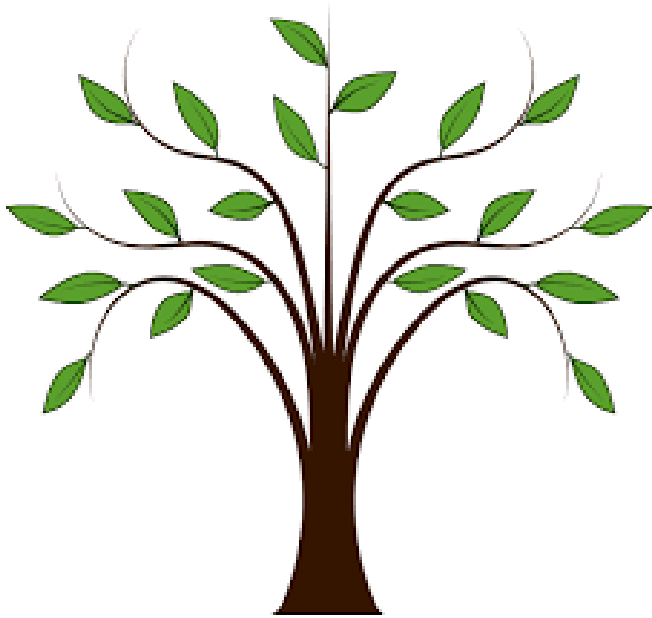
YEAR 8

BHA's Knowledge Quest

Spring 1 (Jan - Feb)

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 Seneca homework, 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. Engineering Seneca assignment to prepare for BBB assessment set as part of the rotation. Independent self-quizzing from Knowledge Organiser.
Art: To research/find and create resource images for projects when required.
Computing: 1 hour of Seneca per fortnight.
All other subjects: Revise the information in this booklet using the revision sheets included with each subject.

Timetable

Use this page to copy out your lessons and room numbers

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

Enrichment and Intervention 2025-26 Term Two

Spring Term

	Monday	Tuesday	Wednesday	Thursday	Friday
Breakfast 7.45am – 8.30am	Start Right Club Library open	Start Right Club Library open	Start Right Club Library open	Start Right Club Library open	Start Right Club Library open
Lunch 12.45pm – 1.15pm	MUGA Year 9 Library Year 11 Yr 7 Basketball LG Yr 7, 8, 9 Keyboard club- Room 36 SW	MUGA Year 11 Library Year 10 Yr 8 Basketball LG	MUGA Year 10 Library Year 9 Yr 9 Basketball LG All Years Vocal Group /Choir Room 36 SW	MUGA Year 8 Library Year 8 Yr 10 Basketball LG	MUGA Year 7 Library Year 7 Yr 11 Basketball LG
Period 7 Monday Tuesday Thursday 3.30pm – 4.30pm Wednesday Friday 2.35pm – 3.35pm	Year 11 Open / MFL Subject Intervention Week 1: **B Block** Week 2: **C Block** Year 9 football (Field) WT All years Chess Club – Room 9 MAG All Years Debate Mate Room 23 BED Sparx Maths Club – Room 15 DHY / RMI	Year 11 Science Intervention All years Netball (MUGA) GH New All years Basketball (Large Gym) WT Year 7 and other beginners Latin Club Room 60 AA Year 8 football (Field) JS All years Dance Club (Dance studio) CG	Year 11 English and Maths Intervention DJO / AWI / KCA / LSI / LHA Year 7/8 Trampolining (Small Gym) KHA All years Dodgeball (Large Gym) WT New Year 10 Football (Field) NK Year 7,8,9 Girls football WBA- Invite only MUGA All years Dance Club (Dance studio) JR	Year 11 Geography /History Intervention Year 7 Football (Field) NK All years Legacy cohort Latin Club Room 60 AA All years Handball (MUGA) JS New Year 9/10 Trampolining (Small Gym) GH All years *The hook and pen society* Room 53 JW/LOM	All years Dungeons and Dragons (MB) Room 5 **Yr 10/11 Engineering** coursework catch up intervention- By invitation only LN **Yr 10/11 Textiles** coursework Catch up intervention- By invitation only NB/KWK
	All years Basketball (Large Gym) NK New All years Girl's Football (MUGA) JS/NW All years Task Master Room 28 GEG All years Science Club Lab 49 SAM/BHO/RHA Year 7 – 9 Masterchef Room 45 (limited to 15 pupils only) CCR/MSH/PCR **SEND** Y7 Reading Intervention ADI/LOM Room 2	All years *Hooked on Bristnall* Room 53 JW All years Beyond the Books (Reading Club) Room 24 FH All years Digital skills Room 30 MCA Year 10 Rock Band- Room 36 SW Basketfields Booster for Year 10 English Room 23 FBA Masterchef **(SEND)** Room 45 CCR/MSH/MCS **SEND** Y8 Reading Intervention ADI/LOM 33	All years Board Game Club Room 55 AK All years The Rep Theatre – Performing Arts Club Room 16 All years Geography Club Room 2 SBW All years Ultimate Uno Club Room 23 QSM All years Scene Stealers Filmmaker Club Room 22 DLA All years Act Up! Drama Club Room 24 SBS Yr 10 GCSE Computer Science and I Media students only: Room 62 JM / Room 10 HA **SEND** Social Society CCR/CST Room 1 **SEND** WBA Multisports/Football LK **SEND** Homework Club – JRE/MPA Room 31 **SEND** Y10 Direct Instruction Lit – JPG Room 3	All Years Graphics club KWK 43 Year 7,8,9 Music Rock Band- Room 36 TW Russian Language Club for beginners Room 58 RMI	

Academic	**Creative**	**Physical**
☐ Task Master (will meet all parts of the diploma) ☐ Latin Club (new and legacy co horts) ☐ Chess Club ☐ Sparx Maths Club ☐ Geography Club ☐ Science Club Lab 49 ☐ Debate Mate ☐ 'Beyond the Books' Reading Club ☐ Russian Language Club for Beginners ☐ Any other subject intervention	☐ Task Master (will meet all parts of the diploma) ☐ Scene stealers film maker club ☐ Act up! Drama Club ☐ Ultimate Uno ☐ Hooked on Bristnall - Crochet club ☐ The hook and pen society ☐ The REP Theatre Performing Arts Club ☐ Board Game Club ☐ Dungeons and Dragons ☐ Graphics Club ☐ Digital Skills ☐ Rock Band ☐ Lunchtime keyboard cub ☐ Lunchtime vocal choir ☐ Masterchef ☐ The Articulators	☐ Task Master (will meet all parts of the diploma) ☐ Football ☐ Basketball ☐ Netball ☐ Trampolining ☐ Dance ☐ Handball ☐ Dodgeball

Dates to remember this half term:

January

February

Attendance record

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

Sparx Check!

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

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

	Sparx Reader Points:	Sparx Maths Points:
Week 1		
Week 2		
Week 3		
Week 4		
Week 5		
Week 6		
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:	Science Assignments:	History Assignments:	Geography Assignments:
Week 1				
Week 2				
Week 3				
Week 4				
Week 5				
Week 6				
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 what % 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	
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

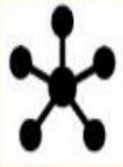
Use this page to record any homework this half term

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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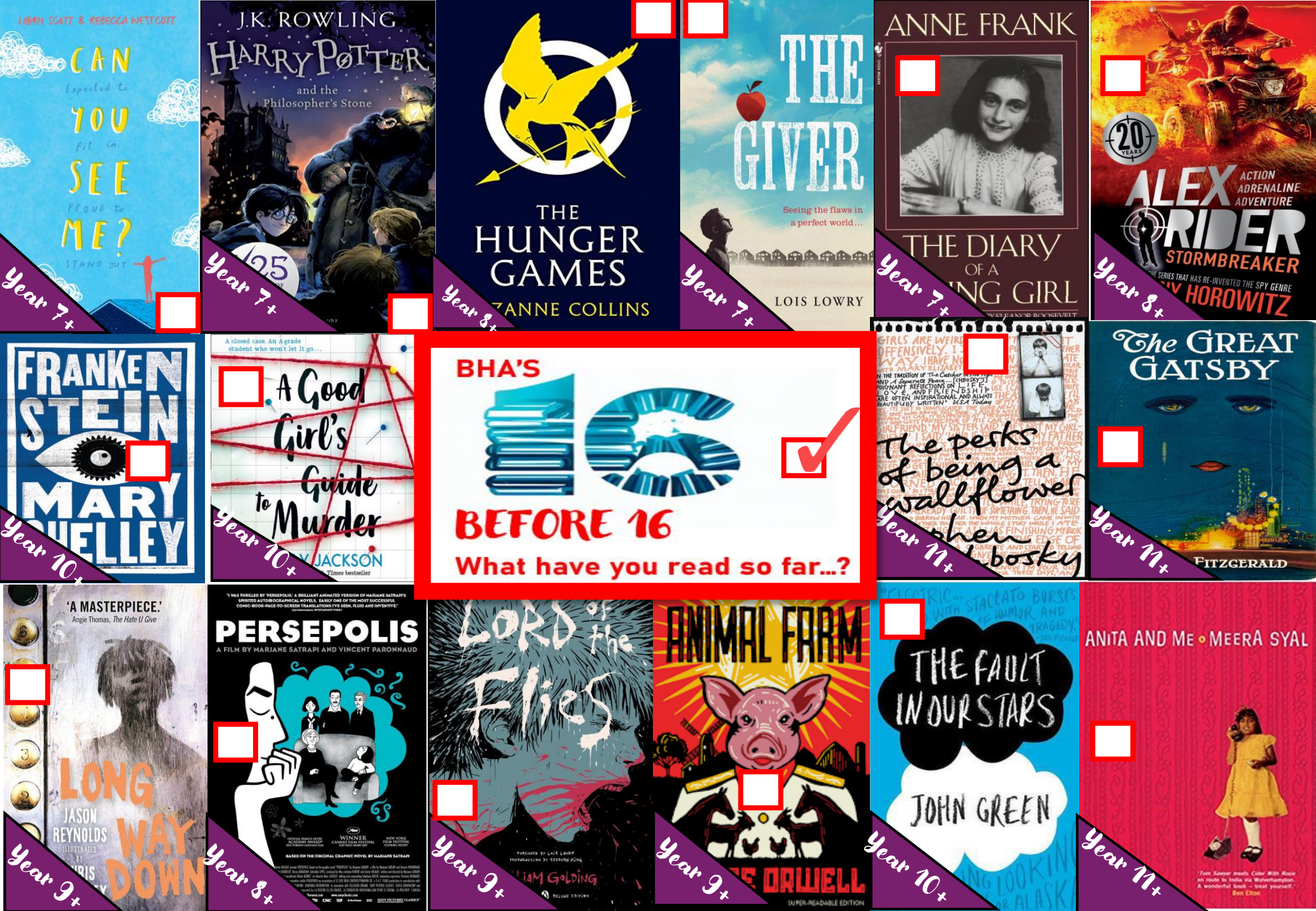
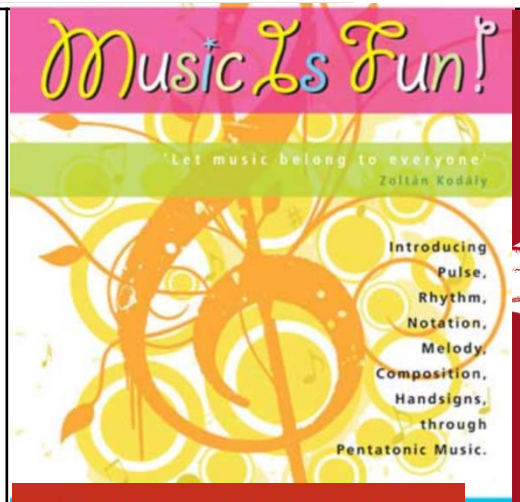

LIBBY SCOTT & REBECCA WESTCOTT
CAN YOU SEE ME?
Expected to Fit in
Proud to
STAND OUT
Year 7+
J.K. ROWLING
HARRY POTTER
and the Philosopher's Stone
Year 7+
THE HUNGER GAMES
Year 8+
THE GIVER
Seeing the flaws in a perfect world...
LOIS LOWRY
Year 7+
ANNE FRANK
THE DIARY OF A YOUNG GIRL
Year 7+
20 YEARS
ALEX RIDER
ACTION ADRENALINE ADVENTURE
STORMBREAKER
THE SERIES THAT HAS RE-INVENTED THE SPY GENRE
HOROWITZ
Year 8+
FRANKEN STEIN
MARY SHELLEY
Year 10+
A closed case. An A grade student who won't let it go...
A Good Girl's Guide to Murder
JACKSON
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
WINNER
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+

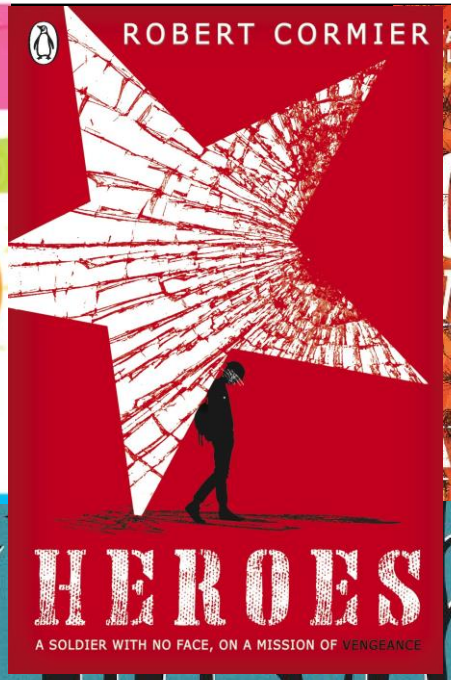
Contents page

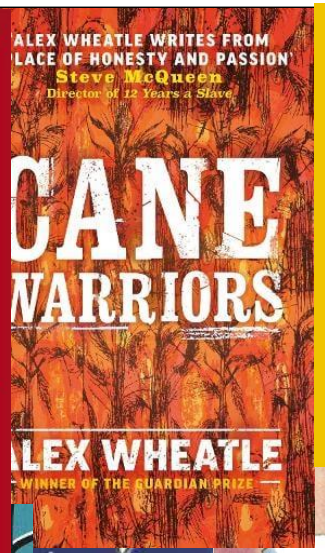
Further Reading List

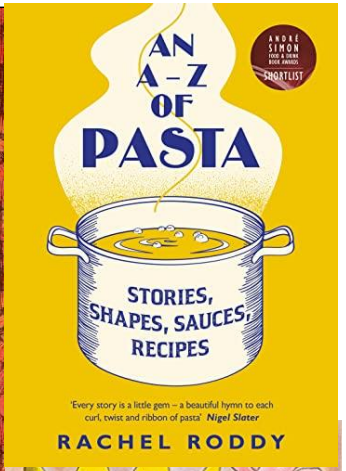
Challenge yourself by reading these topic-related books!

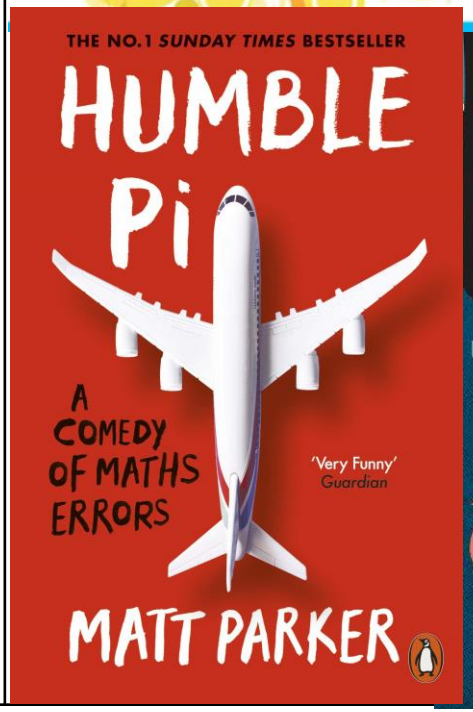
Year 8

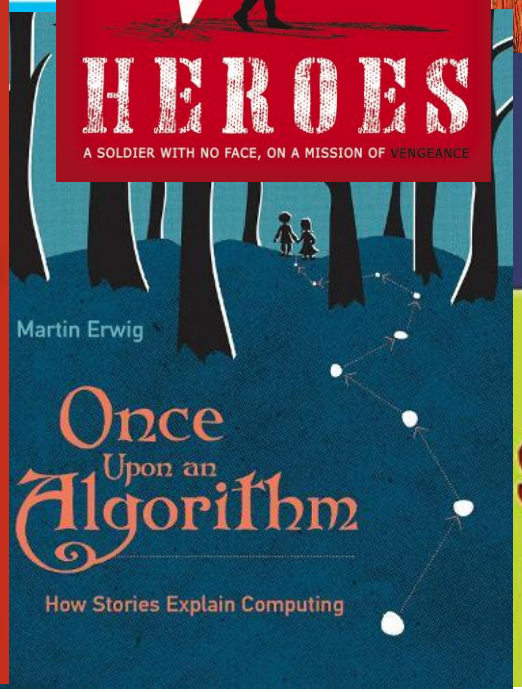


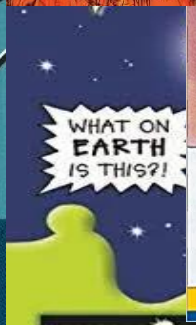


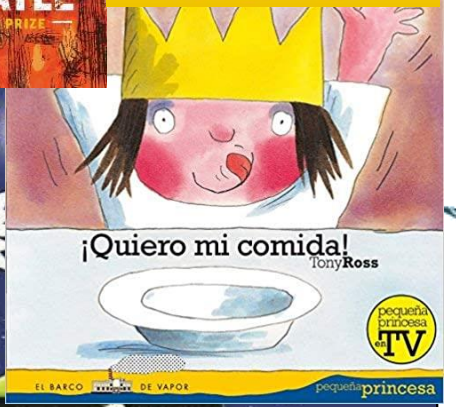


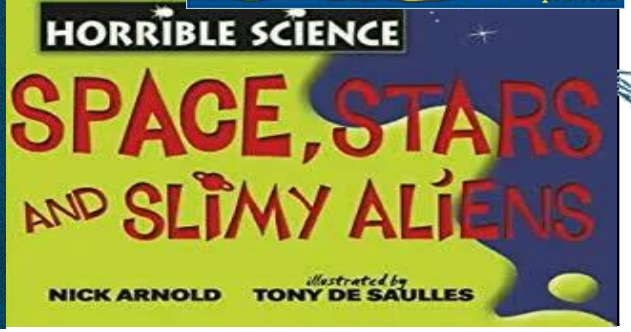






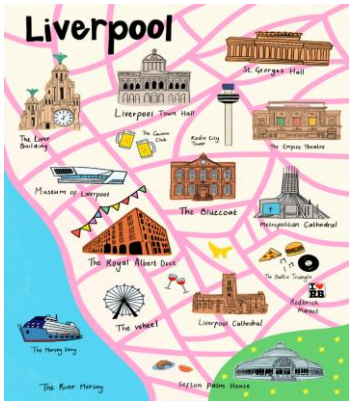






STUDYING BLOOD BROTHERS

BY WILLY RUSSELL 1983



KEY DRAMATIC DEVICES

1. ***Dramatic Irony***
When the audience knows something important that the characters do not.
2. ***Foreshadowing***
Hints or clues about what will happen later in the story.
3. ***Narrator***
A narrator speaks directly to the audience to comment on events or guide the story.
4. ***Songs / Musical Interludes***
Music or lyrics used to express emotions, themes, or move the plot forward.
5. ***Juxtaposition***
Placing two contrasting ideas, characters, or settings side by side to show differences.
6. ***Symbolism***
Objects, actions or words that represent deeper meanings.
7. ***Monologue / Soliloquy***
A character speaks alone, revealing thoughts or feelings directly to the audience.
8. ***Stage Directions***
Instructions in the script about movement, tone, or setting for actors and directors.

Use PEZEL to answer your literature question.

P – Point
- Make a clear statement that answers the question.
- Russell presents the character of…..

E – Evidence
- Support your point with a short quote or reference from the text.
- We see this where it states, '…'

Z – Zoom
- Analyse specific words, phrases, or techniques

Literal: This shows…
Metaphorical: Also, the use of (method) suggests…
Symbolic: Furthermore, this represents…

E – Explore
- Explore the effect on the reader or audience.

The reader is left feeling…
The reader is left questioning…

L – Link
- Connect back to the question or wider themes/context.

It is clear that…

Key themes:

1. Nature vs. Nurture
2. Class and Social Inequality
3. Fate and Superstition
4. Family and Friendship
5. Violence and Tragedy

English. Based on your knowledge of Blood Brothers, recall information about the following

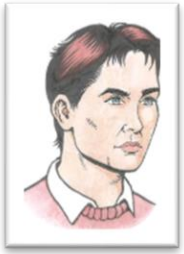
Characters and their qualities:

- Mikey-
-
-
-
-

Parenting:

-
-
-
-
-

Blood Brothers



Society and Social Class:

-
-
-

Violence/Crime:

-
-
-
-

YEAR 9 – REASONING WITH ALGEBRA...

Straight Line Graphs

Maths

What do I need to be able to do?

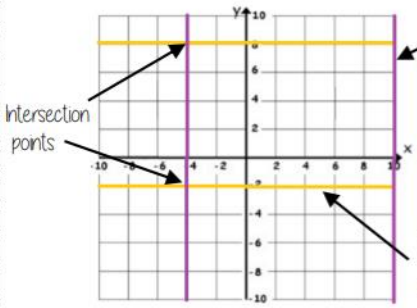
By the end of this unit you should be able to:

- 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 ANY postive 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

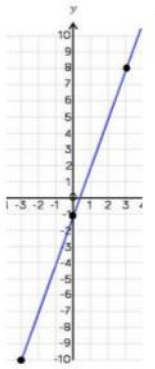
Plotting y = mx + c graphs (R)

$y = 3x - 1$ → 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

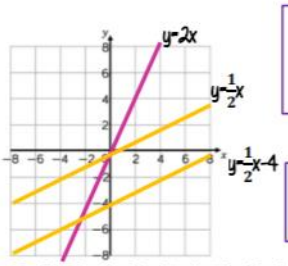
Plotting more points helps you decide if your calculations are correct (if they do make a straight line)

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

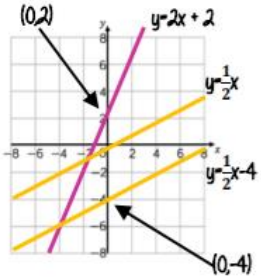
Parallel lines have the **same** gradient

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**

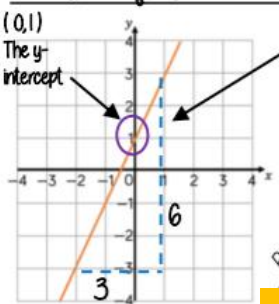
The equation of a line can be rearranged. E.g

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 8 - ALGEBRAIC TECHNIQUES...

Maths

Sequences

What do I need to be able to do?

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

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

Keywords

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

Linear and Non Linear Sequences

Linear Sequences – increase by addition or subtraction and the same amount each time
Non-linear Sequences – do not increase by a constant amount – quadratic, geometric and Fibonacci

- Do not plot as straight lines when modelled graphically
- The differences between terms can be found by addition, subtraction, multiplication or division

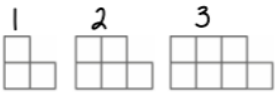
Fibonacci Sequence – look out for this type of sequence

0 1 1 2 3 5 8 ...

Each term is the sum of the previous two terms

Sequence in a table and graphically

Position: the place in the sequence



"The **term** in **position** 3 has 7 squares"

3 5 7

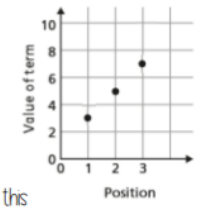
Term: the number or variable
(the number of squares in each image)

In a table

Position	1	2	3
Term	3	5	7

+2 +2

Graphically



Because the terms increase by the same addition each time this is **linear** – as seen in the graph

Sequences from algebraic rules

This is substitution!

$3n + 7$ — This will be linear - note the single power of n. The values increase at a constant rate

$3n^2 + 7$ — This is not linear as there is a power for n

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

eg
1st term = 2 (1) – 5 = -3
2nd term = 2 (2) – 5 = -1
100th term = 2 (100) – 5 = 195

Checking for a term in a sequence

Form an equation

Is 201 in the sequence $3n - 4$?

$3n - 4 = 201$ ← Term to check

Algebraic rule

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

Complex algebraic rules

Misconceptions and comparisons

$2n^2$ — 2 times whatever n squared is

eg
1st term = 2 x 1^2 = 2
2nd term = 2 x 2^2 = 8
100th term = 2 x 100^2 = 2000

$(2n)^2$ — 2 times n then square the answer

eg
1st term = $(2 \times 1)^2$ = 4
2nd term = $(2 \times 2)^2$ = 16
100th term = $(2 \times 100)^2$ = 40000

$n(n + 5)$

eg
1st term = 1 (1 + 5) = 6
2nd term = 2 (2 + 5) = 14
100th term = 100 (100 + 5) = 10500

You don't need to expand the expression

H Finding the algebraic rule

This is the 4 times table → 4, 8, 12, 16, 20....

4n

7, 11, 15, 19, 22 ← This has the same constant difference – but is 3 more than the original sequence

4n + 3

$4n + 3$

This is the constant difference between the terms in the sequence

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

YEAR 8 - ALGEBRAIC TECHNIQUES...

Maths

Indices

What do I need to be able to do?

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

- Add/ Subtract expressions with indices
- Multiply expressions with indices
- Divide expressions with indices
- Know the addition law for indices
- Know the subtraction law for indices

Keywords

Base: The number that gets multiplied by a power
Power: The exponent – or the number that tells you how many times to use the number in multiplication
Exponent: The power – or the number that tells you how many times to use the number in multiplication
Indices: The power or the exponent
Coefficient: The number used to multiply a variable
Simplify: To reduce a power to its lowest term
Product: Multiply

Addition/ Subtraction with indices

Coefficient, Power

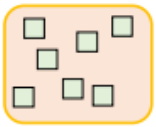
$5x^2 + 4x^4$

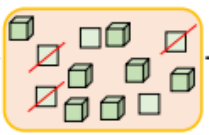
Term, Term

Expression

Each square represents x^2 and each cube represents x^4

Only similar terms can be simplified
If they have different powers, they are unlike terms

$5x^2 + 2x^2$ →  → $7x^2$

$5x^2 + 6x^4 - 3x^2 + x^4$ →  → $2x^2 + 7x^4$

Multiply expressions with indices

$4b \times 3a$
$\equiv 4 \times b \times 3 \times a$
$\equiv 4 \times 3 \times b \times a$
$\equiv 12ab$

$5t \times 9t$
$\equiv 5 \times t \times 9 \times t$
$\equiv 5 \times 9 \times t \times t$
$\equiv 45t^2$

$2b^4 \times 3b^2$
$\equiv 2 \times b \times b \times b \times b \times 3 \times b \times b$
$\equiv 2 \times 3 \times b \times b \times b \times b \times b \times b$
$\equiv 6b^6$

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

Addition/ Subtraction laws for indices

$3^5 \times 3^2$
$= (3 \times 3 \times 3 \times 3 \times 3) \times (3 \times 3)$ → 3^7

The base number is all the same so the terms can be simplified

Addition law for indices

$$a^m \times a^n = a^{m+n}$$

$3^5 \div 3^2$ → 3^3

$\frac{3 \times 3 \times 3 \times \cancel{3} \times \cancel{3}}{\cancel{3} \times \cancel{3}}$ → $\frac{3^3}{3^0}$ → $\frac{3^3}{1}$

Subtraction law for indices

$$a^m \div a^n = a^{m-n}$$

Divide expressions with indices

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

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

Cross cancelling factors shows cancels the expression

$\frac{23a^7y^2}{5db^6}$ This expression cannot be divided (cancelled down) because there are no common factors or similar terms

Maths. Based on your **Linear Graphs** KO, please fill in the key vocabulary and have a go at using the methods to answer the questions.

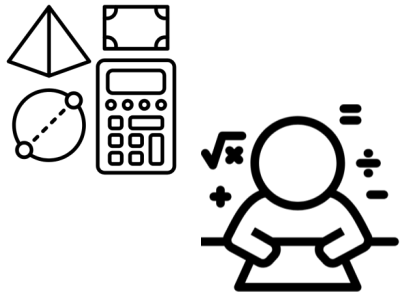
Key Vocabulary (fill the gaps):

Gradient: the _____ of a line.

y-intercept: where the _____ meets the _____.

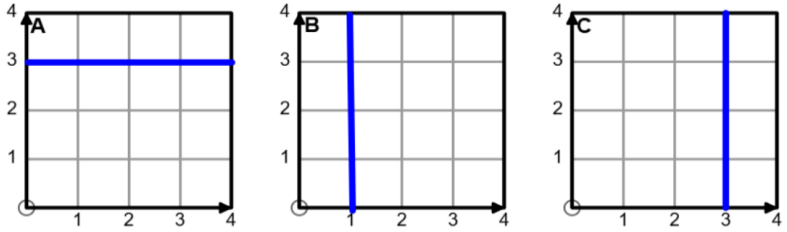
Parallel: two lines that _____ .

Perpendicular: two lines that meet at a _____.



Write down the general equation of a line:

State the equation of each line shown:



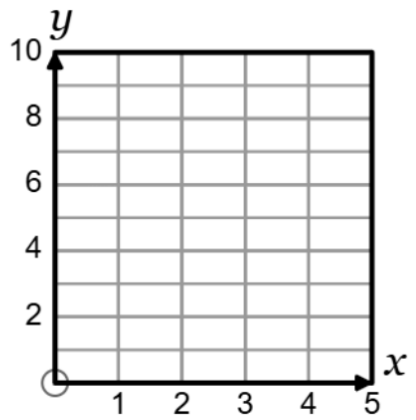
Write down the equation of the lines below

gradient of 3 and y–intercept of 6

gradient of –4 and y–intercept of 3

$y = 2x$

x	y
0	
1	
2	
3	
4	



The graph shows line A, with equation $\boldsymbol{y = 4x - 3}$

Which of the following equations are **parallel** to A?

P	$y = 2x - 3$	**Q**	$y = 4x + 5$	**R**	$y = -4x$
S	$y = 4x - 2$	**T**	$y = x + 4$	**U**	$y = 3x - 4$

Maths. Based on the Sequences KO page, fill in the key vocabulary and have a go at using the methods to answer the questions.

Key Vocabulary (fill the gaps):

Sequence: An ordered list of _____ that follow a specific rule or pattern.

Term: Each _____ in a sequence is called a term.

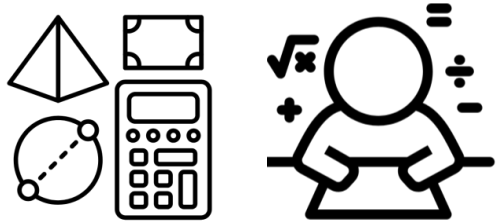
Pattern: The specific method used to _____ the numbers in a sequence.

Position: The position of each term in the _____.

Nth term: An _____ usually in terms of *n*, that allows you to find any term in the sequence based on its position (e.g., the 10th term).

Linear sequence: A _____ that increases or decreases by the same fixed amount each time (a constant common difference).

Term-to-term rule: The _____ that describes how to get from one term to the next term in the sequence.



Question 1 Describe the rule for each sequence below and find the next three terms

(a) 3, 5, 7, 9, ... (b) 5, 10, 15, 20, ... (c) 1, 4, 7, 10, ...

Question 2 Each sequence below increases/decreases by the same amount each time. Find the missing terms.

(a) 4, □, 8, 10, ... (b) 2, 5, □, 11, ... (c) 5, 9, □, 17, ...

Question 3

Find the n^{th} term for each of the following sequences

(a) 5, 8, 11, 14, ... (b) 9, 14, 19, 24, ...

Question 4

(a) 10, 7, 4, 1, ... (b) 6, 4, 2, 0, ...

Maths. Based on **Indices** KO page, please fill in the key vocabulary and have a go at using the methods to answer the questions.

Key Vocabulary (fill the gaps):

Base: The number that gets _____ by a power.

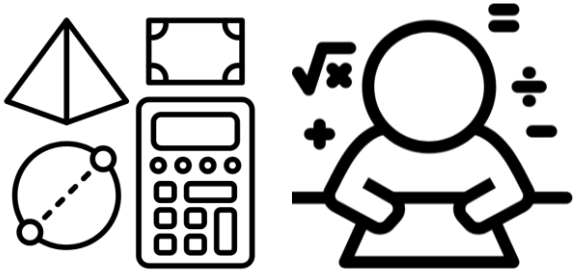
Power: The _____ – or the number that tells you how many times to use the number in multiplication.

Indices: The _____ or the exponent.

Coefficient: The _____ used to multiply a variable.

Simplify: To reduce a power to its _____ term.

Product: Means to _____



1.Simplify the following

(a) $4^5 \times 4^2$ (b) $4^5 \times 4^3$

(c) $4^3 \times 4^5$ (d) 4×4^5

2.Simplify the following

(a) $4^5 \div 4^2$ (b) $4^5 \div 4^3$

(c) $4^2 \div 4^5$ (d) $4^5 \div 4$

3. Simplfy the following:

$$a^4 \times a^3 \times a^{-2}$$

$$6x \times 5x^4$$

$$\frac{27y^{12}}{9y^7}$$

4. Simplify:

$$5x + 2x^2 - 2x + 3x^2$$

$$(3a^6b^5)^3$$

5. Find the value of n

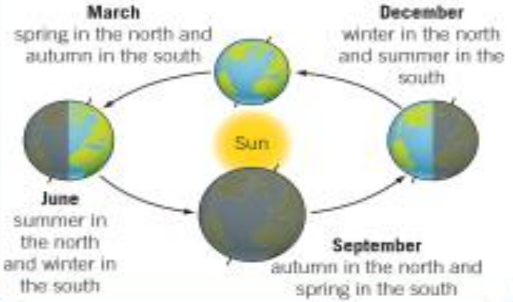
$$g^5 \times g^n = g^{15}$$

$$\frac{e^9}{e^n} = e^{11}$$

Knowledge organiser: Space

The spinning Earth

- The Earth takes 365 days to **orbit** the Sun, this is one Earth **year**
- The Earth takes 24 hours to spin on it's axis, that is why we have day and night
- The Earth's **axis** has a tilt of 23.4° which gives rise to our **seasons**



The Moon

- The Moon is a **natural satellite** which orbits the Earth
- One orbit of the Earth takes 27 days and 7 hours, this causes us to see the **phases of the moon**
- The different phases of the moon are caused by different parts of the Moon being lit by the Sun

The night sky

- A **galaxy** is a collection of **stars**, our galaxy is known as the **Milky Way**
- **Stars** produce their own light
- **Planets** are large objects which do not produce their own light but orbit stars
- **Natural satellites** include moons which can orbit planets
- **Artificial satellites**, such as the International Space Station, are man made structures which can orbit planets

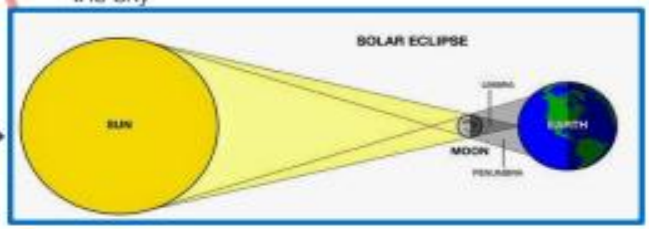
The Universe
contains billions of
Galaxies
contain billions of
Stars
are orbited by
Planets, asteroids, and comets
planets may have
Moons

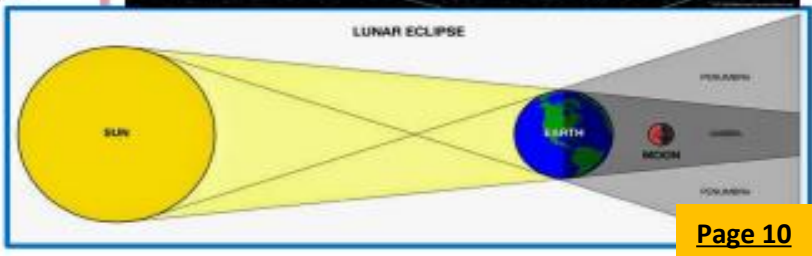
The Solar system

Our **solar system** consists of eight planets which orbit the Sun, four inner and four outer planets

Inner planets	Outer planets
Small and rocky planets ***(dwarf planets)***	*Gas giants*
Mercury, Venus, Earth, Mars	Jupiter, Saturn, Uranus, Neptune

- Between the inner and outer planets, between Mars and Jupiter, there is the **asteroid belt**
- The planets all orbit the Sun , but the path of their orbits are all slightly different, giving them the look of 'wandering' in the sky





Knowledge organiser: Photosynthesis and respiration

Respiration

- Respiration is the process in which energy is released from the molecules of food which you eat
- Respiration happens in the mitochondria of the cell
- **Aerobic respiration** involves oxygen, it is more efficient as all of the food is broken down to release energy

glucose + oxygen → carbon dioxide + water

- The glucose is transported to the cells in the blood **plasma**
- The oxygen is transported to the cells in **red blood cells**, by binding with **haemoglobin**
- Carbon dioxide is a waste product and is transported from the cells to the lungs to be exhaled

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- **Anaerobic respiration** is a type of respiration which does not use oxygen, it is used when the body cannot supply the cells with enough oxygen for aerobic respiration
- Anaerobic respiration releases less energy than aerobic respiration

glucose → lactic acid + carbon dioxide

- The **lactic acid** produced through anaerobic respiration can cause muscle cramps
- Lactic acid will build up if there is not enough oxygen present in the blood supply to break it down. This is known as an **oxygen debt**

Fermentation

- **Fermentation** is a type of anaerobic respiration which occurs in yeast
- Instead of producing lactic acid, yeast produces ethanol, which is a type of alcohol

glucose → ethanol + carbon dioxide

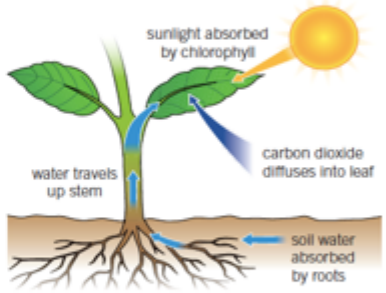
- This process can be used to form alcohol to drink or to allow bread and cakes to rise

Photosynthesis

- **Photosynthesis** is the process which occurs in the chloroplasts to produce glucose using sunlight

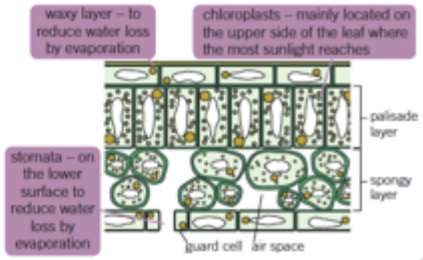
glucose + carbon dioxide → glucose + oxygen

- Any organism that can use photosynthesis to produce its own food is known as a **producer**, these are not just limited to plants but can include other organisms such as **algae**



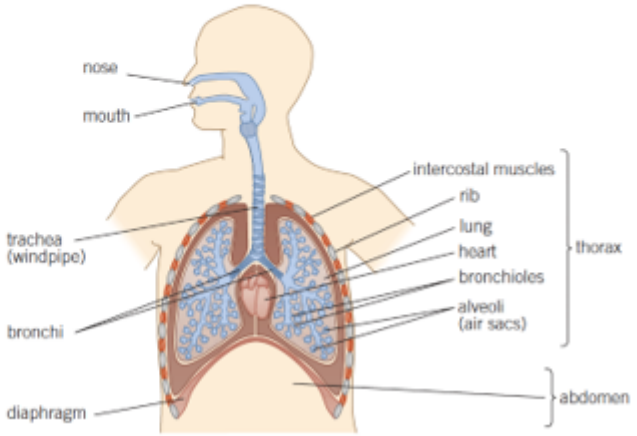
Leaves

- To best adapt for photosynthesis leaves have a number of adaptations
- They are thin to allow the most light through
- There is a lot of **chlorophyll** to absorb light
- They have a large surface area to absorb as much light as possible



Gas exchange and breathing

- **Gas exchange** is the process of taking in oxygen and giving out carbon dioxide
- This occurs in the **respiratory system**
- The proportions of gases in the air we **inhale** and **exhale** changes due to using oxygen in **respiration** and producing carbon dioxide



What happens when you breathe in and out

when you breathe in (inhale)	• muscles between the rubs contract • ribs are pulled up and out • diaphragm contracts and flattens • volume of the chest increases • pressure inside the chest decreases • air rushes into the lungs
when you breathe out (exhale)	• muscles between ribs relax • ribs are pulledin and down • diaphragm relaxes and moves up • volume in the chest decrease • pressure inside the chest increases • air is forced out of the lungs

Notes

Science. Answer the following questions on Respiration and Photosynthesis

1. Where does aerobic respiration take place?

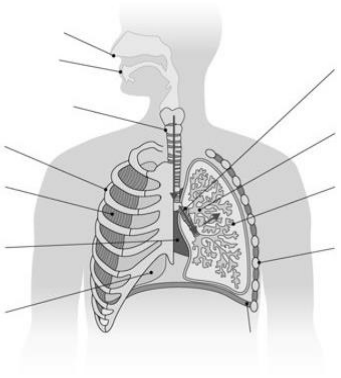
2. Write the word equation for aerobic respiration.

3. Write the word equation for photosynthesis.

4. Where does photosynthesis take place?

5. Label the diagram using the key words.

<u>Key words</u>
alveolus
bronchiole
bronchus
diaphragm
heart
intercostal muscle
lung
rib
ribcage
trachea



6. Describe the difference between breathing and respiration.

Opinions

j'adore – *I love*

j'aime bien – *I really like*

j'aime – *I like*

je n'aime pas – *I don't like*

je déteste – *I hate*

Justifications

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

Intensifiers

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

Connectives

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

Reasons

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

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

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

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

Classroom language

Bonjour monsieur / madame – *Hello Sir / Miss*
Oui / non – *Yes / No*
S'il vous plaît – *Please*
Merci – *Thank you*
J'ai besoin de… – *I need a/some…*
stylo (vert) – *(green) pen*
papier – *paper*
dictionnaire – *dictionary*
règle – *ruler*
cahier – *exercise book*
Est-ce que vous pouvez répéter?
– *Can you repeat?*
Je ne comprends pas – *I don't understand*
Est-ce que vous pouvez m'aider?
– *Can you help me?*
Puis-je aller aux toilettes?
– *Can I go to the toilets?*
J'ai fini – *I have finished*
Puis-je enlever ma veste?
– *Can I take off my blazer?*
Qu'est-ce que c'est …. en francais / anglais?
– *What is … in French / English?*

Les numéros

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

Year 8 French Unit 2: Hometown Knowledge Organiser

MFL

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

Key vocabulary

Describing where we live	
J'habite	I live
dans	in
le nord	the north
le sud	the south
l'est	the east
l'ouest	the west
le centre / le midi	the centre/midi
le nord-ouest / le sud-est	the north West/South west
en Angleterre	in England
en Ecosse	in Scotland
en Allemagne	in Germany
au Pays de galles	in Wales

Dans la ville—in the town	
Il y a	There is/are
la patinoire	the ice rink
la piscine	the swimming pool
le stade	the stadium
la discothèque	the disco
le port	the port
la forêt	the forest
la mairie	the town hall
la gare routière	the bus station
le commissariat	the police station
la gare SNCF	the train station
l'église	the church

Adjectives	
ma ville / mon village est	my town/my village is
nul(le)	rubbish
rural(e)	rural
bruyant(e)	noisy
ancien(ne)	old
vieux/vieille	old
affreux	awful

Le temps—weather	
dans ma ville	in my town
il y a du soleil	it is sunny
il y a du vent	it is windy
il y a des orages	it Is stormy
il y a des nuages	it is cloudy
il fait beau	it is nice weather
il fait mauvais	it is nasty weather
il y a du brouillard	it is foggy
il pleut	it is raining
il neige	it is snowing

si... if...	
Si	if
s'il fait beau	if it is nice
s'il pleut	if it is raining
je vais au parc	I go to the park
je vais au cinéma	I prefer

Big questions

- How do describe places in the town?
- How do I ask direction in French?
- How do I talk about the weather in French?
- How do I talk about what I visited in French?
- How do I describe my ideal town in French?

Les directions	
allez tout droit	go straight on
tournez à gauche	turn left
tournez à droit	turn right
prenez la première rue à gauche	take the first street on the left
prenez la deuxième rue à droite	take the second street on the right
traversez le pont	cross the bridge
allez jusqu'aux feux	go to the traffic light
au rond point	at the roundabout
continuez...	continue

Ordinal numbers	
premier/première	first
deuxième	second
troisième	third
quatrième	fourth
cinquième	fifth

Intensifiers

- très – very
- trop – too
- assez – quite
- un peu – a little

False Friends

la cave	cellar
l'herbe	grass
la pièce	room
propre	clean/own
sale	dirty

Key verbs

Habiter - to live						
	Present		Past		Future	
Je (I)	habite	I live	ai habité	I lived	vais habiter	I'm going to live
tu (you)	habites	you live	as habité	you lived	vas habiter	you're going to live
il/elle (s/he)	habite	s/he lives	a habité	s/he lived	va habiter	s/he is going to live
nous (we)	habitons	we live	avons habité	we lived	allons habiter	we are going to live
vous (you pl)	habitez	you (pl) live	avez habité	you (pl) lived	allez habiter	you (pl) are going to live
ils/elles (they)	habitent	they live	ont habité	they lived	vont habiter	they are going to live

Avoir – to have	
J'ai	I have
tu as	you have
il/elle a	s/he has
nous avons	we have
vous avez	you (pl) has
ils/elles ont	they have

être – to be	
je suis	I am
tu es	you are
il/elle est	s/he is
nous sommes	we are
vous êtes	you (pl) are
ils/elles sont	they are

aller – to go	
je vais	I go/am going
tu vas	you go/are going
il/elle va	s/he goes/is going
nous allons	we go/are going
vous allez	you (pl) go/are going
ils/elles vont	they go/are going

Tricky pronunciation:

droit/droite	Dwah/dwate
brouillard	Bwee-yahr

Useful Grammar

Adjectival agreement

When you are **describing** things or people you must **agree the adjective** to them. If an adjective **ends in a consonant** and you are describing **a feminine noun**, you add an '**e**'.

Other endings do not change UNLESS you are discussing **more than one person**, then you will need to **add an 's'** in most cases.

example: mon appartement es grand ma maison est grande Les maisons sont grandes

The perfect tense (passé composé)

To form the passé compose in French we need:
1. Present tense of avoir/être
2. The past participle

Avoir – to have	
J'ai	I have
tu as	you have
il/elle a	s/he has
nous avons	we have
vous avez	you (pl) has
ils/elles ont	they have

être – to be	
je suis	I am
tu es	you are
il/elle est	s/he is
nous sommes	we are
vous êtes	you (pl) are
ils/elles sont	they are

past participles	
-er verbs	- é
- ir verbs	- i
- re verbs	- u

Tricky spelling

Brouillard	Double l

Definite and indefinite articles.

Definite articles mean THE in English.
Indefinite articles mean A/AN in English

Articles in French				
		Masc	Fem	plu
definite article	the	le	la	les
indefinite article	a	un	une	des

Key Questions	
où habites-tu?	where do you live?
qu'est-ce que tu as fait en ville le week-end dernier?	what did you do in town last weekend?
comment serait ta ville idéale?	what would your ideal town be like?
où est/sont?	where is/are?

Year 8 French: Travel and Environment Knowledge Organiser

MFL

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

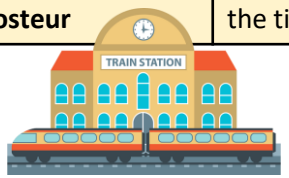
Big questions

- How do I travel?
- How do I find my way at the train station?
- How do I buy a train ticket?
- How do I discuss environmental issues?
- How do I give possible solutions?

Key vocabulary

Le Transport - Transport	
je voyage	I travel
j'ai voyagé	I travelled
je vais voyager	I am going to travel
en bus	by bus
en train	by train
en car	by coach
en voiture	by car
en métro	by underground
en avion	by plane
en moto	by motorbike
à pied	on foot
à cheval	on horseback

à la gare SNCF—At the train station	
la gare SNCF	the train station
où est/sont?	where is/are?
le guichet	the ticket office
les objets trouvés	lost property
la consigne automatique	left luggage
la sortie (de secours)	(emergency) exit
la salle d'attente	waiting room
les quais	the platforms
le composteur	the ticket machine



Au guichet—buying a ticket	
je voudrais	I would like
j'aimerais	I would like
un aller-retour	a return ticket
un aller simple	a single ticket
fumeur	smoking
non fumeur	non-smoking
première classe	1st class
deuxième classe	2nd class

mon quartier– my region	
il y a	there is
il n'y a pas de	there isn't
circulation	traffic
vandalisme	vandalism
emballages	packaging
papiers sur terre	paper on the floor
crottes de chien	dog mess
espaces verts	green spaces
choses pour les jeunes	things for young people.

Opinions—Opinions	
j'adore	I love
j'aime	I like
j'aime bien	I like
je déteste	I hate
je préfère	I prefer

Intensifiers

très—very
assez—quite
un peu—a little
beaucoup—a lot

Les hasards– hazards	
pour moi	for me
le problème le plus grave est	the most serious problem is
le manque d'eau potable	the lack of drinking water
les espèces menacées	endangered species
la destruction des forêts	the destruction of the forests
la sécheresse	drought
les incendies/inondations	fires/floods
la pollution de l'air/eau	air/water pollution.

protéger l'environnement— to protect the planet	
on doit/il faut	you must
acheter /utiliser	buy/use
des produits verts/recyclés	green/recycled products
les transports en commun	public transport
prendre une douche au lieu d'un bain	have a shower instead of a bath.
conserver l'energie	conserve energy
trier les déchets	sort rubbish
éteindre la lumière	switch off the lights
recycler	to recycle
les journaux	news papers
les bouteilles/cannettes/piles	bottles/cans/batteries
les vêtements	clothes

Key verbs

regular –er verbs (voyager)	
Je (I)	- e
tu (you)	- es
il/elle (he/she)	- e
nous (we)	- ons
vous (you pl)	- ez
ils/elles (they)	- ent

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

Key Questions	
Comment voyages-tu?	How do you travel?
Comment est ta région?	What's your región like?
Que fais tu pour aider l'environnement?	What do you do to help the environment?

False Friends

essence	petrol
pile	battery

Tricky pronunciation:

quais	kay

Tricky spelling

bouteilles	ei vowel cluster

Useful Grammar

Negatives.
To make a verb NEGATIVE. You need to make a negative sandwich. The negative elements go AROUND the verb.

ne + verb + **pas** (not)
Je **ne** prends **pas** de bain (I do not take a bath)

ne + verb + **jamais** (never)
Je **ne** prends **jamais** de bain (I never take a bath)

The perfect tense (past tense—I went, I saw etc)
To form the perfect tense we need:
- the verb avoir
- You then need the past participle of the main verb.

avoir (to have)	
Je (I)	ai
tu (you)	as
il/elle (he/she)	a
nous (we)	avons
vous (you pl)	avez
ils/elles (they)	ont

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

Future tense
To form the future tense you need:
- the present tense of the verb "aller—to go"
- the infinitive of the main verb.

(The infinitive is the form of the verb which ends in ***er/ir/re***)

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

aller
voyager
recycler
trier

FOUND IN TRANSLATION

MFL: French Translate the key words into English and then use them in sentences.

FRENCH

Spanish vocabulary	English Translation
	I travel
en voiture	
j'adore	
il pleut	
	I am going to travel
où habites-tu?	

Application: Write 4 sentences using as many key words as you can.

1.

2.

3.

4.

The Age of Exploration
(also called the Age of Discovery) began in the 1400s and continued through the 1600s. It was a period of time when the European nations began exploring the world.

Key Terminology

- Empire- A group of states or countries.
- Colonise-Send settlers to a place (country) to gain political control.
- Mother Country- A country that is ruled my another country.
- British Raj- India was declared under British rule.
- Jewel in the Crown- Refers to the wealth India provided the British Empire with.
- East India Company- A Trading company that took control of India before Britain.
- Mahatma Gandhi- A leader of the India Independence movement.

British Empire

Australia

Captain Cook sailed to Australia in 1770 and claimed it for Britain. From 1788, the British used Australia as a prison and transported thousands of convicts to the colony.

British people took land from the native people of Australia (Aborigines). Many of them were killed and parts of their culture and traditions were wiped out.

Canada

- Canada was claimed by France in 1750, but the British wanted to take it from them.
- In 1759, General James Wolfe led the British army to Canada and beat the French.
- By 1865, there were 3 million British people living in Canada.
- British people made money from cattle, wheat, tobacco and sugar on farms in Canada.

Why did Britain want an Empire?

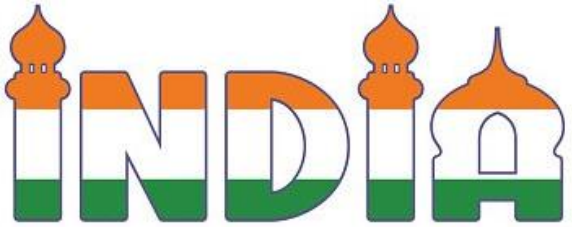
Britain decided to get an empire for a number of reasons. These included;

- Trade.
- Money.
- **Strategic Reasons-** Such as having access to other countries and protecting Sea lanes so that goods could be transported safely.
- **Expansion-** Allows Britain to grow.
- **To Spread Religion.**
- **Age of Exploration** and the **competition** it created to find new land so that money could be made.

India's Independence

1

- In 1857, Indians serving in the British army rebelled. Indians consider this the First War of Independence, but the British think of it as the Sepoy Mutiny.
- The immediate cause was the use of animal fat in army rifles, which was unacceptable to both Hindus and Muslims.
- The revolt failed and India was placed under even firmer rule.



India

- The first British takeover of India happened in 1757. However, this wasn't the British Empire, it was a private company called the EAST INDIA COMPANY. They had their own army, flag and government.
- A large rebellion occurred in 1857. The East India Company had to ask the British Army for help. Once the rebellion ended, the British Government decided to take India for itself. In 1858, India officially became part of the British Empire.

Key Events in India

2

Rowlatt Act of 1919

- This Act was passed by the British Government to give themselves greater power over the people of India.
- This new Act allowed the British to arrest and jail anyone they wished without trial if they are thought to be plotting against the British.

Day of Shame, Amritsar

3

On April 13 1919, a protest was held at Jallianwala Bagh, a public park.

This was a protest against the arrest of two Indian leaders under the Rowlatt Act.

This protest was peaceful until General Reginald Dyer arrived with his troops and without warning, opened fire on the crowd.

After ten minutes of firing, around a thousand people were killed and two thousand were left injured.

4

- After the massacre, many Indians could never accept British rule.
- An Indian National Congress Party was created.
- From this Party came one man who would dominate the independence debate: Mahatma Gandhi.

World Cities – Year 7.

Geography

Key terms:

urbanisation– when an increasing percentage of a country's population lives in cities.
migrant – a person who moves from one place to another to live or work.
rural to urban migration– when people migrate from the countryside to the city.
natural increase– when the birth rate is higher than the death rate causing population to increase.
push factor – a bad thing that causes someone to move from an area e.g. conflict or low paid jobs.
pull factor – a good thing that attracts someone to an area e.g. high paid jobs and good healthcare.
millionaire city – a city with a population of one million or more people.
megacity – a city with ten million or more people.
squatter settlement – an area of poor-quality housing with no or limited services such as water supply, sewerage and electricity. Sometimes called a slum, shanty town or favela in South America.
sustainable – providing for people now without damaging the environment for future generations.

World cities.

Urban settlements are some of the largest, busiest and most exciting places on Earth. The most important cities are global hubs for business and transport e.g. London, New York and Rio de Janeiro. There are often reasons why cities are located in certain places such as:

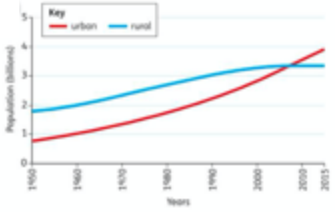
- Near rivers to help with trade.
- On flat land that is easy to build on.
- Close to raw materials e.g. oil.
- On a coastline to make trading easier.
- Protected by mountains from attacks.
- On historical trading routes.

New York City has one of the largest natural harbours in the world, which was ideal for trade with Europe

Rio de Janeiro is Brazil's second largest city and home to almost 7 million people

Urbanisation

Urbanisation happens when more and more of a country's population moves to towns and cities. In 1950, 751 million people lived in cities. However, by 2015, 3.95 billion people lived in urban areas.
There are two reasons for increased urbanisation: rural-urban migration and natural increase.



Global urban and rural populations, 1950-2015

Rural to urban migration.

Cities are magnets for people from rural areas because they tend to offer good job opportunities and services (such as buses and doctors' surgeries.

Natural increase.

Cities tend to have a high proportion of young people, particularly migrants. This means that cities tend to have high birth rates and a rapidly growing population.

Migration – push and pull factors.

Migration is the movement of people from one place to another to live or work. When looking at why people move to urban areas, we need to look at what encourages them to leave the countryside (push factors) and what attracts them to the cities (pull factors).

Push factors.

Push factors for leaving China's rural areas

Pull factors.

Pull factors attract people to China's cities

Examples of world cities.

The map below shows some examples of world cities that have global significance.

Copenhagen, Denmark.

Copenhagen is the capital city of Denmark with a population of 600, 000. It is attempting to become more sustainable by encouraging people to cycle instead of using cars.

Mumbai, India.

Mumbai is a city in India with a population of nearly 20 million people. Many of these people live in squatter settlements known as slums. Dharavi is the biggest slum in India with over 1million people living in poor quality houses and cramped conditions.

Rio de Janeiro, Brazil

Rio is a globally important city. It is an industrial and financial centre and home to over 7 million people. Rio hosted the World Cup in 2014 and the Olympics in 2016.

Jakarta, Indonesia.

Jakarta is the third most populated megacity in the world with over 31 million people. Its inhabitants make $321 billion per year, however, the city is sinking because people have taken too much water out of the ground.

DUAL CODING

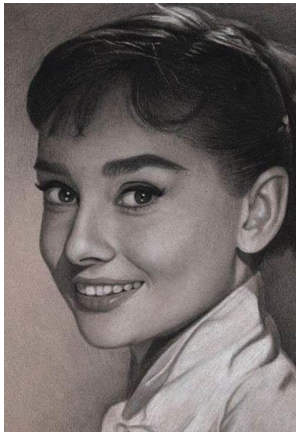
Based on some key knowledge from your ***History*** and ***Geography*** knowledge organisers, can you assign different parts of this knowledge to images to help you remember this in the future? Consider your images carefully.

Image	Key Knowledge

Image	Key Knowledge

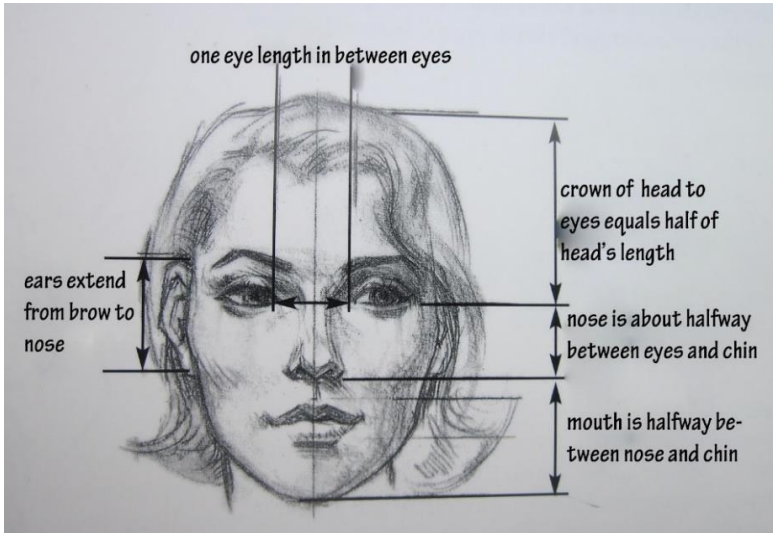
Art

Portraiture



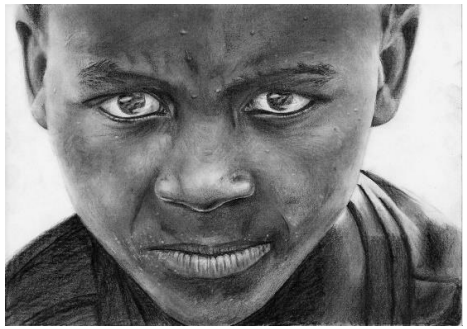
A portrait focusses on the face and it's expression.

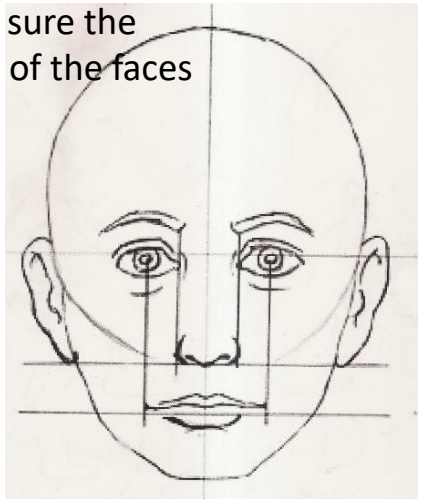
A portrait tries to show how the person truly looks, their personality and even the mood of the person.



Portraits can be photos, sculptures, pencil studies, prints and paintings etc.

Artist use mathematics to make sure the 'proportions' (size and position) of the faces features are correct.



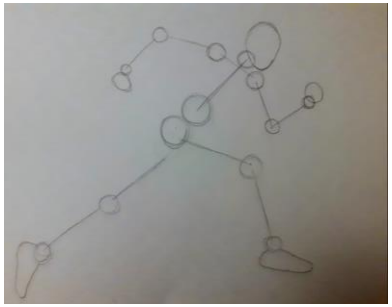


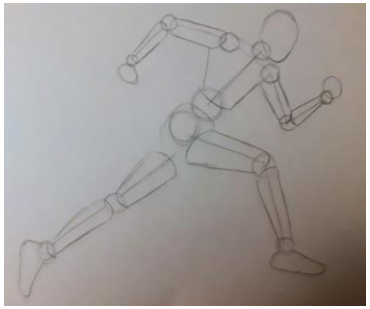
Artists use tone and texture to create a realistic 3D portrait.

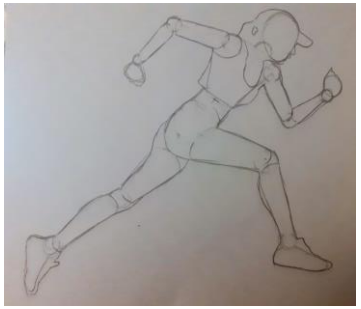
Portraiture has recorded history through the ages.

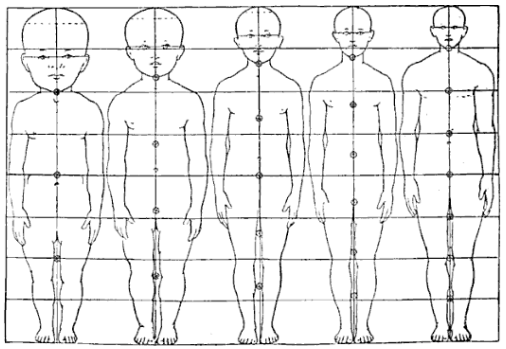
Hyper realism – Art that is so detailed and accurate that it looks like real life.

Figure Drawing – The Basics





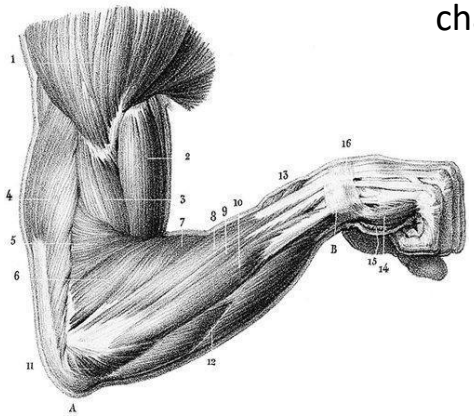




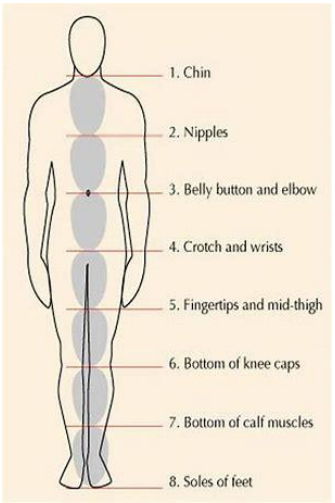
The proportions of the human body change as you age.

- Artists use mathematics and careful measurements to ensure correct proportions.
- They work out the distance between the joints, basic shapes and size of the body segments to ensure correct proportions.

Artists often use wooden mannequins to practice achieving the correct proportions.



Anatomy studies helped artists to work out the true structure of the body and draw it with greater accuracy.



Artists can break down the body into head sized portions to ensure accuracy.

Engineering

Year 8 Desk Tidy Storage with USB light: Iterative Design

Vocabulary:

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.

Hardwoods

Comes from deciduous trees

This is a broad-leaved tree which loses its leaves in the winter.

Beech
Oak
Ash
Teak

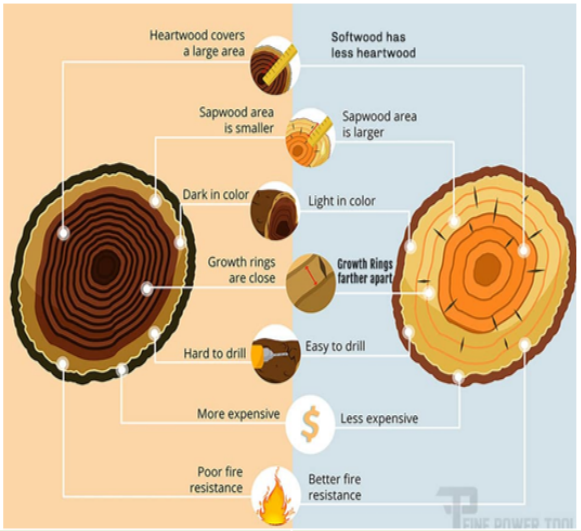
Softwoods

Comes from coniferous trees

This tree is an evergreen(green all year),needle leaved, cone-bearing tree.

Pine
Spruce
Cedar
Fir

Hardwoods Vs Softwoods

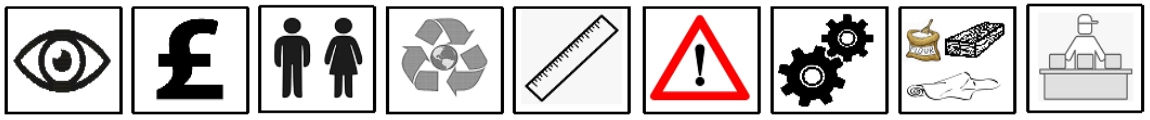


Hardwood

- Darker in colour
- Heavy
- Close grain
- More expensive
- Lasts for several decades
- Natural weather resistance
- More environmental impact

Softwood

- Lighter in colour
- Lighter weight
- Open grain
- Less expensive
- Lasts for over a decade
- Weather resistant only when treated
- Less environmental impact

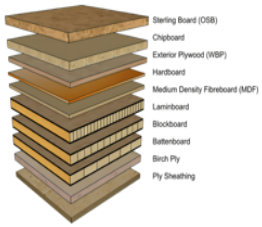


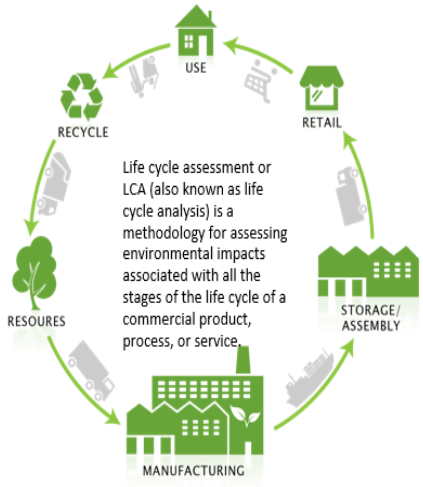
Aesthetic **Cost** **Client** **Environment** **Size** **Safety** **Function** **Material** **Manufacture**

Manufactured Boards

Manmade boards are commonly used in the construction industry, for interior fittings and furniture. They are more stable than natural woods and are less likely to warp and twist out of shape.
The three main types are; plywood's (laminated boards), particle boards and fibreboards. They are all manmade in factories / mills. They are usually composed of natural woods and resins which binds them together.

- Made from using off cuts or recycled wood
- Available in large boards and a wide range of thicknesses
- Are usually painted, laminated or veneered as the surface texture is not as nice as natural wood
- Cheaper than natural woods and environmentally friendly (sustainable)
- Can be cut to the size required and made to order
- Very flat and do not warp or twist like natural woods





Life cycle assessment or LCA (also known as life cycle analysis) is a methodology for assessing environmental impacts associated with all the stages of the life cycle of a commercial product, process, or service.

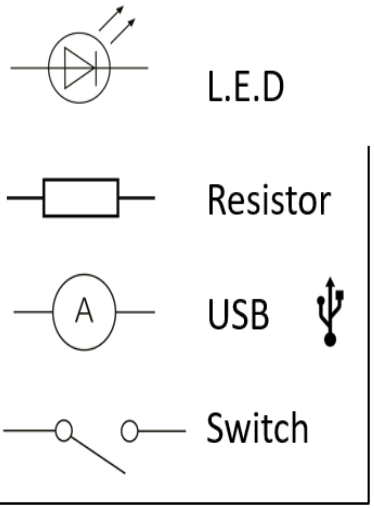
Hardwoods	Softwoods	Manufactured Boards
Generally harder/tougher than other woods. Weak along the grain, strong against	Easier to cut and work with (open grain) Weak along the grain, strong against	Variety of strengths, can be improved due to structure e.g. no grain or alternative grain direction
Trees bear fruits with seeds. Seeds have coverings.	Seeds fall to ground, are not covered e.g. Pine cones	Made in a factory, can use waste from natural wood e.g. chips or fine dust
Leaves fall off in autumn.	Does not loose its needles/pines	Made in a factory using glues, and chemicals
Very long growth time (100+ years)	Grows quickly (30 years)	Made quickly and to order
Usually harder to cut because it is more dense (close grain)	Generally easier to cut	Some are easy to cut but some due to structure are tough.
Less likely to warp or twist	More likely to warp or twist	Flat as a pancake.
Nice aesthetic, rarely painted just wax or varnish	Nice aesthetic, with wax or varnish. Can be painted	Usually painted, laminated or veneered
Very expensive to buy	Cheaper to buy	Can be cheaper that softwood

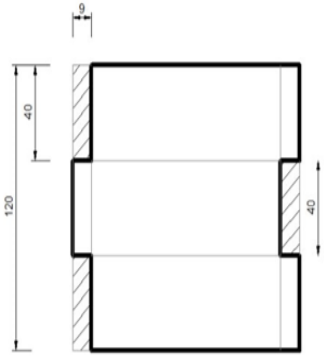
FSC FOREST STEWARDSHIP COUNCIL

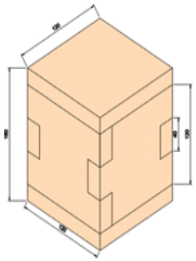
The Forest Stewardship Council® (FSC®) is the world's leading organisation for responsible forest management. They are a global, not-for-profit organisation that brings together experts from environmental, economic and social areas to promote sustainable methods of taking care of forests for future generations.
As part of their mission, the FSC® runs a global certification that ensures that healthy forests are maintained, and the rights of forestry workers and forest dwellers are protected.

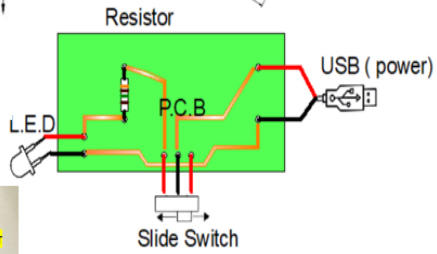
Engineering

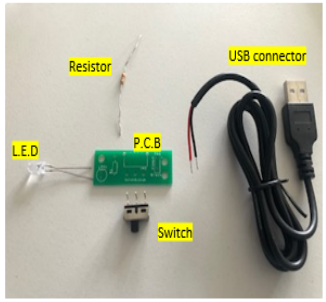
Year 8 Desk Tidy Storage with USB light: Iterative Design









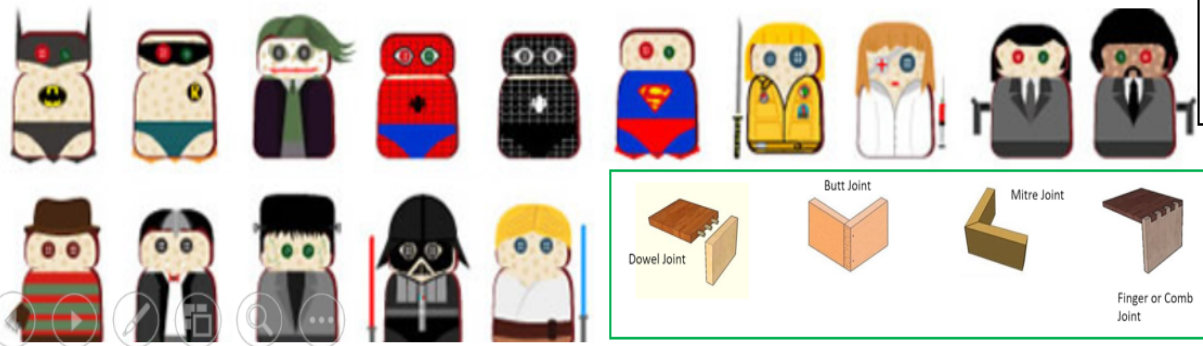


A resistor is an electrical component that limits or regulates the flow of electrical current in an electronic circuit.
Current is a flow of electrical charge

Vocabulary

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.

A hero is a real person or a main fictional character who combats adversity (Difficulty) through feats of ingenuity (cleverness), courage, or strength. The term hero is often used to refer to any gender, though heroine only refers to women. A villain is a character who opposes the hero. They are often the antagonist (Enemy) of the story.



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.

Thermoplastic polymers (plastics)
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 polymers (plastics)
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.

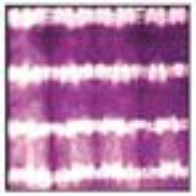
Smart Material
materials that exhibit (show) a physical change in response to some external stimuli (for example, environment e.g., light or heat) . E.g., shape memory alloy, thermochromic pigment, photochromic pigment

Textiles

Year 8 Rotation Textiles Knowledge Organiser:
Methods of adding colour to fabric

Tie dye - A resist method of dyeing fabric, using string or elastic bands

Swirl effect:
- Place fabric on a flat surface.
- Pinch up the centre and twist into a spiral.
- Secure the shape with 2 rubber bands to form 4 sections



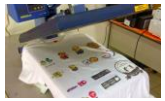
Striped effect:
- Starting with a wide edge, pleat the fabric in opposite directions in deep folds forming a concertina effect.
- Bind tightly at intervals along the length of the folded strip with string or rubber bands.

Circle effect:
- Place fabric flat on a surface
- Pinch the centre of the fabric and pull into a cone shape.
- Using string or rubber bands, bind tightly at intervals from the cone centre downwards.

Marble effect:
- Place fabric flat on a surface
- Crush the dry fabric tightly to form a ball and secure the shape with string or several rubber bands.

Heat Press/Transfer printing:
A heat press is a machine used that a transfer onto a printable (material). Using high temperatures and heavy pressures for a certain amount of time, the transfer is permanently embedded into the product.

Heat press



Key words to use in your analysis:

Tone	Aesthetics
Texture	Decoration
Repetition	Structure
Scale	Process
Pattern	Style
Shape	Trend
Connotation	Movement
Colour	Form
Textile Technique	

What is a source?
A source can be absolutely ANYTHING you are inspired by! Below is an example of different sources you will use throughout this project:

A theme mind map - Mind map all the things you can think of relating to your topic. Include images if you want to.

Mood Board - Collect images linked to your theme and make into a mood board.

Artist/Designer Analysis - Look at an existing artist or designer and complete an analysis of their work.

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?

Block printing - is a method of printing textiles by stamping ink-dipped **blocks,** usually made from wood or linoleum, onto **fabric**.

Block printing has a long history that spans thousands of years. Originating in East Asia, the technique existed in China as one of the earliest surviving woodblock printing methods.
Images and text were cut into blocks of wood and printed onto silk cloth.
Eventually, the printing made its way to paper. Lino blocks are slightly different to wooden blocks and can easily be cut using special tools to create hand made blocks to print with.

Equipment used:

Inks

Lino cutter

Lino blocks

Ink roller

Wooden blocks

Components - Something extra you add to your work other than fabric. Components can be either decorative or functional.

KEY TERMS:

Decorative - to decorate fabric only
Functional - attached for a purpose

Decorative components:

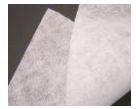
Beads

Lace

Sequins

Embroidery threads

Functional components:



Interfacing

Press studs

Buckle

Velcro

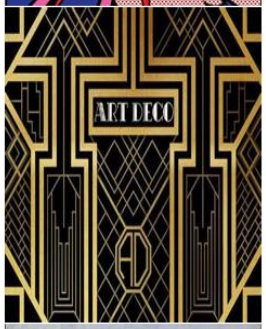
Functional and decorative components:

Ribbon

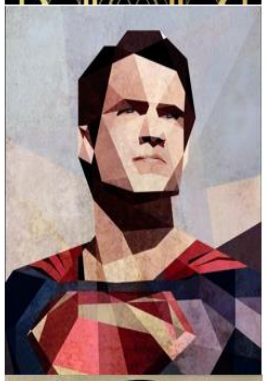
Zip

Buttons

POP ART



ART DECO



CUBISM

BAUHAUS

Alberto Alessi

Alberto Alessi was born in Italy and is most famous for his designs for everyday items made from metal and plastic. His designs are unique and stylish, aesthetically pleasing, with key features of his are the use of bright colours and different shape forms.

Wally Olins

Wally Olins is a British artist who is famous for theories on branding and corporate identity.

SUBLIMATION PRINTING

Select a blank. A blank references the mug or other dye-sublimation product that doesn't have an image applied to it yet.

Design work is inkjet printed, using special dye-sublimation inks and transfer paper. The transfer paper is only a temporary stop for the printed image.

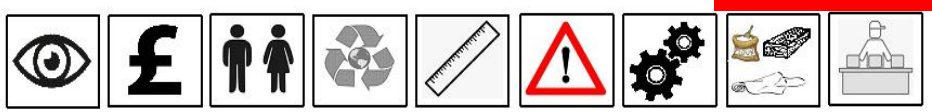
The blank and transfer paper are placed in a heat press. Heat and pressure are applied to transfer the image from the transfer paper to the surface of the blank.

The transfer paper is wrapped around and affixed to the mug or other dye-sublimation product. The image on the transfer paper is mirrored or backwards so text can be read correctly once it has been transferred.

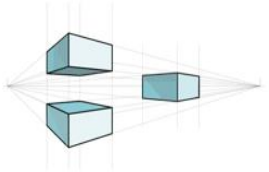
Finished Dye-Sublimation Product.

Vocabulary

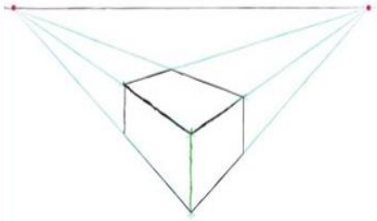
Branding- Wording or design to identify a particular brand e.g. golden arches for MacDonalds
Differentiate- Identify differences between
Distinctive- a characteristic that helps distinguish form another
Tonality- colour scheme and range of tones used in an image
Strategic-planned or calculated aims
Ambient- advertising that makes use of sites or objects other than the established media
Guerrilla- referring to actions or activities performed in an impromptu way
Corporate identity- Self-image of a company
Consultation- Meeting with an expert, formally discussing
Art Movement- a particular style followed by many artists during a specific time (e.g. pop art)
Development- an act of improving, refining, or expanding an idea
Dimension- a measurable extent of a particular kind, such as length, breadth, depth or height
Personification- the attribution of a personal nature or human characteristics to something non-human, or the representation of an abstract quality in human form

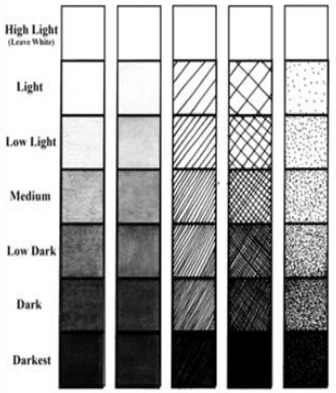


Branding Definition:
The marketing practice of creating a name, symbol or design that identifies and differentiates a product from other products



Two Point Perspective:
Using **two** vanishing points to create a 3D shape





Logo Design (technologystudent.com)

1. A successful logo is usually very simple in design.
2. The logo is easy to understand, even at a distance.
3. One or two colours are normally used.
4. Any writing is presented in a simple way and is easy to read.
5. A simple drawing or symbol is sometimes used

Pointillism is a technique of graphics in which small, distinct dots of color are applied in patterns to form an image.

Year 8 Food Studies Rotation

Starchy foods are our main source of carbohydrate and play an important role in a healthy diet. Starchy foods such as potatoes, bread, rice, pasta and cereals should make up just over a third of the food you eat, as shown by the Eatwell Guide. Starchy foods are a good source of energy and the main source of a range of nutrients in our diet. As well as starch, they contain fibre, calcium, iron and B vitamins. Wholegrain varieties of starchy foods and potatoes – particularly when eaten with their skins on – are good sources of fibre. Fibre is the name given to a range of compounds found in the cell walls of vegetables, fruits, pulses and cereal grains. Fibre that cannot be digested helps other food and waste products move through the gut more easily.

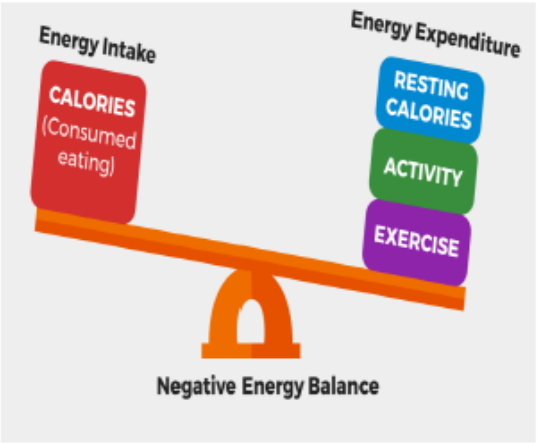
Starchy foods are complex carbohydrates- chains of carbon and hydrogen. They take longer to break down and therefore gives us energy for longer.

Temperature Zones- cooking food at the right temperature and for the correct length of time will ensure that any harmful bacteria are killed. Bacteria usually grow in the 'Danger Zone' between 8°C and 60°C. Below 8°C, growth slows down. Above 60°C the bacteria start to die.

Pathogenic- bacteria that produces a toxin
Binary Fission- the division of a bacteria into 2 and so on to create many.

Flour contains starch, which is a type of carbohydrate. As the starch heats up in the liquid, at about 60°C, the starch granules begin to swell and absorb the liquid. Once the mixture reaches a temperature of around 85°C the starch granules will have absorbed a large amount of water (about five times their own volume of water) and they then bump into each other, eventually bursting and releasing the starch from the granules into the liquid. The starch released into the liquid causes it to thicken. Gelatinisation is complete when the liquid reaches around 96C.

A ROUX= Equal mix of fat and flour



The versatile pasta bake is a comforting, easy dish that can often be pre-assembled, making it a perfect make-ahead meal.

Basic Sauce Recipes

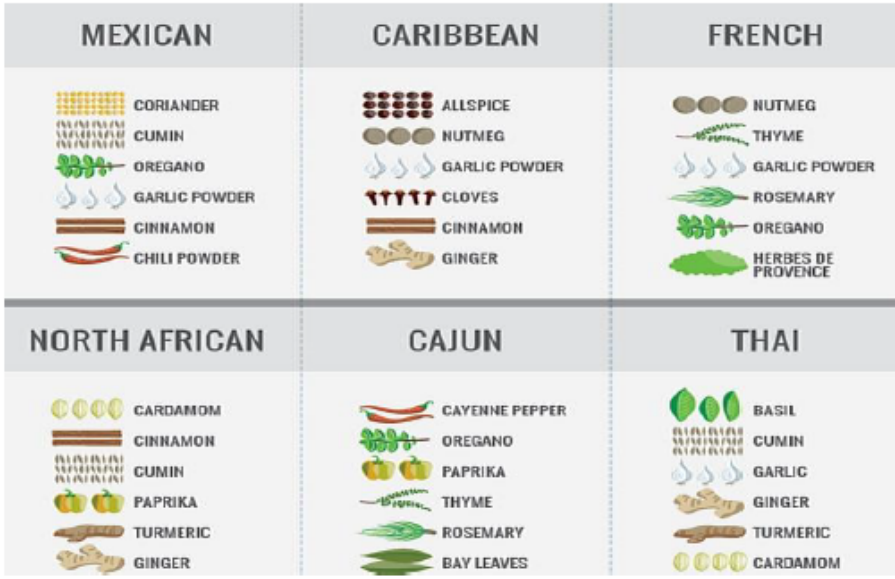
Tomato based sauce- 1 onion, teaspoon of garlic puree, 1 tin chopped tomatoes, fresh basil, salt and pepper

Cheese based sauce- 250ml milk, 25g plain flour, 25g butter, 50g grated cheese

Key skills- bridge and claw, temperature control on the hob, using the grill.

Remember- Protein means any type of meat or fish. Or lentils, beans and Vegetarian alternatives: Quorn Mince/sausage/ chicken style products

Adaptations-
Vegetables- courgette, peppers, spinach, mushroom, peas, sweetcorn
Proteins- chickpeas, quorn mince, chicken, prawns, tuna.
Toppings- mozzarella, fresh basil, chilli flakes, crisps, breadcrumbs.

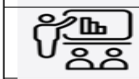
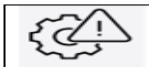
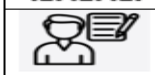


High frequency words in DT

Based on your current **DT** rotation, provide a definition for these key words and use it in a sentence.

Year 8 Subject Specific

• **Engineering**	• **Food**	• **Graphics**	• **Textiles**
• ACCESSFM • Sustainable • Iterate/iterative • Hardwood • Softwood • Manufactured boards • Technology Push • Market Pull	• Pathogen • Temperature • Carbohydrate • Energy • Fibre	• Iconic • Development • Refinement • Inspiration • Heat Press • Sublimation • Laser cutting • Serif • Sans Serif • Kerning • Typography • rendering	• Tie Dye • Decorative • Functional • Cotton • Pattern • Sublimation • Components • Street wear

Suggested Icon	Key term Tier 2/ 3	Definition/ example sentence
	Label	
	Annotate	
	Explain	
	Describe	
	Function	
	Discuss	
	Sustainable	
	Design context (problem)	
	Design Brief	
	Design specification (ACCESSFMM)	
	Analyse	
	Turn and talk	
	Group work	
	Class discussion	
	Independent	
	Book work	
	Knowledge/ Core knowledge	
	BBB	

All That Jazz

Exploring Jazz and The Blues

African Music

European Music

Work-songs & Spirituals

Combined African **SYNCOPATIONS** and **POLYRHYTHMS** with hymn-tunes from the white settlers from Europe.
Based on African **CALL AND RESPONSE** pattern with leader (**UNISON**) singing the "call" answered by a chorus (**HARMONY**) singing the "response" (answer).

The Blues

Simple, personal, and strongly felt lyrics in **A-A-B** form.
Built on a chord progression called the **TWELVE BAR BLUES** (using **CHORDS I, IV & V**) and some **SEVENTH CHORDS**.
Uses the **BLUES SCALE** for vocal and instrumental **IMPROVISATIONS.** Melodies are often **SYNCOPATED** with instrumental **BREAKS** at the end of each vocal line.
Famous Blues singers include *Bessie Smith, Sarah Vaughan, Ella Fitzgerald, Billie Holiday.*

Ragtime

Performed on a solo piano with a leaping **VAMP** accompaniment in the left hand against **SYNCOPATED** offbeat and **CHROMATIC** melodies in the right hand.
Longer pieces of ragtime often broken down into different sections for variety. *Scott Joplin* was the most famous ragtime composer whose works include: *"The Entertainer", "Maple Leaf Rag" and "Ragtime Dance"* .

Dixieland/Trad/New Orleans Jazz

Small ensembles of 5-6 players on instruments such as drums, banjo, cornet, trombone, string bass, clarinet etc. Based on a traditional "song" but "played around" with by solo performers adding **IMPROVISATIONS** and **COUNTER MELODIES**
Soloists accompanied and 'backed' by a "**RHYTHM SECTION**". *Famous Dixieland Jazz artists include Duke Ellington, Bix Beiderbecke, Louis Armstrong.*

Swing

Larger ensembles of 10+ with a "leader" who wrote down and arranged the music for players. Sections included rhythm (piano and drums/ bass), reeds trumpets and trombones. **CHROMATIC SCALE** often used in Swing. Uses **SOLOISTS** who **IMPROVISE** against the **ENSEMBLE** in **COLLECTIVE IMPROVISATION.** Often characterised by a **SWING** rhythm which is easy to **DANCE** to. Often based on a **WALKING BASS LINE.** *Glenn Miller is probably the most famous swing band leader (and Trombonist) and his well-known piece "In the Mood".*

Bebop

Bebop developed in 1940's as swing declined in popularity. Characterised by fast tempo, tricky chord changes and emphasis placed on **VITRUOSIC IMPROVISATION** with improvisation contests.
Bands returned to 5 or 6 members and Bebop was listened to rather than danced to.
Famous Bebop musicians include *Charlie Parker* and *Dizzy Gillespie.*

Free/Modal Jazz

Slower Tempo than Swing and Bebop.
More laid-back feel and relaxed mood.
Continued the jazz tradition of a **SOLOIST(S)** backed by **RHYTHM SECTION. IMPROVISATION** still a key feature but more emphasis on **TIMBRE** and **SONORITY.** Based on a set of chords (often 12-bar blues or 32 bars) and based on **MODES** (a type of **SCALE**) *e.g., Dorian Mode, Lydian Mode etc.* Famous Modal Jazz artists include *Miles Davis, John Coltrane.*

A. Jazz and Blues Key Words

RIFF/OSTINATO – Short, repeated musical patterns often used in **SOLOS**.
IMPROVISATION – music created 'on the spot' (previously unprepared performance)
SEVENTH CHORD – a **TRIAD** (root, third and fifth) with a fourth note added which is seven notes about the root/tonic. **C7** = C , E, G (triad) + **B flat**.
SWING/SWUNG RHYTHM – performing a regular 'straight' rhythm with a 'lilt' in a "**ONE** and **A**, **TWO** and **A**" style (using **TRIPLETS**) common in swing music.

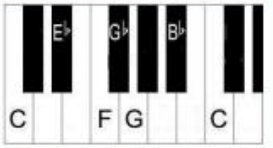
B. The Twelve Bar Blues

Some or all of these chords can be **SEVENTH CHORDS (7)**

CHORD I	CHORD I	CHORD I	CHORD I
CHORD IV	CHORD IV	CHORD I	CHORD I
CHORD V	CHORD IV	CHORD I	CHORD I

C. The Blues Scale

BLUES SCALE – a series of notes often used within improvisations in blues music *(the Blues Scale on C is shown to the right).*
BLUE NOTES – additional or extra sharpened or flattened notes in a melody.



D. Instruments of Jazz and Blues

Year 8 Dance

FEATURES OF DANCE
- Action – What you are doing
- Space – Where you are dancing
- Dynamics – How you are dancing
- Relationships – Who you are dancing with

Break dancing, also called breaking and B-boying, energetic form of dance, fashioned and popularized by African Americans and Latinos. It includes stylized footwork and athletic moves such as back spins or head spins. Break dancing originated in New York City during the late 1960s and early ’70s, incorporating moves from a variety of sources, including martial arts and gymnastics.

Break dancing is largely improvisational, made up of variations of “standard” moves or steps, including freezes, powermoves, downrock and toprock. The emphasis is on energy, movement, creativity, humour and an element of danger. It is meant to convey the rough world of the city streets from which it is said to have sprung. It is also associated with a particular style of dress that includes baggy pants or sweat suits, baseball caps worn sideways or backward and sneakers (required because of the dangerous nature of many of the moves).

Michael Jackson’s dance style was influenced by a wide range of people, varying from R&B artists to even ballerinas. His influences included jazz, street dances and African-American indigenous styles. Throughout his career, he was under no formal training, nor did he have any dance teachers supervising him, further affirming his natural talent. He was completely self-taught and worked very much in isolation when it came to mastering his famous dance moves. Beers: He was creative in the way he brought different techniques of various dance styles together, taking whatever, he saw and liked in other dancers and making them his own. Roy: By fusing various styles and techniques, together with his own artistic creations, he introduced an entirely new dance style to the world.

MIND MAPS

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

ABOUT

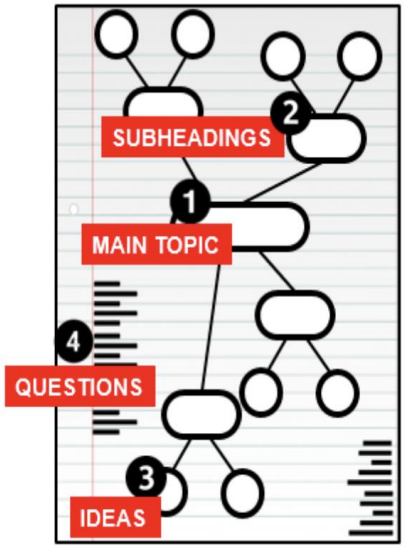
Mind Mapping and Brainstorming is a highly visual method of representing information

- 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

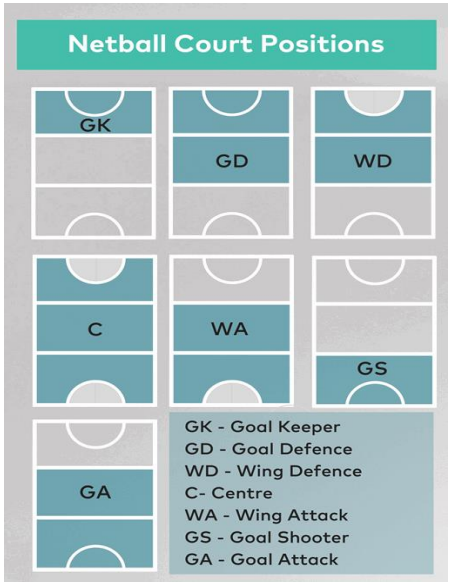
3
- Each subheading will have at **least one idea** related to it.
- Make sure that your **ideas are visually distinct** from your subheadings

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.

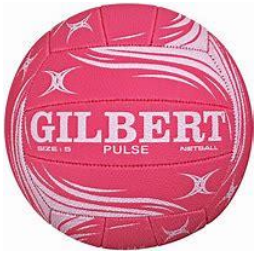
PE

Netball – Year 8



The Shooting Technique

1. Stand in a balanced position facing the goal.
2. Ball held high above head
3. Ball sits in one hand with other hand supporting.
4. Bend your knees and elbows and focus on goal. Keep shoulders still.
5. Extend knees and elbows and flick the ball off your finger tips – push the ball high so it falls in to the net.
6. End shot with your arms high and hands following the ball.



•**Centre (C)** - This position starts the game and is allowed anywhere on the court except their own and the opposing team's goal circles.
•**Wing attack (WA)** - This position aims to collect the ball and deliver it safely into the goal circle to the shooters. The wing attack is only allowed in the top 2 thirds of their court.
•**Goal attack (GA)** - This position aims to collect the ball safely from the wing attack or centre and either passes to the shooter or has a shot for themselves. The goal attack is only allowed in the top two thirds of their court and the goal circle.
•**Goal shooter (GS)** - This position aims to find space in order to receive the ball from their teammates and shoot at the net. The goal shooter is only allowed in the top third of their court and the goal circle.
•**Wing defence (WD)** - This position is required to close down opposition players, intercept and protect the goal circle. The wing defence is only allowed in the bottom two thirds of their court.
•**Goal defence (GD)** - This position deals with preventing the opposition from passing the ball into the goal circle. The goal defence is only allowed in the bottom two thirds of their court and the goal circle.
•**Goal keeper (GK)** - This position aims to close down opposition shooters in order stop the ball from being shot at the net. The goal keeper is only allowed in the bottom third of their court and the goal circle.

Chest Pass

Both thumbs to the back of the ball, take the ball from your chest and send it to a team-mates chest (ball should not touch the floor). Fingers finish pointing towards the target and palms facing out.

Bounce Pass

Same setup at the chest pass with the exception of fingers end up pointing to the floor when you let go of the ball. Aim towards your teammates feet– the ball should bounce once.

Shoulder Pass

One handed pass—cradle the ball in hand and lift the ball to shoulder—push the ball quickly towards your teammate. Foot position opposite foot forwards to the hand being used.

Year 8- Basketball

RULES OF BASKETBALL

- Played with two teams of five.
- Score by shooting a ball through a hoop.
- A side-line ball is taken from the opposite team to who touched it last.
- Outside of the three points a basket scores 3pts and inside scores 2pt.
- Once the offense has brought the ball across the mid-court line, they cannot go back across the line during possession.
- Personal fouls include hitting, pushing and holding.
- Fouling a shooter results in one, two or three throws, worth 1pt each, depending on where and how they were fouled.
- Players cannot travel with the ball or double dribble.
- Players cannot hold the ball for longer than 5 seconds.

Blocking

Jump shot

Overhead Pass

Dribbling

Key Words

Spatial Awareness	Spatial awareness is the ability to see and understand two or more objects in relation to each other and to one's body in terms of space and distance.
Tactics	Tactics are a plan or strategy put into place to allow the best outcome for an individual or team in sporting competition.
Formation	A formation are the positions players of a team are put into during a competitive match. There are different formations depending on your strategy .
Leadership	The ability to lead a team and be a role model to your team mates. Communicate strategies and tactics in a way that motivates team members.
Accuracy	How precise a pass, shot or throw is when aiming for a specific target.
Technique	Technique is skill and ability in a sporting or other practical activity that you develop through training and practice.

Travelling

Definition - A violation in basketball called when the player holding the ball moves one or both of their feet illegally.

Examples:

Illegal movement of the pivot foot - A player must remain stationary once they stop dribbling and hold the ball in both hands in an attempt to pass, shoot or pivot. From this position the player may choose to pivot on an established pivot foot. If the pivot foot moves or drags, a player will receive a travelling penalty.

Returning to the ground without shooting or passing - If a player jumps with possession of the ball, the ball must leave their hands before they return to ground. Failing to do this will result in a travelling violation.

I will learn:

Spatial Awareness – Moving into space, communicating to team mates that you are in space. Why do we move into space?

Passing – Types of passing, making the right decision as to which type of pass to use and when to pass. Accuracy and technique.

Dribbling/ Running with the ball – Keeping control of the ball. Decision making on releasing the ball.

Shooting – Different techniques, accuracy, power, decision making.

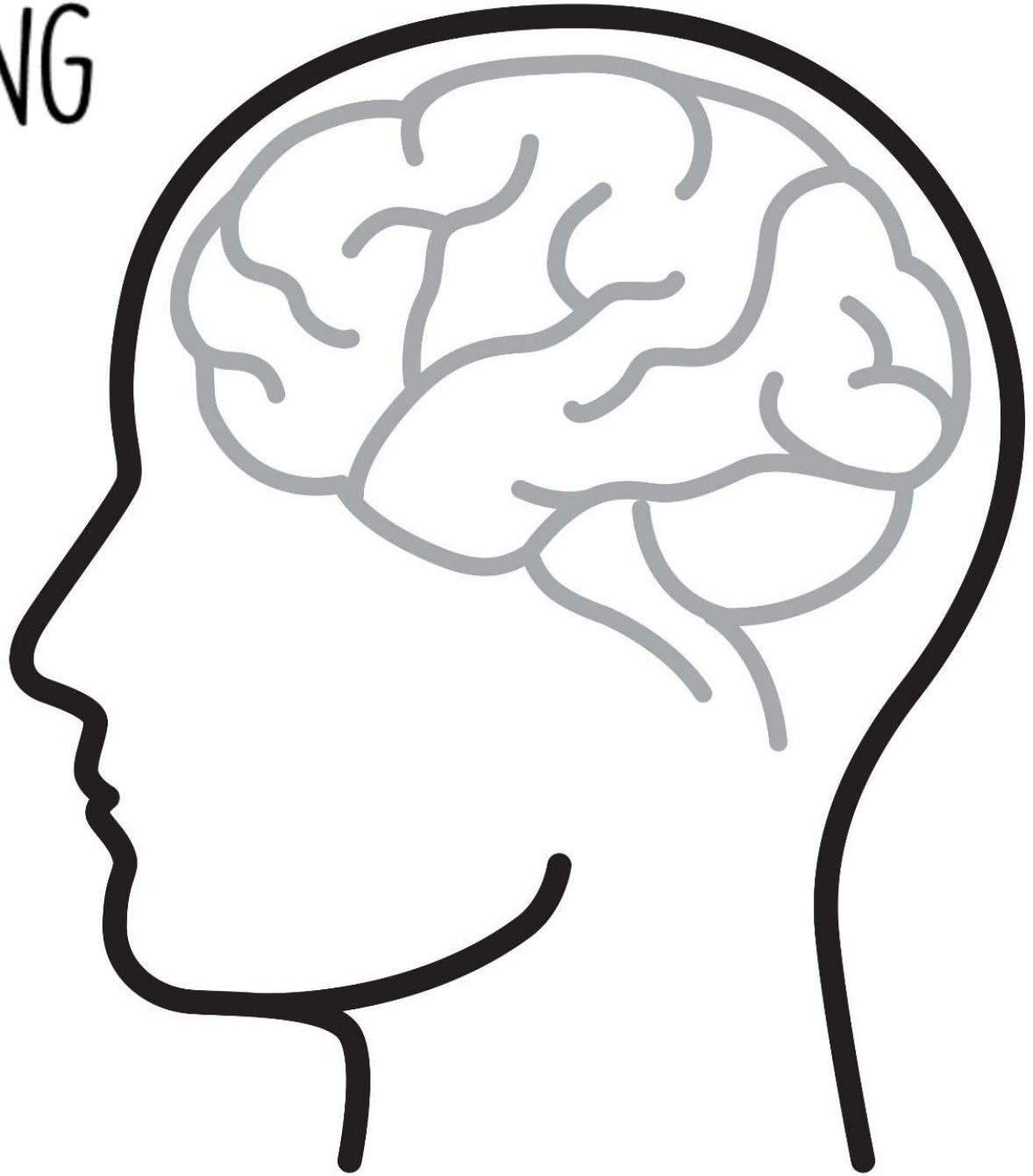
Travelling – When a player holding the ball moves one or both their feet illegally.

Pivoting – A player standing still may plant one foot to the ground and change direction using their other foot. Their pivoting foot (foot planted to ground) must not move.

Double dribbling – When a player dribbles the ball in both hands at the same time, or when a player has stopped their dribble to hold the ball in one or both hands and attempts to start a new dribble.

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.



Year 8: How do Hindus practice their religion in the modern world?

Knowledge organiser

Key vocabulary

ahimsa Literally 'non-harming' or 'non-violence', a Hindu teaching that encourages peaceful resolution of conflict and kindness towards other living creatures

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

darshan 'Seeing' God; a form of worship and devotion in which the murti of a deity is revealed to worshippers

dharti 'She who holds everything' – a way of referring to the earth goddess

Diwali The festival of lights, celebrated by nearly all Hindus

kavadi A burden carried during the Thaipusam festival to express devotion to Murugan

mandir A Hindu term for a temple

mantra An extract from a sacred text that is chanted repeatedly during worship

murti An image of a god or goddess

pantheism The belief that God is in everything

patriarchal society A culture that is dominated or controlled by men

puja The Sanskrit word for worship

Ratha Yatra A Vaishnava festival in Puri involving a procession of murtis in chariots

sati When a woman throws herself on to her husband's funeral pyre

Thaipusam A Shaiva festival to worship Murugan, the god of war

tirtha A 'crossing place', where a deity enters the human world; for this reason, tirthas are places of pilgrimage

Key facts

- Hindu worship is called puja, and it may be done at a shrine in the home or in a temple. The image of a deity in a shrine or temple is called a murti. Hindus 'see' or worship these in a special way called darshan.
- Making a pilgrimage to one of Hinduism's many holy sites is believed to create good karma. Key pilgrimage sites include Varanasi on the river Ganges and the city of Puri.
- Hindus in different parts of the world celebrate different festivals, but almost all Hindus celebrate Diwali, the festival of lights. It means different things to different people: Diwali may be to honour the Supreme Deity, or to remember the events of the Ramayana or a legend from the Vedas.
- The caste system is a social structure mentioned in some ancient Hindu texts. It divides society into four classes, which later developed into five, with the 'Untouchables', or Dalits, at the bottom. Mohandas Gandhi campaigned to stop discrimination against the Dalits, although they still face problems today.
- Hindus believe it is important to avoid harming other creatures, summed up in the ancient idea of ahisma, which means 'non-harming'.
- In ancient times, Hindu men and women had different roles in society. Although there is more gender equality today, there are still not many female Hindu priests or temple leaders.
- Hindus respect and value the earth because it provides people with everything they need to survive. For this reason, they work hard to protect it against environmental problems.
- Ancient Hindu ideas have influenced popular culture through the centuries, for example in the form of practices such as yoga and meditation, theatre shows and films.

Key people and gods

Bhumi Devi 'Mother Earth' – the earth seen as a goddess

Gandhi A Hindu who lived from 1869 to 1948 who opposed caste-based discrimination and led peaceful protests for Indian independence

Ganga A goddess who formed the river Ganges

Jagannath An important deity for many Hindus, believed to be a form of Vishnu

Murugan A fierce god of war, a form of Shiva, worshipped by Shaivas at Thaipusam

Purusha A mythical giant whose vast body was sacrificed by the gods to create human society

Yama The god of death

Murugan Golden Statue at Battuck caves, Kuala lampur, Malaysia, Asia.

Hindu priests in India worship goddess Durga during the Hindu festival of Dussera.

KEYWORD REVISION

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

Keyword:	Definition:

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

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

My BHAmazing vocabulary, written in sentences:

1.

2.

3.

4.

5.

6.

7.