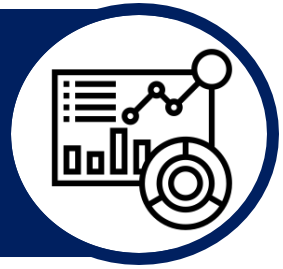
WINTERSTOKE HUNDRED ACADEMY

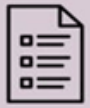
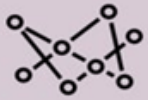
Knowledge Organisers



Term 1 and 2
Year 7

Contents

How to use a knowledge organiser – step by step guide

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

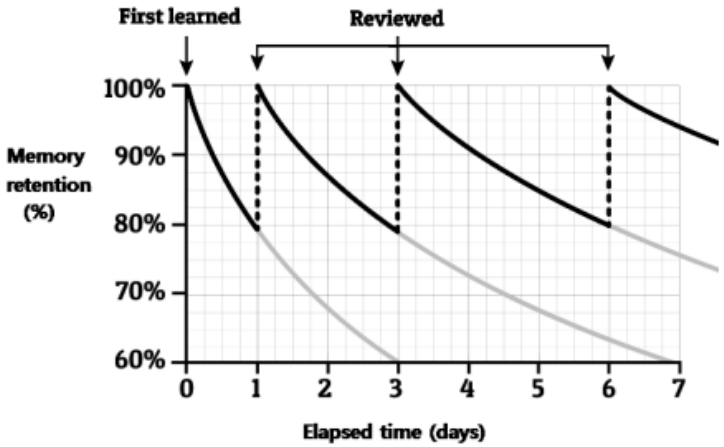
How to revise

Successful Learning Takes Place Over Time

It's rare for anyone to be completely comfortable with something they learn for the first time. This could be a new piece of music, dance move, language or chemistry. We all have to practice. In most instances, the aim is to be at your optimum on the day it matters, e.g. the performance, race or exam. Everything leading up to this point is part of the process of improving. It's about the long-term rather than the short-term, which also means there are no quick fixes. During this period, it's okay to make mistakes; it's okay to feel frustrated. What matters is what you do about it.

Space out your learning on a subject

Spacing out your learning over time is far more effective than last-minute cramming. This is based on research into how we forget and how we remember. The speed at which we forget something will depend on many factors such as the difficulty of the material, how meaningful it was to us, how we learned it and how frequently we relearn or remember it. The last factor tells us that when we learn something for the first time, we need to review it quickly afterwards. The more times we force ourselves to remember something, the longer the gap between reviews, which the diagram below illustrates nicely. The Leitner system and Cornell Notes mentioned earlier provides a wonderful way of achieving this, but the principle applies to all of the learning strategies mentioned in this booklet



Revision strategies

List It

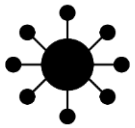
This is a simple free recall task that is very versatile. It can feel challenging, but this is a good thing, and it provides clear feedback on what you do and don't know. Choose a topic, set yourself a time limit and…

- List as many keywords as you can
- List as many facts as you can
- List as many key events/quotes/individuals as you can
- List as many causes of X as you can
- List as many consequences of Y as you can

Flashcards

Flashcards have the potential to be a powerful learning aid. However, how successful this is will depend on the thought you put into making them in the first place and then how they're used. It's very important to remember that they're for testing, not summarising

Mapping



Mapping is a brilliant way of organising and learning information, demonstrated on various pages in this booklet. It helps you break down complex information, memorise it, and see the connections between different ideas.

Self-testing

Research has shown that every time you bring a memory to mind, you strengthen it. And the more challenging you make this retrieval, the greater the benefit. Self-testing improves the recall of information, transfer of knowledge and making inferences between information. Equally, there are many indirect effects, such as a greater appreciation of what you do and don't know, which helps you plan your next steps.

Flashcards

Flashcards are small sheets of paper or card with matching pieces of information on either side. They are a useful tool for learning facts and allow you to quickly check whether you have remembered something correctly.

When making and using flashcards:

Do:

- ✓ …make flashcards quickly.
- ✓ …put a single piece of information of each flashcard.
- ✓ …sort your flashcards according to your confidence with them (see below).
- ✓ …test yourself on the flashcards from memory.

Don't:

- X …spend more time making flashcards than actually using them.
- X …put lots of information onto each flashcard.
- X …revise the flashcards in the same order every time that you use them.
- X …only read through flashcards.

1861	groynes	osmosis	Where is the pharmacy?
Pasteur published his paper about germ theory.	A low wall on the coastline which slows longshore drift	Net movement of water from a high concentration to low concentration across a partially permeable membrane	Où est la pharmacie?

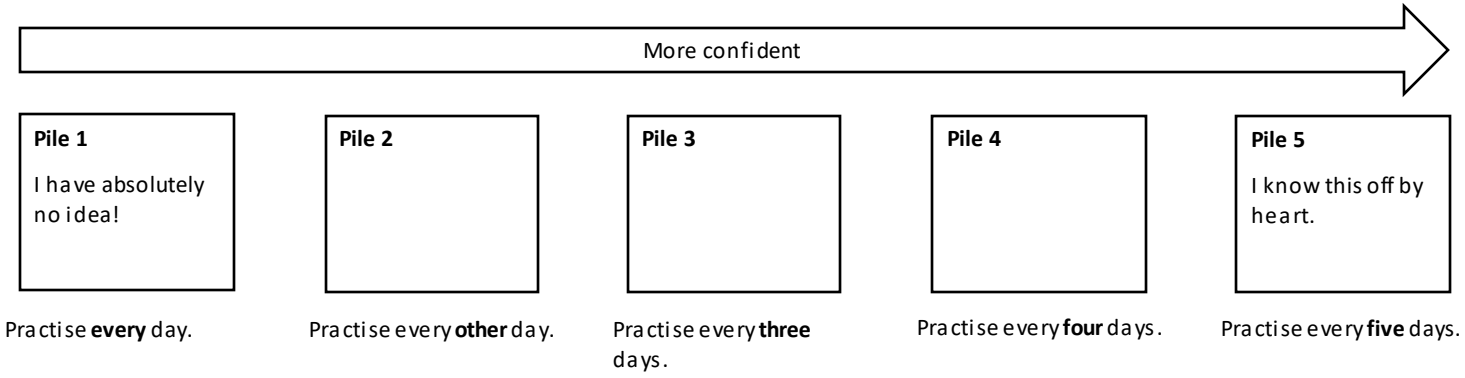
How to make flashcards:

- You can by a set of flashcards or use a free website such as Quizlet.
- Find the information you want to put onto flashcards using your existing revision resources (e.g. a knowledge organiser).
- Fold a piece of A4 paper into 10.
- Write the questions on the top half of the paper.
- Write the answers on the bottom half of the paper.
- Cut the paper along the dotted lines shown here.
- Fold the strips of paper so that the writing is on either side.

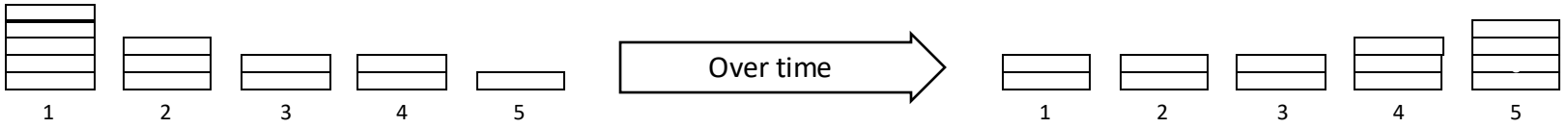
Definition 1	Definition 2	Definition 3	Definition 4	Definition 5
Answer 1	Answer 2	Answer 3	Answer 4	Answer 5

How to use flashcards:

1. Test yourself using the flashcards.
2. As you test yourself, sort the flashcards into up to five piles according to how confident you are with the content.
3. Put the piles into numbered envelopes (1-5).
4. Test yourself on the different piles on different days (see below):



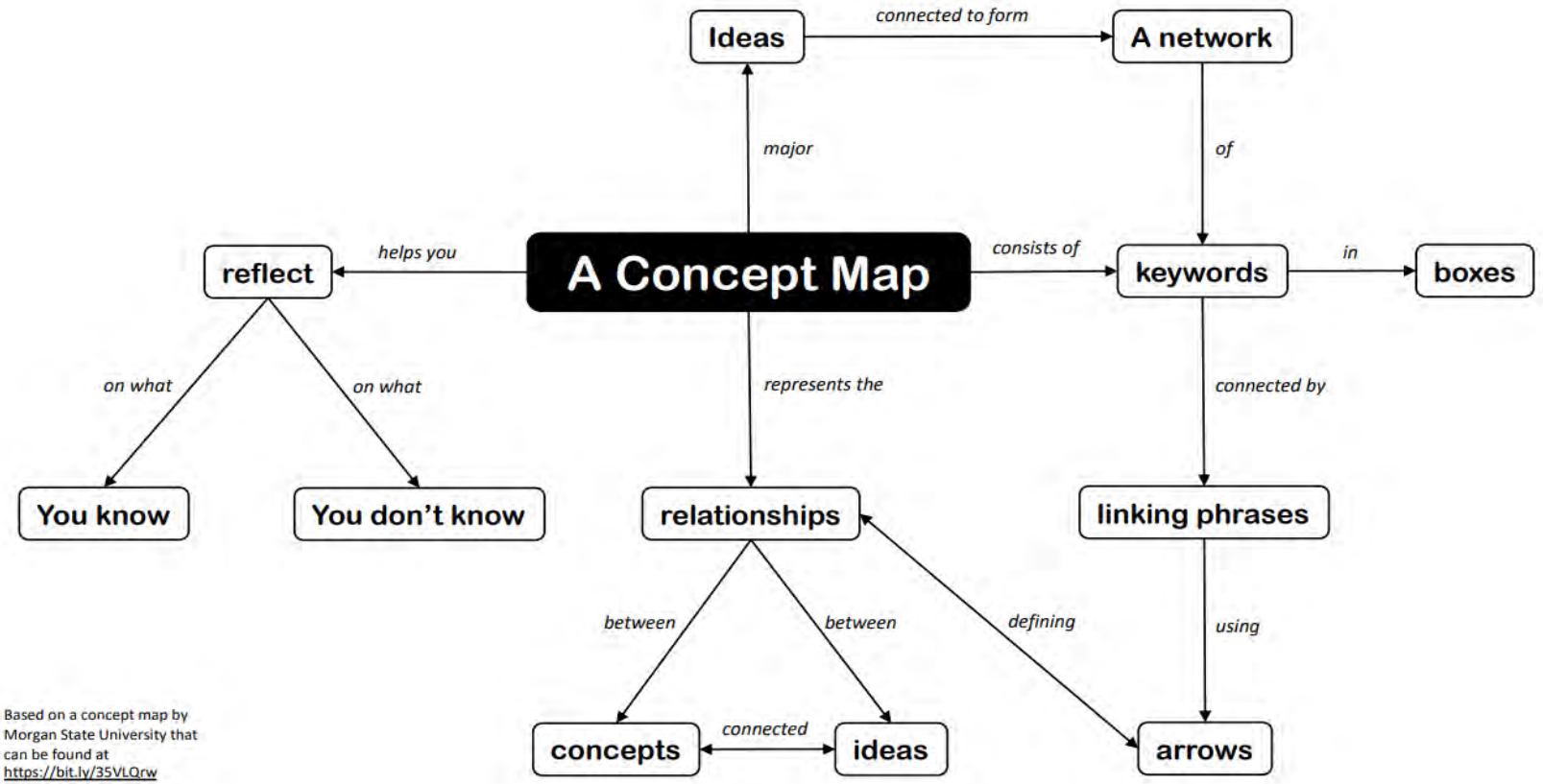
5. As you test yourself on the different piles, move the cards into different piles as you become more confident.



Useful resources:

www.quizlet.com – This free website allows you to quickly create flashcards which you can print, use on a computer, or use on your phone.

Mapping



Based on a concept map by Morgan State University that can be found at https://bit.ly/35VLQrw

Maths

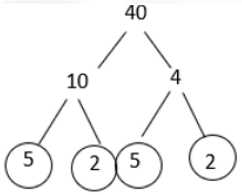
Probability

1	The probability of an impossible event is	0
2	The probability of a certain event is	1 or 100%
3	The probability of an even chance is	½ 0.5 or 50%
4	The probability of rolling a 5 on a dice is	$\frac{1}{6}$
5	The probability of rolling an even number on dice is	$\frac{3}{6}=\frac{1}{2}=0.5=50\%$
6	The probability of rolling a number less than 6 on a dice is	$\frac{5}{6}$
7	P(choosing a red) means	Probability of choosing a red
8	**Never** write probabilities as	ratio
9	Mutually exclusive outcomes…	Cannot happen at the same time
10	The probabilities of mutually exclusive outcomes always sum to	1 or 100%
11	P(rain) = 0.3 What is the p(not rain)	1 – 0.3 = 0.7
12	P(snowing) = 0.03 What is the p(not snowing)	1 – 0.03 = 0.97
13	p(win)= $\frac{4}{7}$ p(not win) =	$1-\frac{4}{7}=\frac{3}{7}$
14a	Work out the p(red) Colour / red / blue / Green Probability / / 0.3 / 0.4	$1-(0.3+0.4)$ $1-0.7=0.3$
14b	If I choose 200 balls, how many would you expect to be green?	0.4 x 200 = 80 green expected

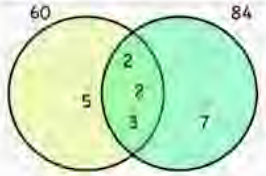
Sample Space Diagrams

1	Two coins are flipped, what is the probability of throwing HH?	HH HT TH TT $\frac{1}{4}$
2	Here is a sample space diagram of rolling to dice and finding the sum (adding) their scores 	
2a	How many outcomes are there?	6 x 6 = 36
2b	p(scoring a 3)	$\frac{2}{36}$
2c	p(scoring a 7)	$\frac{6}{36}$
7	P(scoring a prime number)	Primes: 2,3,5,7,11 $\frac{15}{36}$

Factors, Multiples and Primes

1	Factors of 16 are:	16 1 x 16 2 x 8 ~~3 x~~ 4 x 4 1, 16, 2, 8, 4 (5 factors)
2	Which sentence is correct? 5 is a multiple of 15 15 is a multiple of 5	15 is a multiple of 5 because 15 = 5 x 3
3a	A prime number is…	A whole number with only two factors, one and itself.
3b	List the first 10 prime numbers	2, 3, 5, 7, 11, 13, 17, 19, 23, 29
4b	1 is not a prime because…	It has only one factor: 1. A prime has exactly two factors.
5	15 is not a prime because…	It has four factors: 1, 3, 5, 15. A prime has exactly two factors.
6	Product means…	Multiply
7	If it says "write 40 as a product of its prime factors the method is…	 Answer: 2 x 2 x 5 x 5 Index form: $2^2 \times 5^2$
7	Express 30 as a product of its prime factors	$30 = 2 \times 3 \times 5$
8	Write $2 \times 2 \times 2 \times 3 \times 5 \times 5$ in index form	$2^3 \times 3 \times 5^2$
9	First three multiples of 10:	10, 20, 30
10	Which sentence is correct? 2 is a multiple of 8 8 is a multiple of 2	8 is a multiple of 2 because 8 = 2 x 4
11	How to spot a multiple of 10	It ends in 0
12	How to spot a multiple of 5	It ends in 0 or 5
13	How to spot a multiple of 2	It is even, it ends in 0, 2, 4, 6 or 8

HCF and LCM

1	HCF stands for…	Highest Common Factor
2	LCM stands for …	Lowest Common Multiple
3	Find the LCM of 6 and 10	6: 6, 12 , 18 , 24 , (30), 36 , … 10: 10 , 20 , (30) The LCM of 6 and 10 is 30
4	Find the HCF of 12 and 30	Factors of 12: 1, 2, 3, 4, (6), 12 Factors of 30: 1, 2, 3, 5, (6), 10, 15, 30 The HCF of 12 and 30 is 6
5	Imagine you are finding the HCF and LCM of 60 and 84. You have written them both as a product of primes using factor trees so that $60 = 2 \times 2 \times 3 \times 5$ $84 = 2 \times 2 \times 3 \times 7$ What would this look like in a Venn diagram?	
6	Using the Venn diagram above. How would you find the HCF of 60 and 84?	Multiply the numbers in the intersection 2 x 2 x 3 = 12 (HCF)
7	Using the Venn diagram above. How would you find the LCM of 60 and 84?	Multiply the numbers in the union (all of them) 2 x 2 x 3 x 5 x 7 = 420 (LCM)

Maths WHA

Fraction Skills

1	$\frac{1}{8}$ of 40	$40 \div 8 = 5$
2	$\frac{3}{8}$ of 40	$40 \div 8 = 5 \quad 5 \times 3 = 15$
3	To add fractions, you first need…	A common denominator
4	To subtract fractions, you first need…	A common denominator
5	$\frac{3}{5} + \frac{1}{5} =$	$\frac{4}{5}$
6	$\frac{3}{5} - \frac{1}{5} =$	$\frac{2}{5}$
7	$\frac{3}{5} + \frac{1}{4} =$	$\frac{12}{20} + \frac{5}{20} = \frac{17}{20}$
8	$\frac{3}{5} - \frac{1}{4} =$	$\frac{12}{20} - \frac{5}{20} = \frac{7}{20}$
9	Which is greater: $\frac{1}{3}$ or $\frac{1}{4}$?	$\frac{1}{3}$
10	Which is greater: $\frac{3}{10}$ or $\frac{7}{10}$?	$\frac{7}{10}$
11	Steps to put fractions in order	1. A common denominator 2. Compare the numerators
12	Ascending order means…	Smallest to biggest

Order of Operations

1	Draw the pyramid of order of operations	
2	Calculations on the same row of the pyramid are done.	Left to right
3	$10 - 5 + 2$	$10 - 5 = 5$ $5 + 2 = 7$
4	$12 \div 3 \times 5$	$12 \div 3 = 4$ $4 \times 5 = 20$
5	Set your working out by	Writing the answer to the calculation that takes priority directly underneath
6	$60 - 10 \times 5$	$60 - 10 \times 5$ **(multiply comes first)** $60 - 50$ (50 under 10 x 5) $= 10$
7	Insert bracket to make the calculation true $5 + 3 \times 10 \div 2 = 17.5$	$(5 + 3 \times 10) \div 2 = 17.5$
8	Insert bracket to make the calculation true $5 + 3 \times 10 \div 2 = 20$	$5 + (3 \times 10 \div 2) = 20$
9	Insert bracket to make the calculation true $5 + 3 \times 10 \div 2 = 40$	$(5 + 3) \times (10 \div 2) = 40$

Negative Numbers

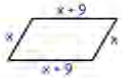
1	Put these numbers in ascending order: 4, -5, 0, 2, -3	-5, -3, 0, 2, 4
2	-4 – 3 =	-7
3	___ + 4 = 0	-4
4	4 - -3 =	+7
5	$-4 \times -3 =$	+12
6	$-4 \times 3 =$	-12
7	$-20 \div -4 =$	+5
8	$20 \div -4 =$	-5
9	$-4^2 =$	-16
10	$(-4)^2 =$	= -4 ×-4 = +16 (squaring a negative = positive)
11	Subtraction is the same as …	addition of the opposite
12	-3 - -4 =	-3 + 4 = +1
13	-3 + - 4 =	-3 – 4 = -7
14	$(-4)^3 =$	-64 (cubing a negative = negative)

WHA Maths

Basic Algebra

1	2a means	2 x a
2	$\frac{a}{10}$ means	$a \div 10$
3	P^2 means	p x p (p squared)
4	Simplify a + a + a	3a
5	Simplify 5a + 2a	7a
6	You cannot simplify 5a + 2 because	They are not like terms
7	5a + 2 + 3a + 10	Collect the a's and integers 8a + 10
8	Simplify 5a + 2b + 2a	7a + 2b
9	Simplify 5a + 2b – 2a	3a + 2b (the minus belongs to the 2a and 2b is positive)
10	Simplify 5a –2b – 2a	3a – 2b (the minus belongs to the 2a and 2b is negative)
11	Simplify a x a x a	a^3
12	Simplify 5 x a x 3 x b	Multiply numbers first 15ab
13	Simplify $5 \times a \times 3 \times a$	Multiply numbers first a x a = a^2 $15a^2$
14	3a + a	4a
15	3a x a	$3a^2$
16	3a x 2b	6ab
17	$Simplify \frac{15a}{3}$	Divide 15 by 3 5a
18	$Simplify \frac{a}{a}$	Anything divided by itself is 1
19	$Simplify \frac{15a}{3a}$	$\frac{15\cancel{a}}{3\cancel{a}}$ $15 \div 3 = 5$
20	Simplify $\frac{a \times a \times a \times b \times b}{a \times a \times b}$	$\frac{\cancel{a} \times \cancel{a} \times a \times \cancel{b} \times b}{\cancel{a} \times \cancel{a} \times \cancel{b}}$ $\frac{a \times b}{1} = ab$
21	Simplify $\frac{a \times a \times b}{a \times a \times \times a \times b \times b}$	$\frac{\cancel{a} \times \cancel{a} \times \cancel{b}}{\cancel{a} \times \cancel{a} \times \times \cancel{a} \times \cancel{b} \times b}$ $\frac{1}{a \times b} = \frac{1}{ab}$
22	15ab + 2ab – 3a	Collect ab terms only 17ab – 3a
23	$5x^2 + 3x - 2x^2 + 6x$	Collect x^x terms separately to x terms $3x^2 + 9x$ ($2x^2$ term is negative, all others positive)

Algebraic Expressions

1	An expression is	A collection of letters/numbers e.g. 5n + 10 3n + 4m
2	5 more than y	$y + 5$
3	5 less than y	$y - 5$
4	Y less than 5	$5 - y$
5	5 lots of/multiplied by y	5y
6	y divided/shared into 5	$\frac{y}{5}$
7	Ben is x years old John is 5 years older Alice is twice John's age	Ben = x John = x + 5 Alice = 2(x + 5) = 2x + 10
8	Write an expression for the sum of Ben, John and Alice's age	x + x + 5 + 2x + 10 = 4x + 15
9	Write an expression for the perimeter 	4x + 18
10	There are x strawberries in a pack and y bananas in a bunch Write an expression for 5 packets and 3 bunches	5x + 3y

Maths WHA

Substitution

1	Evaluate means	Write your answer as a number (no letters)
2	Substitute means	Replace the number with a letter
3	Evaluate 5a when a = 2	5a means 5 x a 5 x 2 = 10
4	Evaluate $\frac{a}{3}$ when a = 12	$\frac{a}{3}$ means a÷3 $12 \div 3 = 4$
5	If a = 3 and b = 5 Evaluate 10ab	10 x 3 x 5 = 150
6	If a = 3 and b = 5 Evaluate 4a – 2b	4a = 4 x 3 = 12 2b = 2 x 5 = 10 12 – 10
7	If b = 5 Evaluate $3b^2$	Squaring comes first $5^2 = 25$ 25 x 3 = 75
8a	The cost C of hiring a boat for h hours with an initial payment is is given by the formula C = 10+3h What is the cost of the initial payment?	£10
8b	The cost C of hiring a boat for h hours is given by the formula C = 10+3h What is the hourly cost?	£3.00 an hour
8c	The cost C of hiring a boat for h hours is given by the formula C = 10+3h What is the cost of hiring a boat for 4 hours?	h = 4 10 + 3 x 4 (multiply first) = 10 + 12 = £22.00

Expanding Brackets

1	Expand means	Multiply out **all** terms inside by term outside
2	Expand 5(2y + 3)	Multiply 2y and 3 by 5 10y + 15
3	Expand 5(2y - 3)	Don't miss the negatives 10y - 15
4a	Expand 5(2y – 3 + 4p)	3 terms in the bracket… 3 multiplications $10y - 15 + 20p$
4b	Expand $-5(2y - 3 + 4p)$	Negative term on the outside changes the signs $-10y + 15 - 20p$
5	Expand y(y + 5)	$y^2 + 5y$
6	Expand and simplify means	Multiply out Collect like terms
7	Expand and simplify $5(2y + 3) - 10$	Multiply out the bracket only and then -10 10y + 15 – 10 Collect like terms (15 – 10) 10y + 5
8	Expand and simplify $5(2y + 3) + 2(y - 5)$	Multiply out brackets separately $10y + 15 + 2y - 10$ Collect like terms 12y + 5

Maths WHA

English

Unit 1

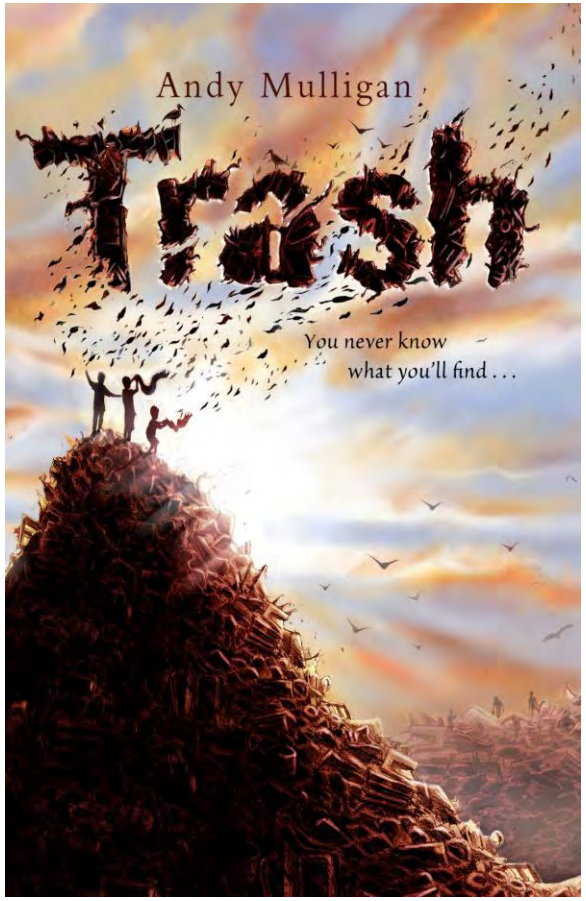
Key Vocabulary	
Narrator The story-teller	**Setting** When/where a story is set
Protagonist The main character	**Atmosphere** The mood or tone of a piece of writing
Antagonist A **character** who opposes the protagonist	**Acceptance** Being received as adequate or valid
First person narrator The story is told from the perspective of a character. Uses the pronoun 'I'	**Context** historical information about when/where a text is set/written
Identity What makes you, you.	**Structure** How something is organised into its parts
Exposition the beginning of a story where the characters and setting are introduced	**Imagery** When words or phrases allow the reader to imagine what is described.

Language Features	
Tension A feeling of unease in a text	**Foreshadowing** when the writer hints at a later event in the story
Perspective A particular attitude or opinion	**Repetition** Where one word or phrase is used more than once
Rhetorical Questions Questions which do not require an answer	**Pronouns** A word that can replace a noun in a sentence
Dialogue speech between characters	**Figurative language** Words and phrase that allow the reader to imagine the scene e.g. similes, metaphors

English

Unit 1

Context of Trash
Andy Mulligan – Andy is a prolific author writing radio plays and screenplays as well as prose-fiction. He has won The Guardian Children's Fiction prize and been shortlisted for the CILIP Carnegie Medal. His books have been translated into thirty-two languages. Andy worked as a theatre director initially, before travels in Asia prompted him to retrain as a teacher. He has taught English and drama in India, Brazil, Vietnam, the Philippines and the UK. He now lives in England and is writing full time. Andy travels widely, visiting schools around the world.
The Philippines and Stormy Mountain - Set in a developing country (similar to the Philippines), loosely based on upon a real dumpsite "Smokey Mountain" in Manila, the capital of the Philippines. -Smokey Mountain took up 71.6 acres of land. -On the border of the site is Manilla's main slaughterhouse. - For 40 years the dumpsite had been the principal rubbish tip for all Manila's metropolitan rubbish.



English

Unit 1

Characters	
Raphael	Raphael Fernandez is a "trash or dumpsite boy."
Gardo	A friend of Raphael who lives on the Behala dumpsite in Manila
Rat (Jun)	A parentless child who lives in the sewers. He helps Raphael and Gardo work out clues about the missing money
Olivia	He is the sixty-three-year-old administrator of the Pascal Aguila Mission School.
Gabriel Olondriz	He is a political prisoner who was imprisoned for crimes he did not commit.
Senator Zapanta	He is a corrupt politician who has had money stolen from him.
Father Julliard	He is the sixty-three-year-old administrator of the Pascal Aguila Mission School.
Jose Angelico	The man who stole the money from Zapanta.

Plot

Raphael Fernandez is a "trash or dumpsite boy." Along with his friend, Gardo, Raphael rummages through the Behala dumpsite every day, hoping to find treasures to sell. One day, the boys find a small leather bag that turns their lives upside down. The bag contains a wallet, a folded-up map of the city, a key, eleven hundred pesos, a few old papers, photos, and an ID card. When they look at the ID card, they see that it belongs to a man named Jose Angelico. More importantly, there are photos of Jose and a little girl, presumably his daughter, inside the envelope. Soon, the police come looking for the bag, but Raphael lies to them about his discovery. Raphael leaves the next day with Gardo. Both boys decide to take the bag and its contents (minus the money) to a friend (Rat) for safekeeping. For a hundred pesos, Rat agrees to take Gardo and Raphael to Central Station: there's a locker outside of Platform Four, which the key will open. The boys eventually make their way to the station. After unlocking the right locker, Rat retrieves a brown envelope. Inside is a letter with an address. The name above the address is Gabriel Olondriz. Meanwhile, the address is Prisoner 746229, Cell Block 34K, South Wing, Colva Prison. There is also a slip with numbers in the envelope. Apparently, Jose Angelico was arrested for robbing Senator Zapanta of six million dollars. Before he was arrested, Jose discarded the leather bag. As for Gabriel Olondriz, he is the father of Dante Jerome; Jerome was the man who adopted Jose when the latter was a child. Meanwhile, Raphael is later arrested and interrogated. From Gabriel Olondriz, the boys learn that the numbers on the slip of paper are a type of Bible code. Raphael, Rat, and Gardo eventually crack the code and are led to the Angelico family grave site in the city's cemetery.Will they find the missing money there?

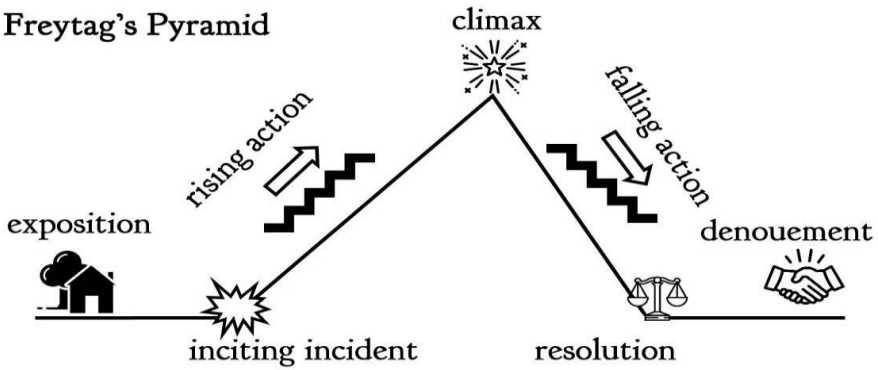
English

Unit 1

Types of Text

Diary Entry A summary of the day's events. Written in first person. It starts with 'Dear Diary'	**Formal Letter** Starts with an address and a salutation of 'Dear'. It should use formal vocabulary and expressions
News Article It reports on recent events using eye witness accounts. It begins with a headline and subheading	**Speech** It is written to persuade or to present an argument. It contains a range of rhetorical devices.

Story Structure



Themes in Trash

Corruption – The police and politicians work for the wealthy rather than for the wellbeing of the people. Of course, there are people who genuinely want to help like charity workers. There are family members who are willing to stretch their resources to include another mouth. Ultimately, though, the gap between the poverty the children experience and the wealth of the elite is the basis of the corruption.

Poverty – The contrast between the three dumpsite boys and the wealthy people that live in the same area is startling. They sort literal trash to find enough money to scrape by while the wealthy dine on delicacies and live in palatial estates. Two of the dumpsite boys live with extended family who can barely afford to keep them. One of the dumpsite boys, Rat, has no family at all; instead, he lives alone in a slum and derives his nickname from the rodents that occupy his space. These are young boys who don't have a lot of other options to pull themselves out of poverty. It's clear that the wealthy elite could make a real difference for them—and yet they choose not to.

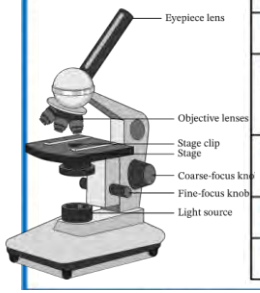
Science

Cells and organisation

Key words

Key word	Definition
Cell	the smallest structural and functional unit of an organism
Tissue	a group of specialised cells that have a similar structure and function
Organ	part of an organism made up of tissues that has a specific vital function
Microscope	an instrument used for viewing very small objects
Cell membrane	Controls the movement of substances into and out of the cell
Nucleus	Contains genetic material, which controls the activities of the cell
Vacuole	Filled with cell sap to help keep the cell turgid and supports the cell
Chloroplast	Contain chlorophyll, which absorbs light energy for photosynthesis
Cytoplasm	Most chemical processes take place here, controlled by enzymes Cell wall Strengthens the cell
Diffusion	The movement of particles from a high concentration to a low concentration until they are evenly spread
Uni-cellular	consisting of a single cell e.g. yeast
Multi-cellular	Consisting of lots of cells e.g. humans
Ribosome	Protein synthesis happens here
Mitochondria	Most energy is released by respiration here

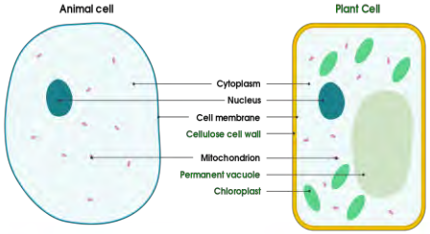
Microscopes and preparing onion slides



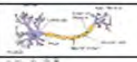
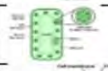
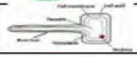
Part	Role
Eye piece	The first lens you look though
Objective lens	A second lens that magnifies the sample so you can see it through the eyepiece
Stage	Provides a solid platform to hold sample
Focusing knob	Turns so that the sample can be focused
Light	Provides the light to see the sample clearly

Animal and plant cells

Organelle	Animal	Plant
Nucleus	Yes	Yes
Cytoplasm	Yes	Yes
Cell membrane	Yes	Yes
Cell wall	No	Yes
Chloroplast	No	Yes
Vacuole	No	Yes
Mitochondria	Yes	Yes
ribosome	Yes	Yes



Specialised cells

Specialised cell	Location	diagram	Role	Adaptation
Red blood cell	Animal – blood		Transport oxygen around the body	Biconcave shape and Large surface area to allow oxygen diffusions Haemoglobin to bind with oxygen No nucleus
Sperm cell	Animal – testies		To join with female egg cells in fertilisation.	Long tail for swimming Head containing enzymes to get into egg cell Mitochondria for energy
Egg ccell (Ovum)	Animal – ovary		To join with male sperm cell in fertilisation and then provide food for embryo	Large Contain food store
Nerve cell	Animal – body		To carry impulses to different parts of the body	Long Connections are each end Can carry electrical signals
Ciliated Epithelial cell	Animal – respiratory track and fallopian tube		Move mucus from one place to another. In the respiratory tract the move mucus containing microbes and dust out.	Has a thing later of tiny 'hairs' called cilia
White blood cell	Animal – blood		Destroys invading pathogens	Releases antibodies and antitoxins. Engulfs and digests pathogen cells
Palisade cell	Plant - leaves		To absorb sunlight for photosynthesis	Large Surface area Lots of chloroplasts
Root hair cell	Plant – roots		To absorb water and minerals	Long finger like protrusions to provide large surface area

Cells to organ systems

Cells → tissue → organ → organ system

cell	Simplest structural and functional unit of an organism
Tissue	A group of similar cells working together
Organ	A group of similar tissues working together
Organ system	A group of different organs that work together
organism	A living thing that performs the seven life processes

Unicellular

- Simple organisms
- Small
- One type of cell
- Rely on diffusion to exchange substances

Multicellular

- Complex organisms
- Large
- Lots of different types of cell

Preparing an onion slide

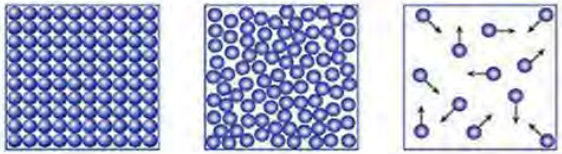
METHOD: Cut out a small piece of onion. Peel off the inner surface (membrane). Put the piece of membrane flat on a slide and add two drops of iodine solution. Gently lower the cover slip onto the slide using the forceps. Place the slide onto the microscope. Focus using focusing knobs.

Science

Particle theory

Particle Theory

- All matter is made up of particles.
- Particles are found in all three states of matter. Solids, liquids and gases. The properties of each state are summarised below.



Solid Liquid Gas

State of matter	Arrangement	Movement
Solid	Regular	Vibrate around a point. Cannot move from place to place
Liquid	Irregular but particles are still touching	Particles can slide over one another
Gas	Irregular, random arrangement. Particles are far apart (not touching)	Move quickly, in all directions.

Properties of Solids, Liquids and Gases

-Solids are rigid, have a fixed shape and a fixed volume because the particles are held together by **strong bonds and arranged regularly.**

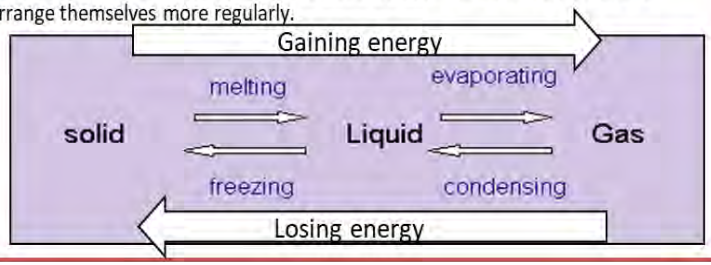
-Liquids are not rigid and have no fixed shape, meaning they can flow to fill their container. This is because the **bonds are weaker**, so the particles can move. However, there is a fixed volume because the particles are **still close together.**

-Gases are not rigid, have no fixed shape or fixed volume because there is **so much space** between particles and the bonds holding them together are **broken.**

Changes of State

Changes of state take place when the particles **gain or lose energy.**

- When energy is applied, particles gain energy, move faster and move further apart.
- When energy is lost, particles become closer to each other, move slower and arrange themselves more regularly.



Science

Particle Theory

Diffusion and Factors Affecting Diffusion

-Diffusion is the **movement of particles from a higher concentration to a lower concentration.**

-Diffusion will stop when particles have spread themselves evenly.

- Diffusion occurs in liquids and gases but not in solids, because particles in a solid are not free to move.

Diffusion

There are **2 factors** which affect the rate of diffusion:

1. **Temperature**: when temperature increases, particles gain more energy. They can then move and spread out at a faster rate.
2. **Concentration**: when concentration increases, the rate of diffusion increases because there are more particles.

Key Terms	Definitions
Key Terms	Definitions
Melting	Change of state from solid to liquid
Freezing	Change of state from liquid to solid
Evaporation	Change of state from liquid to gas
Condensation	Change of state from gas to liquid
Regular arrangement	When particles are arranged in a fixed pattern e.g in solids
Irregular arrangement	When particles are not arranged in a fixed pattern.
Diffusion	Movement of particles from a higher concentration to a lower concentration
Rate	How fast an event is happening
Concentration	The number of particles in a known volume
Particles	All matter is made up of tiny particles

Science

Separation

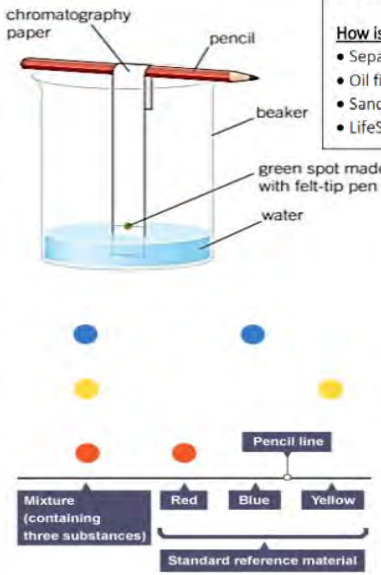
KEYWORD	DEFINITION
Chromatogram	An image obtained from a chromatogram.
Chromatography	A technique to separate mixtures of liquids (often coloured) that are soluble in the same solvent.
Dissolve	The complete mixing of a solute with a solvent to make a solution.
Distillation	A technique that uses evaporation and condensation to obtain a solvent from a solution.
Filtrate	The liquid or solution that collects in the container after the mixture has passed through the filter paper.
Filtration	A way of separating pieces of solid that are mixed with a liquid or solution by pouring through filter paper.
Insoluble	Cannot dissolve in a given substance.
Mixture	A mixture is made up of two or more pure substances that are mixed (not chemically joined) together.
Pure substance	A single material with no other substances mixed with it.
Residue	The solid that collects in the filter paper during filtration.
Saturated solution	A solution in which no more solute can dissolve.
Solubility	The maximum mass of solute that dissolves in a certain volume or mass of solvent.
Solubility curve	A graph showing the change in solubility of a substance with temperature.
Soluble	Can dissolve in a given solvent.
Solute	The solid or gas that is dissolved in a liquid.
Solvent	A substance (normally a liquid) that dissolves another substance.

CHROMATOGRAPHY: It is often used when the dissolved substances are coloured (inks, food colourings and plant dyes). It works because some of the coloured substances dissolve in the solvent used better than others (it is attracted more strongly to the water than the paper), so they travel further up the paper.

- *A pure substance will only produce one spot on the chromatogram during paper chromatography.*
- *Two substances will be the same if they produce the same colour of spot, and their spots travel the same distance up the paper.*

How is it useful?

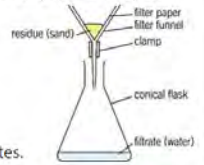
- Identifying food nutrients; compare the amounts of vitamins in different food types.
- Testing the purity of a sample.
- Forensic science; finger printing and DNA analysis.
- Checking the level of pesticides, herbicides and contaminants in food and drinking water.



DISSOLVING During dissolving, particles of solvent (water) collide with particles of solute (sugar). They surround the particles of solute, gradually moving them away until the particles are evenly spread through the solvent.

For each solute and solvent, there is a limit to the mass of solute that will dissolve in a particular volume of the solvent. When no more solute will dissolve, we say that the solution is a saturated solution.

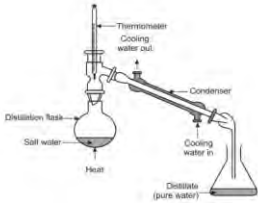
FILTRATION: You can separate sand and water by pouring the mixture into filter paper. Water passes through the filter paper (filtrate) as water particles are smaller than the tiny holes in the filter paper. The grains of sand (residue) stay in the filter paper as they are bigger than the tiny holes.



How is it useful?

- Separates coffee solution from ground-up coffee.
- Oil filters in cars.
- Sand filters to make water safe to drink.
- LifeStraw; fibres filter the water removing bacteria and parasites.

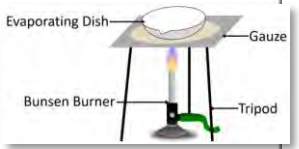
How can we get drinking water from seawater?



- On heating, water in the salt solution boils, forming steam. Salt does not boil, because its boiling point it much higher.
- Steam travels through the condenser and cools down to form liquid water.
- Liquid water drips into the beaker.

How can we separate salt from seawater?

By evaporation → Pour some seawater into an evaporating dish. Heat over a water bath until some of the water has evaporated. Leave in a warm place for the rest of the water to evaporate.

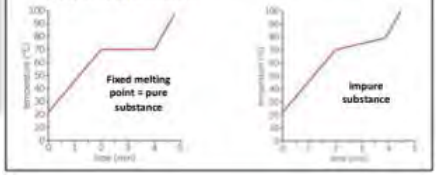


How is it useful?

- Making copper sulfate crystals
- Drying of glue
- Obtaining lithium compounds from solution

PURE SUBSTANCES AND MIXTURES

- Chemists make mixtures suitable to specific purposes (e.g. toothpaste and paint); they work out the best amounts of each substance to add to the mixture.
- A pure substance has a fixed melting and boiling point.
- An impure substance (mixture) will melt/boil over a range of temperatures.

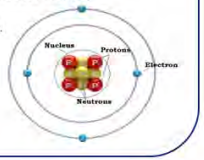


Science

Atoms and elements

1. Structure of the Atom

- An atom is made up of three subatomic particles: protons, electrons and neutrons.
- Protons and neutrons are found in the nucleus of the atom (in the centre).
- Electrons are found orbiting the nucleus in shells.
- Protons have a positive charge.
- Electrons have a negative charge.
- Neutrons have a no charge.



In an atom, there are equal numbers of protons and electrons because the positive and negative charges need to balance.

2. Elements and Compounds

Elements are substances made up of one type of atom. All the elements are found listed in the Periodic Table

Compounds contain two or more elements that are chemically joined to eachother. **Compounds** are formed by chemical reactions.

Examples of elements	Examples of compounds
Carbon (C)	Carbon dioxide (CO_2)
Oxygen (O_2)	Water (H_2O)

3. Chemical Symbols and Formulae

Each element is coded for by a formulae. Most elements have a formula which is the first letter of it's name (eg. C for Carbon and H for Hydrogen). Other formulae are the first two letters of the element name (eg. Li for Lithium and Ne for Neon). There are a few exceptions to this rule. Can you spot them?

Naming Compounds:

Lithium Hydroxide - (Lithium, Hydrogen + Oxygen) – $LiOH$
Lithium Nitrate – (Lithium, Nitrogen + Oxygen) - $LiNO_3$
Lithium Carbonate – (Lithium, Carbon + Oxygen) - Li_2CO_3
Lithium Sulphate – (Lithium, Sulphur + Oxygen) - Li_2SO_4

4. Pure vs Impure

Pure Substances
A substance is pure if it only has **one type** of particle in it e.g. just hydrogen atoms or just carbon dioxide molecules.

Impure Substances
Impure materials are mixtures of different types of particle.

5. The Periodic Table

All the different elements are arranged on the periodic table. The elements are arranged in order of increasing atomic number. On the periodic table, we can see the metal elements on the left and non metal elements on the right.

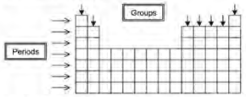
WINTERSTOKE HUNDRED ACADEMY

KS3 Science

Atoms and Elements

6. Patterns in the Periodic Table

Elements are arranged on the periodic table in groups and periods. Horizontal rows are called periods and vertical columns are called groups.



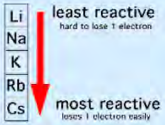
Groups are labelled 1-7 from left to right, with last group being called either group 8 or 0. Elements in the same group have similar properties; because of this we can make predictions about trends.

7. Metals and Non-Metals

Physical properties of metals:

Shiny
Strong
Malleable (can bend)
High melting and boiling point
Conduct heat well
Conduct electricity well

Chemical properties of Group 1 metals



8. Atomic Number and Mass Number

This is the total of protons + neutrons

This is the number of protons

Therefore sodium has 11 protons, 11 electrons and 12 (23-11) neutrons.

Science

Forces

A force can be a **push or a pull,** for example when you open a door you can either push it or pull it. You can not see forces, you can only see what they do.

When a force is applied to an object it can lead to a change in the objects

- **Speed**
- **Direction of movement**
- **Shape (think about a rubber band)**

Forces can also be divided into 2 types, contact forces and non contact forces.

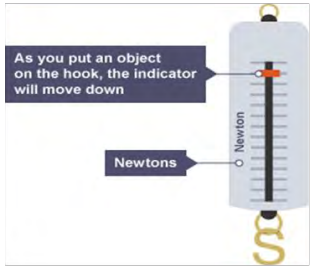
1. Contact forces for example friction, are caused when two objects are in contact.
2. Other forces for example gravity, are non contact forces. The two objects do not need to be in contact for the force to occur.

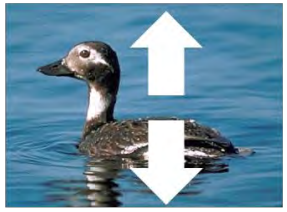
The unit of force is the **Newton (N),** this is named after Sir Isaac Newton, who came up with many theories including those to do with gravity and the three laws of motion. We measure force using a piece of equipment called a Newton metre. See the picture below.

Key Terms	Definitions
Newton	The unit of force
Newton meter	A piece of equipment that can be used to measure the size of the force
Contact Force	A force caused by the contact between two objects
Non Contact Force	A force between two bodies that are not in contact for example gravity
Free body force diagram	A diagram which shows all the forces acting on an object

Force Diagrams

To show the forces acting on a body we use a free body force diagram. A **free body force diagram** shows all of the forces that are acting on the body. It has arrows that show the direction the force acts, the larger the arrow, the larger the force. A free body fore diagram should always have labelled arrows.

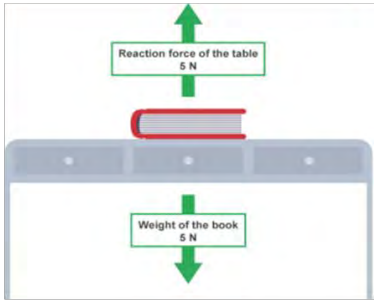




Floating duck

Rising air balloon

Submarine at constant speed and depth



Science

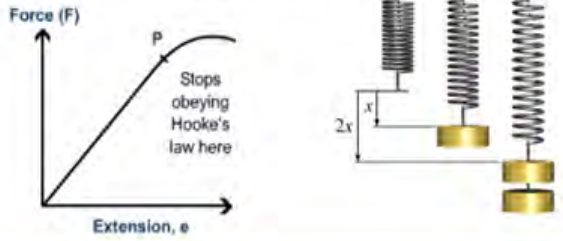
Forces

Types of force

In the table below different forces are summarised:

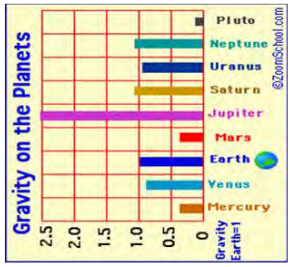
Name of Force	What causes it?	Example
Friction	When two objects rub together	Car tyres moving on a road.
Air resistance	When an object rubs against air particles	A sky diver falling through the air
Reaction	A force that acts in the opposite direction	A book on a desk, the force acting up is a reaction force
Weight	The force an object exerts on the ground due to gravity	You will exert a force on the ground, that is your weight
Thrust	The force that drives on objects with an engine	Thrust moves a plane forwards

Hooke's law states when you double the force on a spring you double the extension.



Contact Forces:
Friction, Air Resistance, and Water Resistance

Non Contact Forces:
Gravity, Magnetic force



Weight on different Planets

As planets have different masses a person's weight would be different depending which planet they were on. For example, a person's weight on Earth is 1000N. If that same person was on Jupiter their weight would be 2500N.

Balanced Forces

When we talk about the total force acting on object we call this the **resultant force.** When the forces acting in opposite directions are the same size we say the forces are **balanced**. This means one of two things:

1. The object is stationary (not moving)
2. The object is moving at a constant speed This is known as Newton's first law.

For example, the resultant force acting on this object is 5N-5N=0N

Key Terms	Definitions
Resultant force	The total force acting on an object
Balanced force	When the resultant force on an object is 0
Unbalanced forces	When the resultant force on an object is more or less than 0

DT

Resistant Materials

Year 7 D&T – Gumball Machine Project

Analyse the above Gumball Machines using ACCESS FM.

We use **ACCESS FM** to help us write a **specification** - a list of requirements for a design - and to help us **analyse and describe** an already existing product.

A	is for	**Aesthetics**
C	is for	**Cost**
C	is for	**Customer**
E	is for	**Environment**
S	is for	**Size**
S	is for	**Safety**
F	is for	**Function**
M	is for	**Material**

Aesthetics means **what does the product look like?**
What is the: Colour? Shape? Texture? Pattern? Appearance? Feel? Weight? Style?

Cost means **how much does the product cost to buy?**
How much does it: Cost to buy? Cost to make?
How much do the different materials cost? Is it good value?

Customer means **who will buy or use your product?**
Who will buy your product? Who will use your product?
What is their: Age? Gender?
What are their: Likes? Dislikes? Needs? Preferences?

Environment means **will the product affect the environment?**
Is the product: Recyclable? Reuseable? Repairable? Sustainable?
Environmentally friendly? Bad for the environment?
6R's of Design: Recycle / Reuse / Repair / Rethink / Reduce / Refuse

Size means **how big or small is the product?**
What is the size of the product in millimeters (mm)? Is this the same size as similar products? Is it comfortable to use? Does it fit?
Would it be improved if it was bigger or smaller?

Safety means **how safe is the product when it is used?**
Will it be safe for the customer to use? Could they hurt themselves?
What's the correct and safest way to use the product? What are the risks?

Function means **how does the product work?**
What is the products job and role? What is it needed for? How well does it work? How could it be improved? Why is it used this way?

Material means **what is the product made out of?**
What materials is the product made from? Why were these materials used? Would a different material be better? How was the product made? What manufacturing techniques were used?

Target Market

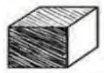
A **target market** is the market segment (group of potential customers) which a particular product or service is marketed (advertised) to.

It's better to use materials from renewable resources — ones that are replaced naturally as fast as we use them up. For example, pine from well-managed plantations is quite a sustainable choice. (But if the timber has to be transported a long way that'll probably use up a lot of fossil fuels.) Natural fibres used for textiles (e.g. cotton) are all renewable.

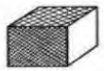
Using recycled materials means that fewer new resources are needed, and often less energy is used. For example, recycling old food cans takes much less energy than mining and processing new metal.

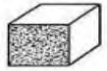
1 km = 1000 m
1 m = 100 cm
1 cm = 10 mm

Hatching | Blending



Crosshatching | Stippling





ACCESS FM - Helpshee

PINE: **Pine** is a softwood which grows in most areas of the Northern Hemisphere. There are more than 100 species worldwide. **Properties**: **Pine** is a soft, white or pale yellow **wood** which is light weight, straight grained and lacks figure. It resists shrinking and swelling.

Evaluation

Designers evaluate their finished products or prototypes in order to test whether they work well and if the design can be corrected or improved. Whatever you have designed it is important to evaluate your work constantly during the project.
Evaluation can take a variety of forms:

- General discussion with other pupils, staff and others.
- Questionnaires / surveys carried out at any time during the project.
- Your personal views, what you think of existing designs.
- Most important of all - what do you think of your designs, prototypes and finished products ?
- Can you think of any other ways of evaluating your work ?

Remember to always suggest improvements when evaluating!

Testing

Testing a prototype / developed design is a very important part of the design and manufacturing process. Testing and evaluation, simply confirms that the product will work as it is supposed to, or if it needs refinement.

In general, testing a prototype allows the designer and client to assess the viability of a design. Will it be successful as a commercial product? Testing also helps identify potential faults, which in turn allows the designer to make improvements.

DT

Food Tech

Health and Safety

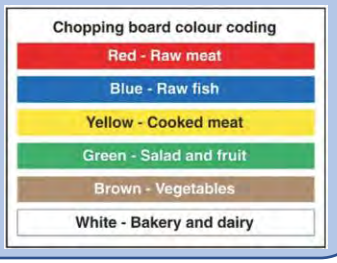
Carry knives pointing down.

Wash up with hot water and washing liquid.

Clean surfaces and equipment to kill bacteria.

Wash hands with soap after touching raw meat.

Wipe up spills straight away to avoid slips.



Knife Skills

- Always carry knives pointing downwards
- Always pass knives by the handle
- Never run or fight with knives
- Keep the knife blade away from your fingers when cutting
- Never cut towards yourself
- Never leave a knife in the sink
- Never try and catch a knife if it falls

When using a knife there are TWO techniques we can use to ensure knife safety when cutting ingredients.

Claw grip

Arch grip

Bacteria

Bacteria are a micro-organisms that multiply in certain conditions.

Where can bacteria be found?

Everywhere!

Are all bacteria bad?

No some are good and essential for normal bodily function.

How can you reduce the risk of bacteria?

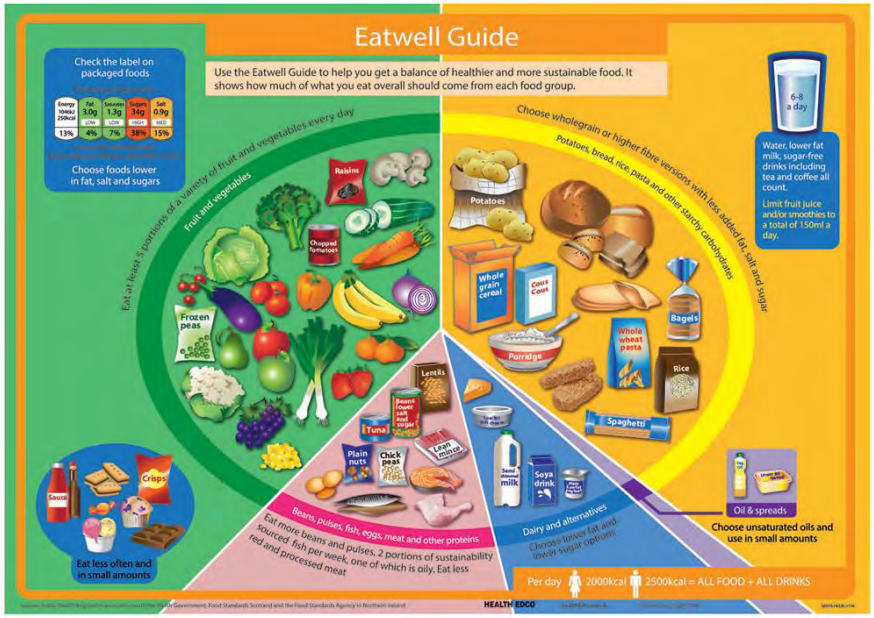
- Storing food separately
- Storing and cooking foods at the correct temperatures

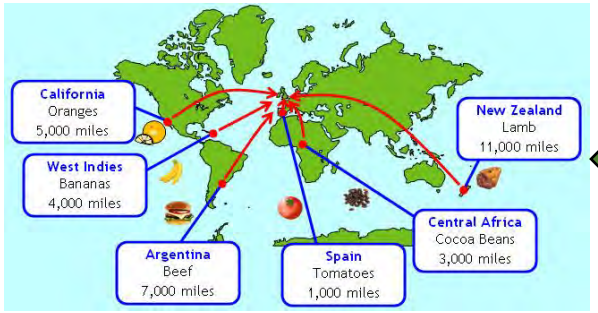
The 4 C's

- Cleaning - wash your hands properly.
- Cooking - make sure you cook food properly or you could make someone very ill.
- Chilling - keep it chilly silly.
- Cross contamination - keep raw meat and cooked food apart.

WHA DT

Food Tech





Food Miles

All food makes a journey from where it is grown or produced to your plate.

How far food has travelled is known as its food miles.

We should be aiming for as few miles as possible. Choosing foods with fewer food miles helps reduce pollution and protect our planet. We can reduce food miles by eating food that is in season, and buying food that is produced locally.

Cooking Processes

Radiation
Heat from an oven or grill.

Denaturation
When the protein in cheese unravels (melting).

Gelatinisation
When starch granules swell.

Mis-en-place
A French word to describe preparing ingredients and getting everything ready for cooking.

Convection
The scientific process that occurs when liquids boil in a pan.

Stock
The juice from cooked meats, fish, and vegetables.

Enzymic Browning
A reaction that occurs in some fruit and vegetables when left to react with air.

Gluten
The protein particles contained in flour.

Shortening
Rubbing flour and fat together to make a crumbly mixture.

Dextrinisation
A chemical process that turns food brown/black when cooking.

PE

Year 7 – Knowledge Organiser – Anatomy and Physiology

Parts of a warm up

1 Pulse raiser: Light continuous activity such as slow jogging, is used to increase heart rate and blood flow. Muscles, ligaments and synovial fluid in the joints are warmed, increasing flexibility

2 Stretch: Stretching the main muscle groups and joints increases their elasticity and mobility so that they are less likely to be strained. Dynamic stretching is a form of stretching whilst moving and therefore not holding a stretch e.g. lunges. Static stretching is holding a stretch for 8-10 seconds (before exercise).

3 Mobilisation: Gently moving the joints through a full range of movement to promote synovial fluid the helps to lubricate the joint e.g. shoulder rotations. Shoulder rotations, open and close the gate, ankle plantar and dorsi flexion.

Effects of exercise

4 Heart rate raises:
During exercise the heart rate increases so that sufficient blood is taken to the working muscles to provide them with enough nutrients and oxygen. An increase in heart rate also allows for waste products to be removed.

5 Blood pressure increases:
Your heart starts to pump harder and faster to circulate blood to deliver oxygen to your muscles. As a result, systolic blood pressure rises.

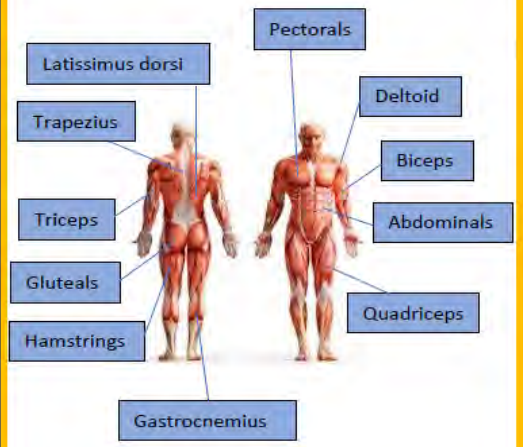
6 Endorphins are released into the blood:
When you exercise, your body releases chemicals called endorphins. These endorphins interact with the receptors in your brain that reduce your perception of pain. Endorphins also trigger a positive feeling in the body, similar to that of morphine.

Benefits of exercise

7 Physical health and well-being:
Improves fitness levels, heart function and efficiency of the body systems e.g. cardio-vascular system. Reduced risk of some illness e.g. diabetes, helps to prevent obesity, enables you to carry out everyday tasks without getting tired.

8 Mental health (emotional) and well-being:
Reduces stress, release feel-good hormones in the body such as serotonin, helps us to control our emotions and work productively.

9 Social health and well-being:
Provides opportunities to socialise/make friends, encourages cooperation, teamwork and mental resilience.



	Muscle	Static stretch
10	Triceps	
11	Hamstring	
12	Pectorals	
13	Quadriceps	
14	Gluteals	
15	Biceps	
16	Deltoids	
17	Abdominals	
18	Gastrocnemius	
18	Latissimus dorsi	

Structure of a PE lesson:

1. Warm up
2. Sports specific drills
3. Adapted games
4. Cool down

WHA PE

Key Stage 3 Knowledge Organiser – Year 7 Core PE Unit 2: Health

Cabot Learning Federation

Physical Effects Immediate

1	Increased heart rate.	
2	Increased breathing rate and depth.	
3	Skin becomes red as blood comes to the surface.	
4	Skin becomes sweaty to lower your body temperature.	
5	Lactic acid is produced causing muscular pain.	
6	Activation of serotonin - which makes you feel good.	

Physical Effects Long Term

7	Lower resting heart rate	
8	Lower breathing rate	
9	Bigger and Stronger muscles (Hypertrophy)	
10	Reduce risk of chronic illnesses such as type 2 diabetes and heart disease	

Mental Effects

11	Reduces Stress	
12	Makes you feel good. It releases the feel good hormone Serotonin.	
13	Increases Confidence	

Social Effects

14	**Make Friends.** If you exercise with a group, you'll develop greater empathy and social skills and gain new social outlets.	
15	**Teamwork Skills.** Allows your members to work together to achieve a common goal, such as improving as a team or winning a game.	
16	**Communication Skills.** It makes you talk to and listen to others.	
17	**Leadership Skills.** You have to do your part to achieve the goal and work with others.	

Languages and me! Year 7
French ARE 1

Ça va?	How are you?
Bonjour	Hello
Salut	Hi
Comment t'appelles-tu?	What's your name?
Je m'appelle...	My name is...
Comment ça s'écrit ?	How is it spelt?
Ça s'écrit...	It's spelt...
Oui, ça va bien, merci	It's going well thanks.
Pas mal	Not bad.
Non, ça ne va pas	No, it's not going well.
Au revoir	Goodbye.
À bientôt	See you soon.
À plus tard	See you later.
Quel âge as-tu?	How old are you?
J'ai... ans	I'm.....years old.
Quelle est la date de ton anniversaire?	When is your birthday?
Mon anniversaire est le ...	My birthday is the....

Qui est dans ta famille?	Who is in your family?
Ma mère	My mum
Mon père	My dad
Ma belle-mère	My step-mum
Mon beau-père	My step-dad
Mes parents	My parents
Mon frère	My brother
Ma sœur	My sister
Mon demi-frère	My half or step-brother
Ma demi-sœur	My half or step-sister
Je suis fils/fille unique	I am an only child
Mon oncle	My uncle
Ma tante	My auntie
Mon cousin	My cousin (male)
Ma cousine	My cousin (female)
Mon grand-père	My grandfather
Ma grand-mère	My grandmother
Mes grands-parents	My grandparents

Qu'est-ce qu'il y a dans ton sac / ta trousse?	What's in your bag/your pencil case?
Qu'est-ce que c'est?	What is it?
C'est..	It is...
Il y a...	There is...
Il n'y a pas de...	There isn't...
J'ai...	I have...
Je n'ai pas de...	I don't have....
Un cahier	An exercise book
Un livre	A book
Un stylo/ un bic	A pen /A biro
Un crayon	A pencil
Un portable	A mobile phone
Une trousse	A pencil case
Un taille-crayon	A sharpener
Un bâton de colle	A glue stick
Un sac	A bag
Un carnet de texte	A planner
Une gomme	A rubber
Une tablette	A tablet
Une règle	A ruler
Une calculatrice	A calculator
Des feutres	Some felt tips
Des ciseaux	Some scissors

Ç'est de quelle couleur?	What colour is it?
Bleu	Blue
Blanc	White
Rouge	Red
Vert	Green
Orange	Orange
Jaune	Yellow
Marron	Brown
Noir	Black
Rose	Pink
Violet	Purple
Gris	Grey
Clair	Light
Foncé	Dark
Rayé	Striped
Multicolore	Multi-coloured

As-tu un animal à la maison ?	Do you have a pet?
Un chien	A dog
Un chat	A cat
Un cochon d'Inde	A guinea-pig
Un hamster	A hamster
Un lapin	A rabbit
Un oiseau	A bird
Un cheval	A horse
Un lézard	A lizard
Un poisson	A fish
Une souris	A mouse
Une tortue	A tortoise
Une araignée	A spider
Un serpent	A snake
Je n'ai pas d'animal de compagnie	I don't have a pet

French

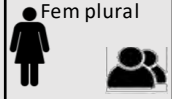
Languages and me! Year 7 French ARE 1

My belongings – Cognates, Gender; masculine and feminine nouns. Plurals. Use of 'avoir'.

A **noun** is an object, place or thing.
In French, all nouns are either **masculine (masc)** e.g. ***un*** stylo or **feminine (fem)** e.g. ***une*** gomme.
If there is more than one item e.g. 3 pens, we call this **plural (pl)**.

	masculine singular 	feminine singular 	Word beginning with a vowel	plural 
a	un	une		des
the	le	la	l'	les

An **adjective** describes a noun e.g. a **green** bag.
In French, adjectives normally go after the word it's describing
e.g. un sac **vert** (a bag green).
If the noun is feminine the adjective has to agree
(e.g une gomme vert**e)**
If the noun is plural we also add an '**s**' to make it agree (e.g. deux gomme**s** vert**es)**

	masc 	fem 	Masc plural 	Fem plural 
green	vert	vert**e**	vert**s**	vert**es**
white	blanc	**blanche**	**blancs**	blanches

Usually words that end with the letter 'e' or 'ion' are feminine
e.g. **une** trouss**e, une** animat**ion.**
Most plurals end with the letter 's' like in English
e.g. **deux** gomme**s**
Some form their plural with an 'x'
e.g. **un** jeu, **deux** jeu**x**

A pronoun is a word that states who is doing the verb e.g. **She** plays tennis.

Pronouns	**Avoir** – to have
je (I)	**J'ai** – I have
tu (you)	**tu as** – You have
il (he), **elle** (she), **on** (we)	**il a / elle a / on a** - He has/she has/we have
nous (we)	**nous avons** – we have
vous (you) (pl)	**vous avez** – you have (pl)
ils/elles (they)	**ils ont / elles ont** – they have

Je n'ai pas de...= I don't have... When we use this phrase there is no un/une e.g.
Je n'ai pas **de** stylo

People Around Me Year 7
French ARE 2

Que penses-tu?	What do you think?
J'adore ♡♡	I love
J'aime ♡	I like
Je n'aime pas 💔	I don't like
Je déteste 💔💔	I hate
À mon avis	In my opinion
Je pense que	I think that
Je crois que	I believe that
Selon moi	According to me

Tu es comment?		What are you like?
J'ai... Il a /elle a...		I have... He has /she has...
les cheveux		hair
longs		long
courts		short
raides		straight
bouclés		curly
ondulés		wavy
Afro / crépus		afro
blonds		blond
châtains		light brown
les yeux		eyes
bleus		blue
marron		brown
verts		green
foncés		dark
noirs		black
gris		grey
Je suis...		I am...
Il / elle est ...		He/she is...
grand (e)		tall
petit (e)		short
gros (-se)		fat
mince		thin
de taille moyenne		medium size

Tu es comment? /Décris-toi	What are you like? /Describe yourself
Je suis...	I am...
Gentil (-le)	Kind
Agréable	Pleasant
Joyeux (se)	Happy
Bavard(e)	Chatty
Beau/belle	Beautiful
Amusant (e)	Fun
Fort (e)	Strong
Mignon(ne)	Cute
Joli(e)	Pretty/Handsome
Jeune	Young
Parfait (e)	Perfect
Rapide	Fast
Riche	Rich
Sage	Wise
Timide	Shy
Travailleur(se)	Hard working
Triste	Sad
Vieux (vieille)	Old
Ennuyeux(se)	Boring
Casse-pieds	Annoying
Sérieux (se)	Serious
Difficile	Difficult
Sévère	Strict
Moche	Ugly
Bruyant	Noisy
Impoli(e)	Rude
Horrible	Horrible/Awful
Paresseux(se)	Lazy
Gourmand(e)	Greedy
Sportif(ve)	Sporty
Sympa	Nice

Extra detail	Extra detail
Je porte	I wear
J'ai	I have
Des lunettes	glasses
Des piercings	piercings
Le voile	a hijab
Des lentilles	contact lenses
Des tâches de rousseur	freckles
Une cicatrice	a scar
Une barbe	a beard
Une moustache	a moustache

Quelle-est ta nationalité?	What is your nationality?	
Je suis...	I am...	
Anglais(e)	English	
Français(e)	French	
Belge	Belgian	
Suisse	Swiss	
Allemand(e)	German	
Espagnol(e)	Spanish	
Somalien(ne)	Somalian	
Polonais(e)	Polish	
Portugais(e)	Portuguese	
Bangladais(e)	Bangladeshi	
Chinois(e)	Chinese	
Italien(ne)	Italian	
Gallois(e)	Welsh	
Pakistanais(e)	Pakistani	
Écossais(e)	Scottish	
Irlandais(e)	Irish	
Americain(e)	American	

Connectives	Connectives
Mais	But
Pourtant	However
Aussi	Also
En plus	Furthermore
Parce que/car	Because
Et	And

Intensifiers	Intensifiers
Très	very
Assez	quite
Un peu	a bit
Trop	too
Extrèmement	extremely
Tellement	really

French

People Around Me. Year 7 French ARE 2 Knowledge Organiser

Describe yourself (appearance and personality). Family, friends (describing others), pets,

Pronouns	Avoir – to have	Être – to be
Je (I)	**J'ai** I have	**Je suis** - I am
Tu (you)	**Tu as** (you have)	**Tu es** – You are
il (he), **elle** (she)	**Il a** (he has), **elle a** (she has)	**il /elle est** - He is/she is
Nous (we)	**Nous avons** (we have)	**Nous sommes** – we are
Vous (you) (pl)	**Vous avez** (you have) (pl)	**Vous êtes** – you are (pl)
ils /elles (they)	**Ils ont /elles ont** (they have)	**ils / elles sont** – they are

Comparisons

Plus - more	Jean est plus intéressant que Paul
Moins - less	Paul est moins intéressant que Jean

Superlative

Le /la plus – the most	Jean est le plus intelligent
Le /la moins – the least	Marie est la moins sympa

Je m'appelle - My name is / I am called
Elle s'appelle - she is called
Il s'appelle – he is called
Ils s'appell**ent** – they are called

To say "my" in French we must change how we say it to match the noun (whether it is masculine, feminine or plural). Whether you are male or female doesn't change which word you use.

Examples :
Mon père = my dad
Ma mère = my dad
Mes parents = my parents

	Masc	Fem	Plural
my	**mon**	**ma**	**mes**
your	**ton**	**ta**	**tes**
his/her	**son**	**sa**	**ses**

Adjective agreement.

Remember adjectives have to agree with the noun. Normally you would add an **'e'** to make the adjective feminine but check out the following rules...

Il est paress**eux** – elle est paress**euse**
Il est sporti**f** – elle est sporti**ve**
Il est travaill**eur** – elle est travaill**euse**
Il est genti**l** – elle est genti**lle**
Il est mignon – elle est migon**ne**
Il est **beau** – elle est **belle**
Il est **vieux** – elle est **vieille**
Il est sympa – elle est sympa

Spanish

Languages and me! Year 7
Spanish ARE 1

¿Qué tal?	How are you?
Hola	Hello
¿Cómo te llamas?	What's your name?
Me llamo…	My name is…
¿Cómo se escribe?	How is it spelt?
Se escribe…	It's spelt…
Bien gracias	It's going well thanks.
Regular	Not bad.
Fenomenal	Amazing
Fatal	Awful.
Adiós	Goodbye.
Hasta luego	See you later.
Hasta la próxima	See you next time.
¿Cuántos años tienes?	How old are you?
Tengo… años	I'm……years old.
¿Cuándo es tu cumpleaños?	When is your birthday?
Mi cumpleaños es el …	My birthday is the….

¿Quién hay en tu familia?	Who is in your family?
Mi madre	My mum
Mi padre	My dad
Mi madrastra	My step-mum
Mi padrastro	My step-dad
Mis padres	My parents
Mi hermano	My brother
Mi hermana	My sister
Mi hermanastro	My half or step-brother
Mi hermanastra	My half or step-sister
Soy hijo/a único/a	I am an only child
Mi tío	My uncle
Mi tía	My auntie
Mi primo	My cousin (male)
Mi prima	My cousin (female)
Mi abuelo	My grandfather
Mi abuela	My grandmother
Mis abuelos	My grandparents

¿Qué hay en tu mochila/tu estuche?	What's in your bag/your pencil case?
¿Qué es?	What is it?
Es..	It is…
Hay…	There is…
No hay…	There isn't…
Tengo…	I have…
No tengo…	I don't have….
Un cuaderno	An exercise book
Un libro	A book
Un boli	A pen /A biro
Un lápiz	A pencil
Un móvil	A mobile phone
Un estuche	A pencil case
Un sacapuntas	A sharpener
Un pegamento	A glue stick
Una mochila	A bag
Una agenda	A planner
Una goma	A rubber
Una tableta	A tablet
Una regla	A ruler
Una calculadora	A calculator
Unos rotuladores	Some felt tips
Unas tijeras	Some scissors

¿De qué color es?	What colour is it?
Azul	Blue
Blanco/a	White
Rojo/a	Red
Verde	Green
Naranja	Orange
Amarillo/a	Yellow
Marrón	Brown
Negro/a	Black
Rosa	Pink
Morado/a	Purple
Gris	Grey
Claro/a	Light
Oscuro/a	Dark
De rayas	Striped
Multicolor	Multi-coloured

¿Tienes mascotas en casa?	Do you have a pet?
Un perro	A dog
Un gato	A cat
Una cobaya	A guinea-pig
Un hámster	A hamster
Un conejo	A rabbit
Un pájaro	A bird
Un caballo	A horse
Un lagarto	A lizard
Un pez	A fish
Un ratón	A mouse
Una tortuga	A tortoise
Una araña	A spider
Una serpiente	A snake
No tengo mascota	I don't have a pet

Languages and me! Year 7 Spanish ARE 1

My belongings – Cognates. Gender; masculine and feminine nouns. Plurals. Use of 'tener'.

A **noun** is an object, place or thing.
In Spanish, all nouns are either **masculine (masc)** e.g. ***un*** boli or **feminine (fem)** e.g. ***una*** goma.

If there is more than one item e.g. 3 pens, we call this **plural (pl)**.

	masculine singular	feminine singular	plural
a	un	una	unos/ unas
the	el	la	los/las
my	mi	mi	mis

An **adjective** describes a noun e.g. a **red** pen.
In Spanish, adjectives normally go after the word it's describing e.g. un boli **rojo** (a pen red).
If the noun is feminine the adjective has to agree
e.g **una** goma blanc**a**
If the noun is plural we also add an '**s**' to make it agree
e.g. **dos** goma**s** blanc**as**

	masc	fem	masc plural	fem plural
white	blanc**o**	blanc**a**	blanc**os**	blanc**as**

Most Spanish nouns ending in **"o"** and **"ma"** are masculine
e.g. **un** libr**o, un** problem**a**
Most Spanish nouns ending in "a", "sión" "dad" and "tud" are feminine
eg. una tablet**a, una** televi**sión, la** felici**dad, la** grati**tud**
All plurals end with the letter 's' like in English
e.g. **dos** goma**s**

A pronoun is a word that states who is doing the verb e.g. **She** plays tennis.

Pronouns	**Tener** – to have
yo (I)	**tengo** – I have
tú (you)	**tienes** – You have
él (he), **ella** (she)	**tiene** - He has/she has
Nosotros/nosotras (we)	**tenemos** – we have
Vosotros/vosotras (you) (pl)	**tenéis** – you have (pl)
ellos/ellas (they)	**tienen**– they have

No tengo…=I don't have… When we use this phrase there is no un/una e.g. No tengo boli

Spanish

People Around Me Year 7
Spanish ARE 2

¿Qué piensas?	What do you think?
Me encanta	I love
Me gusta	I like
No me gusta	I don't like
Odio/detesto	I hate
En mi opinion	In my opinion
Pienso que	I think that
Creo que	I believe that
Según yo	According to me

¿Cómo eres?	What are you like?
Tengo /Tiene	I have… He/she has…
El pelo	hair
Largo	long
Corto	short
Liso	straight
Rizado	curly
Ondulado	wavy
Afro	afro
Rubio	blond
Castaño	light brown
Los ojos	eyes
Azules	blue
Marrones	brown
Verdes	green
Oscuros	dark
Negros	black
Grises	grey
Soy…	I am…
Él es / ella es…	He/she is…
Alto/a	tall
Bajo/a	short
Gordo/a	fat
Delgado/a	Thin

¿Cómo eres? Describete	What are you like? /Describe yourself
Soy	I am…
Amable/simpático/a	Kind
Agradable	Pleasant
Contento/a	Happy
Hablador/a	Chatty
Guapo/a	Beautiful
Divertido/a	Fun
Fuerte	Strong
Mono/a	Cute
Bonito/a	Pretty/Handsome
Joven	Young
Perfecto/a	Perfect
Rápido/a	Fast
Rico/a	Rich
Sabio/a	Wise
Tímido/a	Shy
Trabajador/a	Hard working
Triste	Sad
Viejo/a	Old
Aburrido/a	Boring
Pesado/a – molesto/a	Annoying
Serio/a	Serious
Difícil	Difficult
Estricto/a	Strict
Feo/a	Ugly
Ruidoso/a	Noisy
Maleducado/a	Rude
Horrible	Horrible/Awful
Perezoso	Lazy
Goloso/a	Greedy
Deportivo/a	Sporty
Emocionante	Exciting

Extra detail	Extra detail
Llevo	I wear
Tengo	I have
Gafas	glasses
Piercings	piercings
El hiyab	a hijab
Lentillas	contact lenses
Pecas	freckles
Una cicatriz	a scar
Una barba	a beard
Un bigote	a moustache

Cuál es tu nacionalidad?	What is your nationality?
Soy	I am…
Inglés/a	English
Francés/a	French
Belga	Belgian
Suizo/a	Swiss
Alemán/a	German
Español/a	Spanish
Somalí	Somalian
Polaco/a	Polish
Portugués/a	Portuguese
Bangladesí	Bangladeshi
Chino/a	Chinese
Italiano/a	Italian
Galés/a	Welsh
Paquistaní	Pakistani
Escocés/a	Scottish
Irlandés/a	Irish
Americano/a	American

Connectives	Connectives
Pero	But
Sin embargo	However
Tambien	Also
Además	Furthermore
Porque	Because
Y	And

Intensifiers	Intensifiers
Muy	very
Bastante	quite
Un poco	a bit
Demasiado	too
Extremadamente	extremely
Realmente	really

People Around Me Year 7 Spanish ARE 2 – Knowledge organiser

Describe yourself (appearance and personality). Family, friends (describing others), pets.

Pronouns	**Ser – to be**	**Tener – to have**
yo (I)	**soy** - I am	**tengo** - I have
tú (you)	**eres** – You are	**tienes** – you have
él (he), **ella** (she)	**es** - He is/she is	**tiene** – he/she has
Nosotros/nosotras (we)	**somos** – we are	**tenemos** – we have
Vosotros/vosotras (you) (pl)	**soís** – you are (pl)	**tenéis** - you have (pl)
ellos/ellas (they)	**son**– they are	**tienen** – they have

Comparisons

más	- more	Juán es más interesante que Pablo
menos	- less	Pablo es menos interesante que Juan
tan...como	- as...as	Pablo es tan interesante como Juan

Superlative

El/la más	– the most	Juan es el más inteligente
El/la menos	– the least	María es la menos simpática

Me llamo – My name is/ I am called
Se llama – he/she is called
Se llaman – they are called

To say "my" in Spanish we must change how we say it to match the noun (whether it is singular or plural).

My (masculine) = e.g. mi padre
My (feminine) = e.g. mi madre
My (plural) = e.g. mis padres

	Singular	Plural
my	mis	mis
your	tu	tus
his/her	su	sus

To say "I like" in Spanish we must change how we say it to match the noun (whether it is singular or plural)

For singular nouns = **me gusta** e.g. me gusta mi madre

For plural nouns = **me gustan** e.g. me gustan mis padres

This is the same for the verb 'I love'

For singular nouns = **me encanta** e.g. me encanta mi abuelo

For plural nouns = **me encantan** e.g. me encantan mis hermanos

History

Why did William win the Battle of Hastings?

Key Events

5th January 1066 – Edward the Confessor dies, leaving no heir to the English throne.

6th January 1066 – Harold Godwinson is crowned King of England.

20th September 1066 - Harold Hardraada, a Viking claiming the English throne, invades England with more than 10, 000 men in 200 longboats.

25th September 1066 – The Battle of Stamford Bridge. Harold Godwinson, defeats and kills Harald Hardraada, but this tires Harold's army.

27th September 1066 – William Duke of Normandy, invades the South of England.

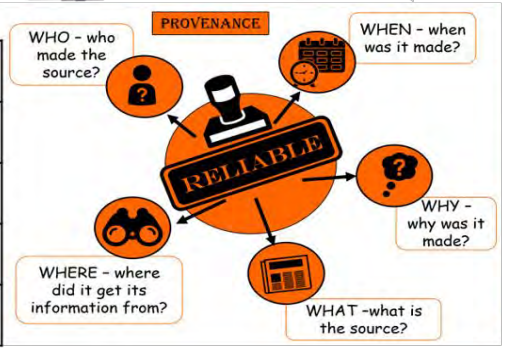
14th October 1066 – The Battle of Hastings Harold marches south to meet William, where they battle at Hastings.

25th December 1066 – William is crowned King of England at Westminster Abbey.

Most historians agree that luck and military skill were the important factors in the events of 1066.

Key People

Edgar Atheling	Last male member of the House of Wessex but he was considered too young to rule.
Edward the Confessor	Edward became king of England in 1042. Edward married but had no children.
Harold Godwinson	English, Earl of Wessex, a powerful leader of England. His sister was married to Edward the Confessor.
Harald Hardrada	A Viking, King of Norway, most feared warrior in Europe, claims he was promised the throne.
William, Duke of Normandy	A Norman and Duke of Normandy in France, cousin of Edward the Confessor. An experienced leader and fighter.



Key Terms

chronology	Putting events in order from earliest to most recent.
reliability	Something that can be trusted.
interpretation	A view or judgement about something, not necessarily based on facts.
source	A piece of evidence that gives us information about the past.
heir	Next in line to the throne.
fyrd	Ordinary, peasant soldiers.
housecarls	Harold's elite and highly trained troops.
cavalry	A soldier mounted on a horse.

History Skills Focus

The Bayeux Tapestry was made c.1070.

Centuries

Century Formula = Add one '1' to the number of hundreds.
E.G: AD 150 = 1 + 1= 2nd Century AD
E.G: 3000 BC= 30 + 1 = 31st Century BC

When your date is 2 digits or less, it MUST be the first century AD/BC. E.G: AD 34 = 1st Century AD.

Content of sources

Sources can be studied to find out more about the past. When we study the content of the source we are trying to find out what the source tells us or shows us.

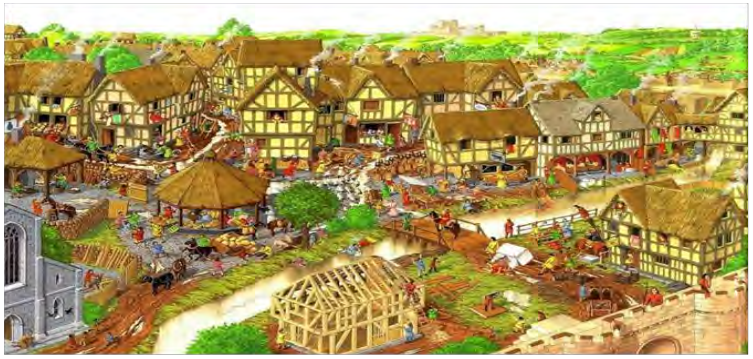
Sources are the building blocks for interpretations

History

Keywords

fact	evidence that is believed to be true.
opinion	what someone thinks.
chronology	arranging events in date order.
psalter	a collection of religious poems.
motte	a mound of earth.
bailey	an area used for storage.
palisade	a wooden fence around the castle.
peasants	workers, poor people.
Feudal System	a hierarchy which ordered society so they all had a role to play.
Doom Paintings	Painting of hell which showed people what would happen if they did not live good lives.
Luttrell Psalter	a manuscript containing images of medieval life in a village.
monk	a man who gives up all his possessions to worship God.

What was it like to live in Medieval England?



Medieval Towns

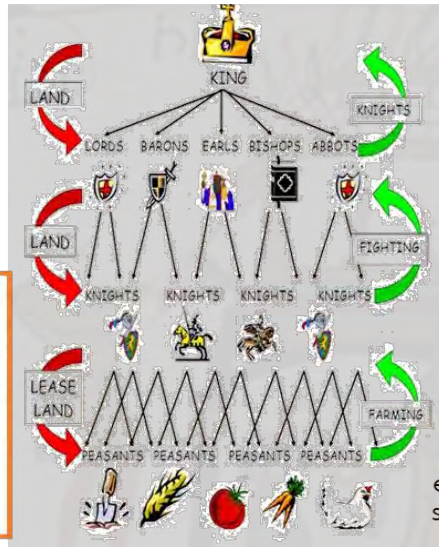
- Towns were dirty places.
- The streets ran with sewage.
- People would go to the toilet and wash in the same river.
- Churches set up hospitals to care for the sick.
- People threw waste out of their windows.

The feudal system was introduced by William and meant that everybody gained something which helped to keep people loyal.

Key People

William the Conqueror

Won the Battle of Hastings in 1066 and established control of England.



William built many castles to help him to keep control.

The domesday book contained a list of everything people owned so he knew how much tax to pay.

History

What was it like to live in Medieval England?

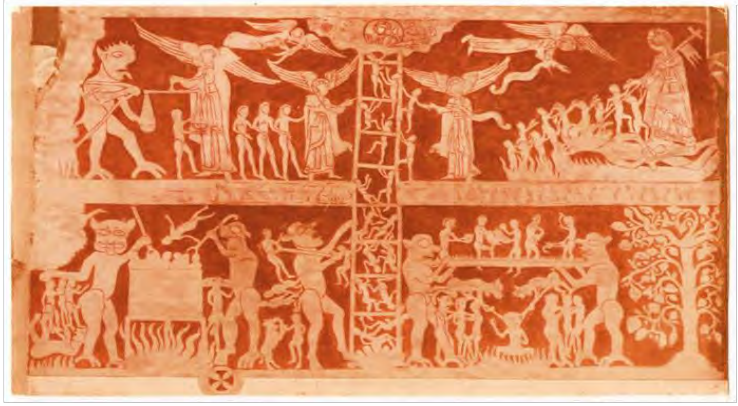
LUTTRELL PSALTER

Life as a peasant was hard. They worked long hours, had to obey certain laws e.g asking their lord to leave the village and sometimes starved if there was a poor harvest.

Women often carried out the same work as men: farming the land, weaving, tending animals etc. Women aren't often documented in medieval texts as monks wrote about kings and other famous men.

THE CHURCH

- Doom paintings like this one were used to help people understand religion.
- The church had an important role in helping people get to heaven and controlling people.



Bristol

Bristol was originally established by the Anglo-Saxons at the loop where the Avon River meets the Frome.

William the Conqueror built a castle during the 11th century. The town began to prosper from 1247, when the Frome River was diverted by way of the Severn. In 1373 it was granted a charter and county status which widened Bristol's trade. It was an important port.

Key Dates	
1066	Norman conquest
1086	Domesday Book completed

History

How did people react to the Black Death?

Key Events

June 1348 – The Black Death arrived in England, in Weymouth, probably on trading ships coming from Europe.

September 1348 – The Black Death arrived in Bristol.

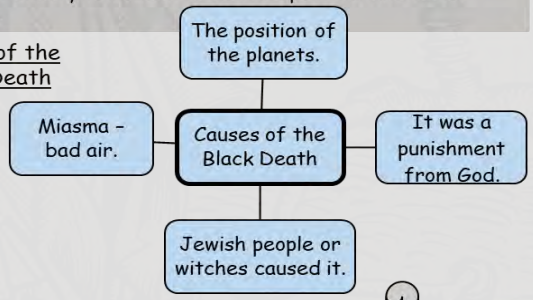
August 1348 – The Black Death arrived in London.

September 1350 – The first outbreak of the plague died out. Around 1/3 of the population had died.

1351 - Edward III introduces the Statute of Labourers. This is a law that stops peasants for asking for higher wages.

1381 – **Peasants Revolt** – Wat Tyler led a group of rebels From Canterbury to London to demand political and social reforms.

Causes of the Black Death



How did people react?

- Flagellants whipped themselves
- People prayed
- Doctors used leeches to bleed people.
- Towns banned visitors
- People carried herbs and spices
- The streets were cleaned

Was the Black Death a significant event?

To be considered **significant**, historians say that an event should have **changed** the **lives** of people at the time. To do this we study the **consequences** of the event.

Consequences of the Black Death:

- It killed about 1/3 of England's population; two million people.
- Survivors believed God had protected them so they were special.
- Peasants began to move around, going against the Feudal System, to look for work with better wages.
- The government introduced the Statute of Labourers which meant peasants could not be paid more than the wages they were paid in 1346.
- Peasants started to demand more rights due to the shortage of labour.

Key Terms

The Black Death	A plague that devastated Europe in the fourteenth century.
plague	A deadly contagious disease.
Bubonic Plague	The most common type of plague, named after the **buboes** (onion shaped swellings that were usually the first symptom of the Black Death).
Pneumonic Plague	A more deadly type of plague that attacked the lungs.
flagellants	A religious group that punished themselves for sins by whipping their bodies. They believed the Black Death was sent by God as a punishment.
miasma	Theory that disease was caused by a poisonous cloud of 'bad air'.
revolt	To take violent action against an established government or ruler.
rebellion	An act of armed resistance.
Feudal System	The system introduced by William the Conqueror to ensure loyalty and keep control.
Cause	Something that directly leads to an event.
Consequence	Something that happens as a result of an event.

History Skills Focus - Inferring from sources

As historians we make inferences from sources. Making an inference is working out some information from a source (an educated guess).

What can we infer from this source about Medieval beliefs about the causes of the Black Death?

We can infer that these people believed that God has sent the Black Death as a punishment as they are carrying a cross.

Geography

UK – Where do we live?

Latitude and

LATITUDE - LINES THAT GO AROUND THE GLOBE (THEY GO BY THE DIRECTIONS NORTH AND SOUTH)
LONGITUDE - LINES THAT POINT FROM TOP TO BOTTOM OF THE GLOBE (THEY GO BY THE DIRECTIONS EAST AND WEST)

Direction

The main direction we use are called **immediate cardinal directions**: **North (N), South (S), East (E) and West (W)**

The compass rose shows us the in between directions. They are called **intermediate directions**.

NE means **northeast**
SE means **southeast**
SW means **southwest**
NW means **northwest**

Symbols

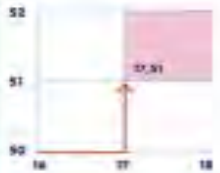
The symbols on a map are used to represent real objects located in the area shown on the map. The **key, or legend,** explains what the symbols are.

Continents and oceans

OS Map Symbols

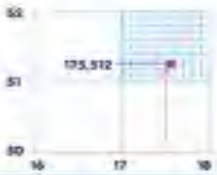
Grid references

The grid lines on an Ordnance Survey map are called eastings (along the corridor) and northings (up the stairs).



Four-figure grid references
Each square has a grid reference which you get by putting together the numbers of the easting and northing that cross in its bottom left hand corner.

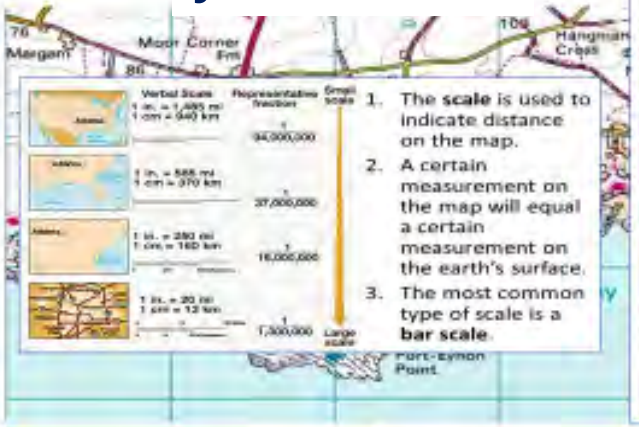
Six-figure grid references
In your head, you should be able to divide all sides of the square into ten equal sections. By doing this, you can pinpoint locations within the square – these are called six-figure grid references.



Geography

UK – Where do we live?

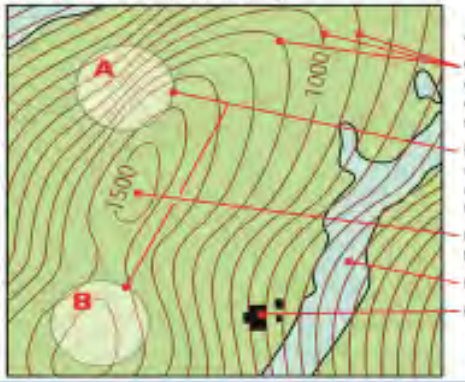
Scale



Contour lines

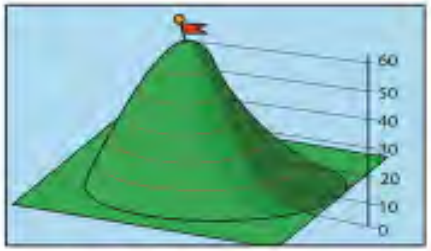
Topographic maps show how flat or steep the land is. They show this with a series of lines that are labeled with the elevation, or height, of the land. These lines are called contour lines.

A simplified topographic map



Topographic maps show:

- Contour lines, which represent changes in elevation, or height. The closer they are together, the steeper the land.
- Here, the map shows that Area A is steeper than Area B because there are more lines and they are closer together in A.
- Elevation indicator, which tells the height in feet or meters.
- Details such as water.
- Buildings.



Contour lines show the elevation. Here the land is steeper on the left side and a gentler slope on the right.

Keywords	Definition
Continent	A large landmass (for example Africa or Asia)
Ocean	A large body of salt water that covers 71% of our planet
Latitude	Parallel lines on an atlas map (drawn north and south of the equator)
Longitude	Vertical lines on an atlas map (drawn between the north and south pole)
Scale	A measurement of enlargement or reduction from its original size (often shown as a ratio e.g., 1:50 000)
Physical feature	Something on the earth's surface that has been created by nature
Human feature	Something that has been created by humans
Fieldwork	Practical work undertaken in a particular environment (e.g., investigating a river)
Survey	To look and record the features of an area

Geography

UK - The Lake District

The Lake District is found in the North-West of England, on the West coast of Britain. It is found in the county of Cumbria and it is near a coastline with the Irish Sea.

The Lake District is a popular tourist attraction due to its unique landscapes shaped by glaciers. Scafell Pike is England's tallest mountain and Lake Windermere is England's largest lake.

A map of the Lake District

Tourism in the Lake District	
Opportunities	Challenges
- Money from tourism can be used to improve the local area - Both the local economy and England's economy is boosted by tourism - Services for tourists also benefit local people - Jobs are created for local people	- Large numbers of tourists can damage the environment e.g. footpath erosion - Prices rise in shops as tourists have more money to spend - Demand for holiday homes pushes house prices up for locals - More pollution and litter as well as traffic and parking problems - Jobs in tourism often have low wages and are seasonal

Keyword	Definition
National Park	An area of outstanding natural beauty that is protected from development
Honeypot site	An overcrowded location or attraction
Relief	The height and shape of the land
Ice Age	A glacial period when the earth has lower than average temperatures
Arete	A sharp knife edged ridge between two corries
Corrie	An arm-chair shaped hollow in the mountainside formed by glacial erosion
Tarn	A small mountain lake in a corrie
U-shaped Valley	 A valley formed by a glacier
Freeze thaw weathering	When rocks are broken down over time by water freezing and thawing inside cracks in rocks.
Tourism	When people spend time away from home for leisure or recreation
Mining	When coal or other raw materials are taken from the ground
Agriculture	Farming of either crops or animals
Quarrying	Taking stone from the ground
Erosion	The wearing away of land

Religion and World Views

Judaism – What are the Stories of the Torah?

Omnipotent	**All powerful, this means that God can do anything**
Omnibenevolent	All loving, this means that God is completely loving to everyone
Omniscient	All knowing, this means God knows everything
Abraham	Founder (father) of Judaism – the 1st prophet
Torah	Jewish holy book
Monotheism	Belief in one God
Prophet	A person who communicates with God and passes the message on to the people
Covenant	A promise made between God and his people
Hebrews	An old name for the Jewish people
Messiah	Meaning 'Chosen One' who will lead the Jewish people

Covenants

Noah – God **judged** humanity and decided only Noah was a 'righteous man' and chosen to restart humanity. Ark represents one of God's miracles. **1st Covenant:** God promised to never destroy humanity again.

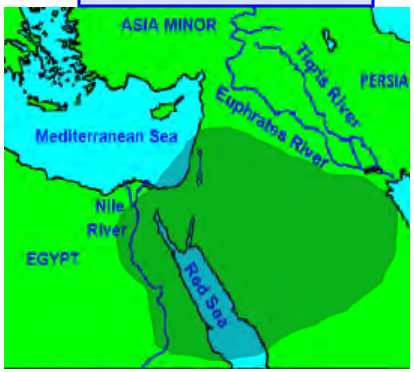
Abraham – descendent of Noah. **2nd Covenant:** God promised Abraham's people (people of God/Jews/Hebrews) would be enslaved then be freed and inherit the Promised Land. All boys would be circumcised as a symbol of their agreement (Brit Milah). This is the basis for the Hebrew's relationship with God.

Moses – saved the people of God from slavery in Egypt. Celebrated during Passover (Pesach) by eating unleavened bread 'matzah'. **3rd Covenant:** Spoke directly with God at **Mount Sinai** and received the **10 Commandments** – the rules all Jewish people must live by. God will judge how well they have lived their lives when they die.

Saved humanity

Followed God's commands without question

The Promised Land



Bulrushes

Slave driver killing

The burning bush

10 Plagues

Exodus

Parting the Red Sea

Israel was established after the Second World War as a country the Jewish people could call home.

Area of land that God gave to Abraham and his descendants.

Called Canaan in the Torah– now known as Israel.

Religion and World Views

Judaism – What are the Stories of the Torah?

Nature of God

Creator – created the world and each of us

Law Giver – gave laws (through the prophets) that people should live by

Judge – will judge how we lived at the end of our lives

Adam & Eve

First people, created by God. Told to populate the Earth.

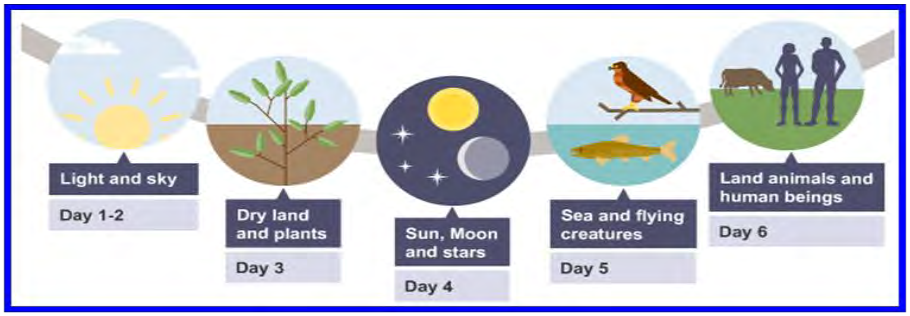
Shows God's nature (creator, law giver, judge). Shows that humanity comes from (and remains) a single world-wide family.

Rainbows

God's covenant with humanity – never again will he destroy the world, no matter what we do

Creation

God created the world from darkness. He worked for 6 days and on the 7th he rested. He commanded that the 7th day be known as the Sabbath and kept as holy.



Abraham & Isaac

God tests Abraham's loyalty

He must kill the son he waited all his life for

He trusts that God will make it right in the end

Prophets are not worshipped.

Prophets are role models - people should follow their example of how to live their lives.

48 male prophets

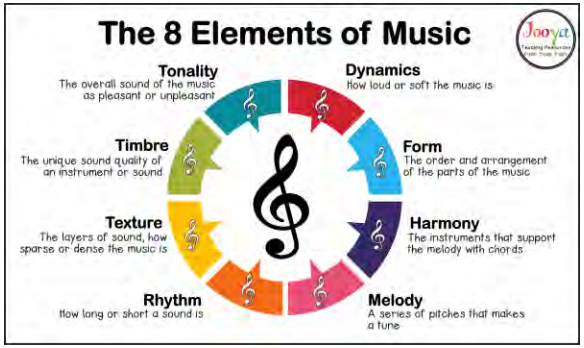
Only 7 female prophets

WHY?

Music

Beat and Rhythm - Carnival Music

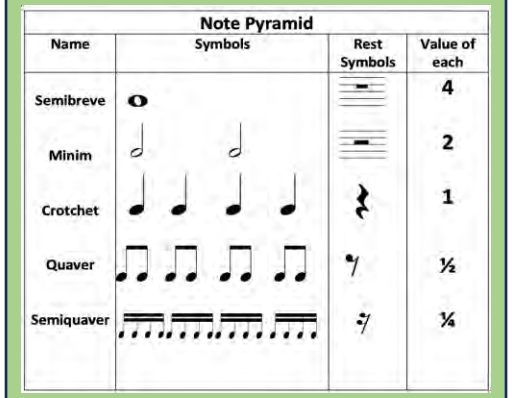
Carnival takes place in most Caribbean and South American countries as well as the UK.



KEY WORDS

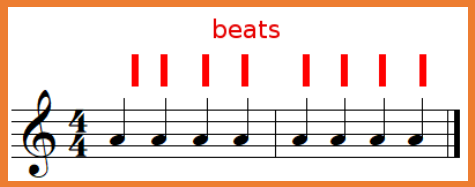
Rhythm	The pattern of notes that fits around the beat
Beat/Pulse	The constant steady pulse that doesn't change
Call and response	When a leader plays a rhythm, and the group responds with a different rhythm
Ostinato	A short repeating pattern that is played over and over
Repetition	When something is played again

Note Values

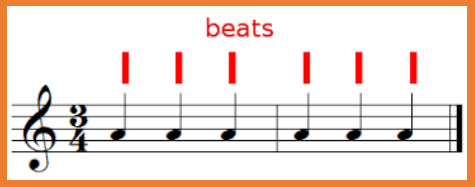


Time signatures

(how many beats are in each bar)

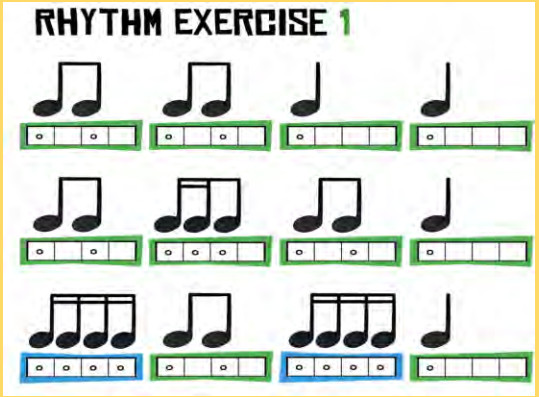


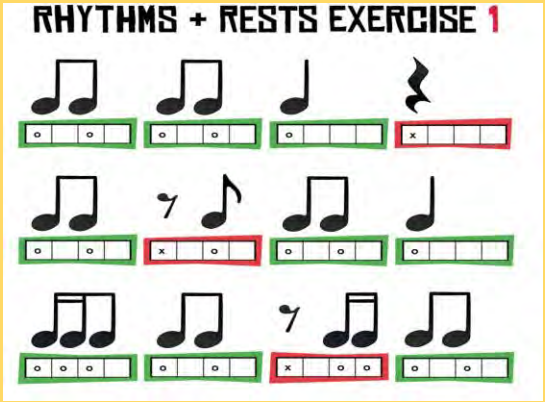
4/4 - Four crotchet beats in a bar



3/4 - Three crotchet beats in a bar

Rhythm Exercises to practice



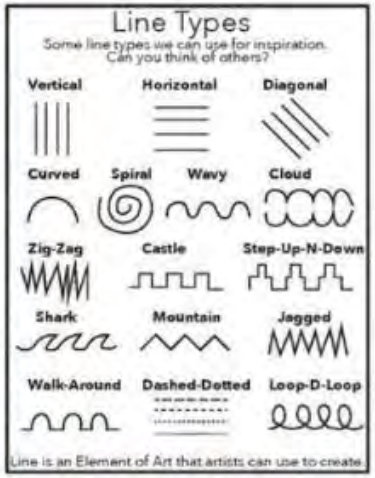


Y7 Art

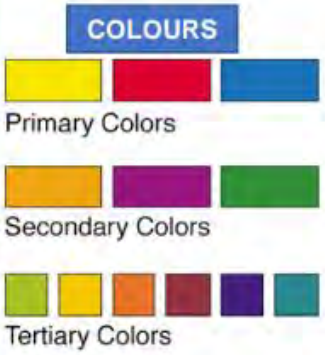
ART: Y7 T1 FORMAL ELEMENTS KNOWLEDGE ORGANISER

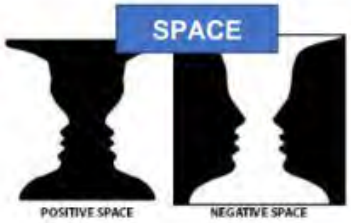
This topic centres on the art genre/category: Formal Elements

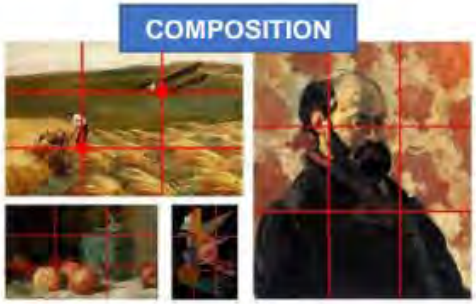
The Formal Elements are the parts used to make a piece of artwork. The art elements are line, shape, space, form, tone, texture, pattern, colour and composition. They are often used together, and how they are organised in a piece of art determines what the finished piece will look like.



KEYWORDS	Definition
Line	Lines are used by artists and designers to describe objects, add detail or create expression.
Shape	In the study of art, a shape is an enclosed space, a bounded 2D form that has both length and width.
Space	Space refers to the emptiness or area between, around, above, below, or within objects. Positive space – the shapes or forms of interest. Negative space – the empty space between the shapes and forms. 3D space can be defined as the space over, under, threw, behind, and around an object.
Tone	In art, tone refers to how light or dark something is.
Form	In relation to art the term has two meaning: it can refer to the overall form taken by the work – it's physical nature. Or within a work of art, it can refer to the element of shape among the various elements that make up the work.
Texture	What is Texture in Art? Texture is one of the elements of art that is used to represent how an object appears or feels.
Composition	How the elements of an artwork are put together.
Pattern	In art, a pattern is a repetition of specific visual elements
Gradient	In art is a visual technique of gradually transitioning from one colour to another.
Highlights	The parts of an object on which the light is strongest
Shadow	The darkest parts of an object
Value	Lightness or darkness of a hue or neutral colour. A value scale shows the range of values from black to white.
Hatching	Is a technique used to create tonal or shading effects by drawing (or painting) closely spaces parallel lines.
Cross Hatching	A shaded area with intersecting sets of parallel lines.
Stippling	The art or process of drawing, painting, or engraving using numerous small dots or specks.
Blending	The technique of gently overlapping two or more colours or values to create a gradual transition or to soften lines.
Scumbling	A method of shading using multiple tiny circles.







Drama

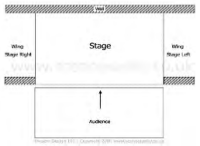
Year 7 Drama- Block 1-Technique Toolkit

You will gain knowledge and understanding of the basic performance techniques and skills that will be required throughout the Drama curriculum.

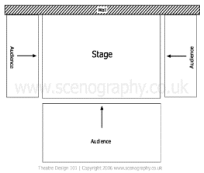
Stage Positions	This is the different parts of the stage. Stage Positions are always from the actor's point of view.
Stage Configurations	This is the different types of staging used for a performance.
Freeze-frame,	This is a frozen picture which is used at the start/end of the scene or to show an important point of a performance. Freeze Frame can also be called a Still Image or Tableaux.
Step-out	This is when actor's step out of a still image and speak their character's thoughts to the audience whilst the rest of the characters are frozen.
Split-stage	This is where the stage is split in two to show a different location or time.
Thought Tracking	This is similar to stepping out, however the teacher selects which characters are going to voice their thoughts
Narration	This is where a narrator tells the audience what is happening in a scene or performance.
Stock Characters	This is a stereotypical character we expect to see in a performance e.g. Hero, Heroine, villain etc.

Stage Configurations

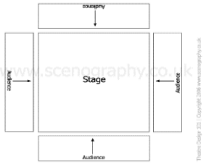
Proscenium Arch



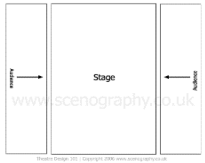
Thrust Stage



Theatre in the Round

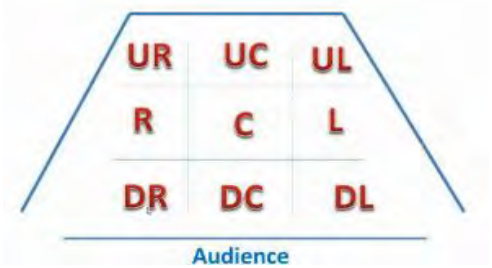


Traverse



Promenade

Stage Positions		
Upstage Right	Upstage Centre	Upstage Left
Stage Right	Centre	Stage Left
Downstage Right	Downstage Centre	Downstage Left



Computing

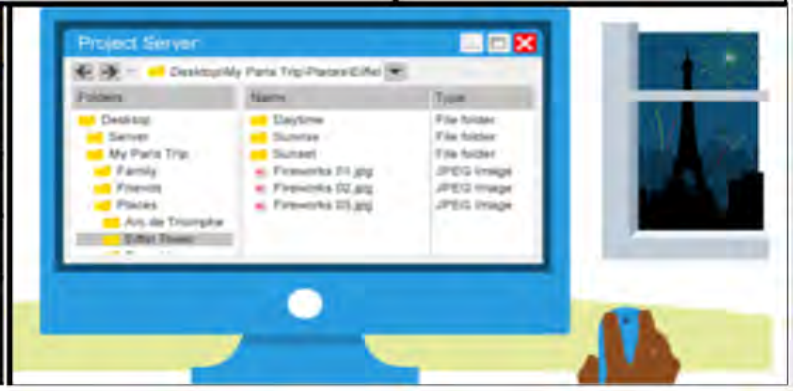
7.1 - Using Computers: Knowledge Organisers

7.1 - Using Computers: Knowledge Organiser

Keywords File Management Passwords	File	Folder/Sub-folder	File Management
	Anything you save. It could be a document, a piece of music, a collection of data or something else.	A place to store files that are related, eg. all of the files relating to one project. Folders help to keep work organised. Sometimes called a directory A sub-folder is a folder inside another folder.	The organisation of files and folders using suitable names (which gives the identity of a file) and placed into folders.
Server	**Security**	**Password**	**Alphanumeric**
A computer that holds data to be shared with other computers. A web server stores and shares websites	The protection of data or hardware from unauthorised users	A string of characters used to verify the identity of a user	A mixture of letters and numbers

Secure Password	Non-secure Password
A mixture of numbers, letters and symbols at least 8 characters	Name, pet etc
Use of symbols	Dictionary words
Not easy to guess	Not complicated

Example: 01Dl2bB57Ss!
"Oh I do like to be beside the seaside!"



Computing

7.1 - Using Computers: Knowledge Organisers

7.1 - Using Computers: Knowledge Organiser

Keywords

E-safety
Cloud Computing

Cloud	Collaborate	E-safety
Cloud computing means storing and accessing data and programs over the Internet servers instead of the hard drive on your computer. For example, using Microsoft office using Google Chrome instead of opening it on your computing directly.	Sharing documents and working together online. Eg, having a meeting with different people around the world and using the same document.	• Do not share personal information (such as your date of birth) • Avoid sharing your location on social networks eg snapchat • If meeting someone you only know online, do so in a public place and take an adult with you. • Don't troll! (upsetting people online) • Change your passwords frequently and avoid using the same password across all accounts

Cloud Computing Advantages	Cloud Computing Disadvantages
Backing up - data backed up in the cloud with a reliable provider can be more reliable than storing your information on a hard drive or USB flash memory stick.	**Connection** – the user can only access their information if they have a network connection.
Compatibility - documents and files are designed to be compatible across different machines and browsers.	**Copyright** – the user sometimes loses legal rights to their original material if they store it online.
Cost – the user doesn't need to buy the latest software as it might be freely accessible through web apps.	**Security** - data stored online is vulnerable to security attacks.
Independence – the user can work with their files on different computers.	**Software** - web apps do not usually have as many detailed functions as a full software package.
Reliable software - web software and browsers are updated online. The user doesn't have to download the latest updates.	**Storage** - it is not always possible to store more than a few gigabytes online with one provider, whereas it is possible to purchase a few terabytes of physical storage to save information at home.