – This refers to either passing or shooting the football immediately without controlling the ball.

Step up – This is called when a team is defending too deep and needs to move forwards up the pitch.

Switching the play – Kicking the ball from one side of the pitch to the other.

Dive – An attempt by a player to gain an unfair advantage by faking being fouled.

Overload – When a team has more players in an area of the pitch than they usually would.

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

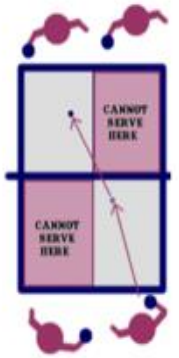
Smash - an offensive, high-speed shot used against high balls, where the racket is in a normal position to generate the most speed possible. Also called a kill

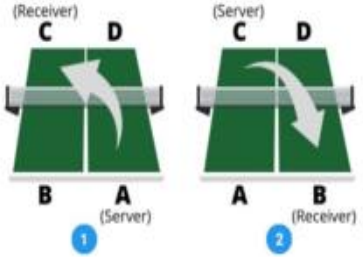
Topspin - a type of spin where, if struck with a normal racket position, the ball would travel over the opposite side of the table without hitting the surface

Serving Doubles

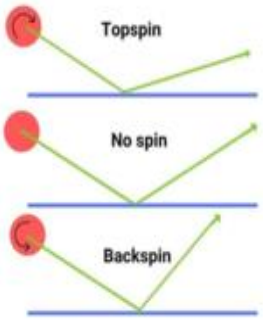
1.In doubles, your service must go **diagonally.** The first drop of your service must be on the **right-hand side** of your board and after crossing over the net, it must bounce on the **right-hand** side of the receiver's board.

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





Types of Spin

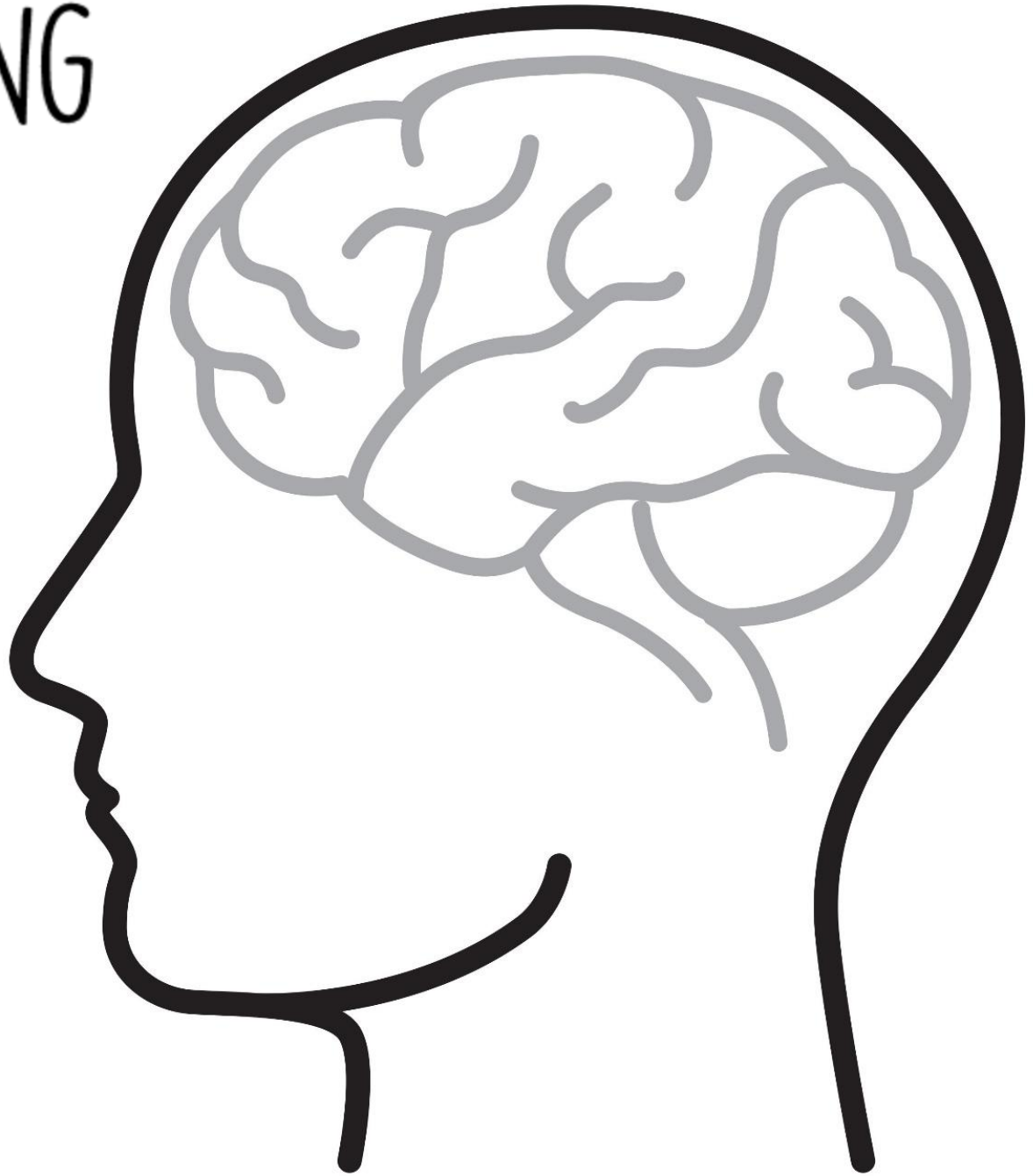


How to Hit a Forehand Topspin in 4 Steps

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.

BRAIN DUMPING

Within the 'brain', add all of the knowledge you can remember from ***PE*** 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.



Knowledge organiser

Key vocabulary

Adi Granth A collection of hymns and writings of the early Sikh Gurus, compiled by Guru Arjan; it means 'first book'

amrit Sugar that is mixed into water using a sword; it is drunk at the Amrit ceremony

Amrit ceremony Ceremony to become part of the Sikh Khalsa

Bhai A title given to people respected by Sikhs; it literally means 'brother'

caste A series of social classes that determine someone's job and status in society

chapati A type of flatbread commonly eaten in India and Pakistan

disciples Followers of a religious leader

The Five Ks Five articles of faith worn by the Khalsa: kesh (uncut hair), kangha (a wooden comb), kara (a steel bracelet), kachera (special cotton underwear) and kirpan (a short sword)

granthi People who read from, and look after, the Guru Granth Sahib; Sikhs do not have religious leaders or priests and anyone can read from the Guru Granth Sahib

gurdwara The Sikh place of worship; it literally means 'doorway to the Guru'

Gurmukhi A language created by the Gurus and used to write the Guru Granth Sahib

Guru A religious teacher or guide who leads a follower from spiritual ignorance (*Gu,* 'darkness') into spiritual enlightenment (*ru,* 'light')

Guru Granth Sahib The Sikh holy book; the name means 'from the Guru's mouth'

initiated Made a member of a particular group through a special ceremony

Janam Sakhis Stories about the childhood and life of Guru Nanak

karah parshad A sweet food shared at the end of the Amrit ceremony

Kartarpur A town in modern Pakistan where the first Sikh community was founded in 1522 by Guru Nanak

Kaur 'Princess' – the title given to a female Khalsa Sikh

Khalsa The community of Sikhs founded by the tenth Guru, Gobind Singh

khanda The symbol of Sikhism, made up of two double-edged swords, one sword in the middle and a circle

langar A word meaning 'free kitchen'; a communal eating area found in every Sikh place of worship

martyr Someone who is killed for his or her beliefs

monotheist Someone who believes in only one God

Mool Mantra The first hymn written by Guru Nanak; it summarises Sikh beliefs about God

Mughal Empire The rulers of the area that is now India and Pakistan in the sixteenth and seventeenth centuries

naam japna Repeating the name of God over and over as an act of worship

Panj Pyare 'The blessed ones' – the first five men who volunteered to join the Khalsa

revelation A message revealed by God to humans

Sikh A follower of Sikhism; it comes from the Sanskrit word *shishya,* which means 'disciple' or 'learner'

Singh 'Lion' – the title given to a male Khalsa Sikh

Waheguru the most common name used by Sikhs to describe God meaning 'wonderful Lord/Guru'

Key facts

- There are around 25 million Sikhs in the world today, most of them (19 million) living in India.
- Sikhism began with a man called Nanak, who was born in part of India called the Punjab.
- When Nanak was 30 he received a revelation in which he understood that although there are many different religions there is only one God. God loves all people equally, whatever religion they follow.
- Stories about Nanak's childhood and life are collected in the Janam Sakhis.
- Nanak made four long journeys over a period of 20 years, spreading word of his revelation. He visited and talked with Buddhists, Hindus and Muslims.
- The story of the miracle of milk and blood emphasises one of Guru Nanak's important teachings – that of working hard and honestly.
- Guru Nanak died in 1539. He was followed by nine Sikh Gurus, who developed the Sikh tradition.
- Guru Arjan is famous for building the holiest site in the world for Sikhs, the Harmandir Sahib, and for being the first Sikh martyr after his death at the hands of the Mughals.
- The Sikh symbol of the Khanda was established by Guru Hargobind, who put on two swords to indicate his spiritual authority (piri) and his worldly authority (miri).
- The ninth Guru was Tegh Bahadur, who challenged the Mughal Emperor Aurangzeb to convert him to Islam. When the emperor failed to do so, he had the Guru executed.
- The last of the human Gurus was Gobind Singh, who established the Khalsa, a brotherhood of Sikhs established to protect their people from persecution.
- Male Sikhs who join the Khalsa take the surname Singh ('lion') and female Khalsa Sikhs take the surname Kaur ('princess').
- Before he died, Gobind Singh said that the collection of Sikh holy scriptures, the Guru Granth Sahib, would be the eleventh and final – eternal – Guru.
- The Guru Granth Sahib is a collection of scriptures collected over 150 years that is highly revered by Sikhs, who look to it for guidance and leadership.
- It is written in a language called Gurmukhi and there are strict rules about how copies of it can be printed, transported and treated.
- The book is used during Sikh worship services and during special ceremonies. Sometimes readers called granthi will read the whole text from start to finish, which takes about 48 hours.
- The Mool Mantra is a text that describes Sikh beliefs about God, including that he is the creator, immortal, without fear or hate, and beyond birth and death.

Key people

Akbar A Muslim Mughal emperor and ruler who was very impressed by the langar and had a good relationship with the Sikhs

Aurangzeb A Mughal emperor during Tegh Bahadur's time as Guru; he had Guru Tegh Bahadur killed

Guru Nanak (1469–1539) The founder and first Guru of Sikhism

Guru Angad (1539–52) A devoted follower of Nanak who succeeded him as second Guru

Guru Amar Das (1552–74) The third Guru

Guru Ram Das (1574–81) The fourth Guru

Guru Arjan (1581–1606) The fifth Guru, who created the Adi Granth (first Sikh scriptures) and founded the Golden Temple in Amritsar; he was martyred by the Mughal emperor

Guru Hargobind (1606–44) The sixth Guru; a key military leader

Guru Har Rai (1644–61) The seventh Guru

Guru Har Krishan (1661–64) The eighth Guru, who died at the age of eight

Guru Tegh Bahadur (1664–1675) The ninth Guru; executed by the Mughal emperor

Guru Gobind Singh (1675–1708) The tenth and final human Guru, who established the Khalsa

Jahangir A son of Mughal Emperor Akbar who had Guru Arjan killed

Lalo A hard-working carpenter of low caste who became one of the first Sikhs

Malik Bhago A rich and corrupt man who was angered by Guru Nanak eating with Lalo

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.

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6.

7.