



YEAR 7 KNOWLEDGE ORGANISER

MICHAELMAS TERM

Name:

Family Group:



LEARNING - LOVING - LIVING

HOW TO USE MY KNOWLEDGE ORGANISER

The timetable shows the **subjects** you should be studying and the days that you should be studying them. You should **complete your work in your exercise book**.

Each evening you should draw a straight line (using a ruler), under the previous day's work, and write the date, clearly at the top. You need to **bring your KO and exercise book with you to school EVERYDAY**.

The **KO** work that you have completed for the week will be checked in Family Group time **EVERY** Friday. If homework is not of an appropriate standard or amount will result in an after school detention. Knowledge tests will also be used frequently in lessons.

SUBJECT HOMEWORK

Students will also be **given** additional subject homework to be completed throughout the week and/or can use FREE online revision tools such as www.senecalearning.com

It is also recommended that students regularly **READ** a variety of fiction and non fiction books that they choose for pleasure. This extra reading will help to develop and broaden their general knowledge.

In **ENGLISH** all students will be expected to complete 1-2 reading assignments each week by accessing www.CommonLit.org . Each assignment will take 20-30 minutes and students will be required to answer multiple choice questions to check their understanding of what they have read.

In **MATHS** students are expected to watch short explanation videos and complete activities on the online platform of <https://mathswatch.co.uk>. Students can log in using the details and password they use to log in to the school computers.

HOMEWORK TIMETABLE

You should spend *at least* **1 hour** per night on homework = 3 subjects x 20 minutes per subject

Year 7	Subject 1	Subject 2	Subject 3
Monday	Maths	History	PE
Tuesday	English	Geography	ICT
Wednesday	Maths	Religious Education	English
Thursday	English	Science	Creative
Friday	Maths	Languages	Drama

RETRIEVAL ACTIVITY IDEAS

Knowledge organisers are for **learning and mastering** the knowledge in each subject. There are many different ways you can do this, however some **PROVEN** methods to try in your work book are:

4 Methods of Retrieval Practice

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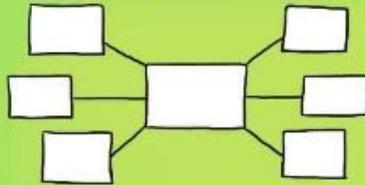
Before you start put away all your books & classroom materials.

Retrieval Practice Examples

- * Exit Tickets
- * Starter quizzes
- * Multiple choice quizzes
- * Short answer tests
- * Free write
- * Think, pair, share
- * Ranking & sorting
- * Challenge grids

BRAIN DUMP

Write, draw a picture, create a mind-map on everything you know about a topic.



Give yourself a time limit, say 3 minutes, then have a look at your books & add a few things you forgot.

QUIZZING

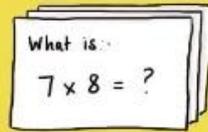
Create practice questions on a topic. Swap your questions with a partner & answer.

Question - What is a metaphor?

- A comparison using 'like, as, than'.
- A comparison where one thing is another.
- A comparison with a human attribute.

FLASHCARDS

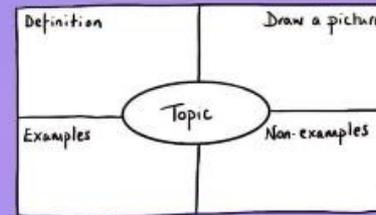
Create your own flashcards, question on one side answer on the other. Can you make links between the cards?



You need to repeat the Q&A process for flashcards you fail on more frequently & less frequently for those you answer correctly

KNOWLEDGE ORGANISERS

Complete a knowledge organiser template for key information about a topic.



You can use knowledge organisers to learn new vocab & make links in between subjects or ideas.

After you have retrieved as much as you can go back to your books & check what you've missed. Next time focus on that missing information

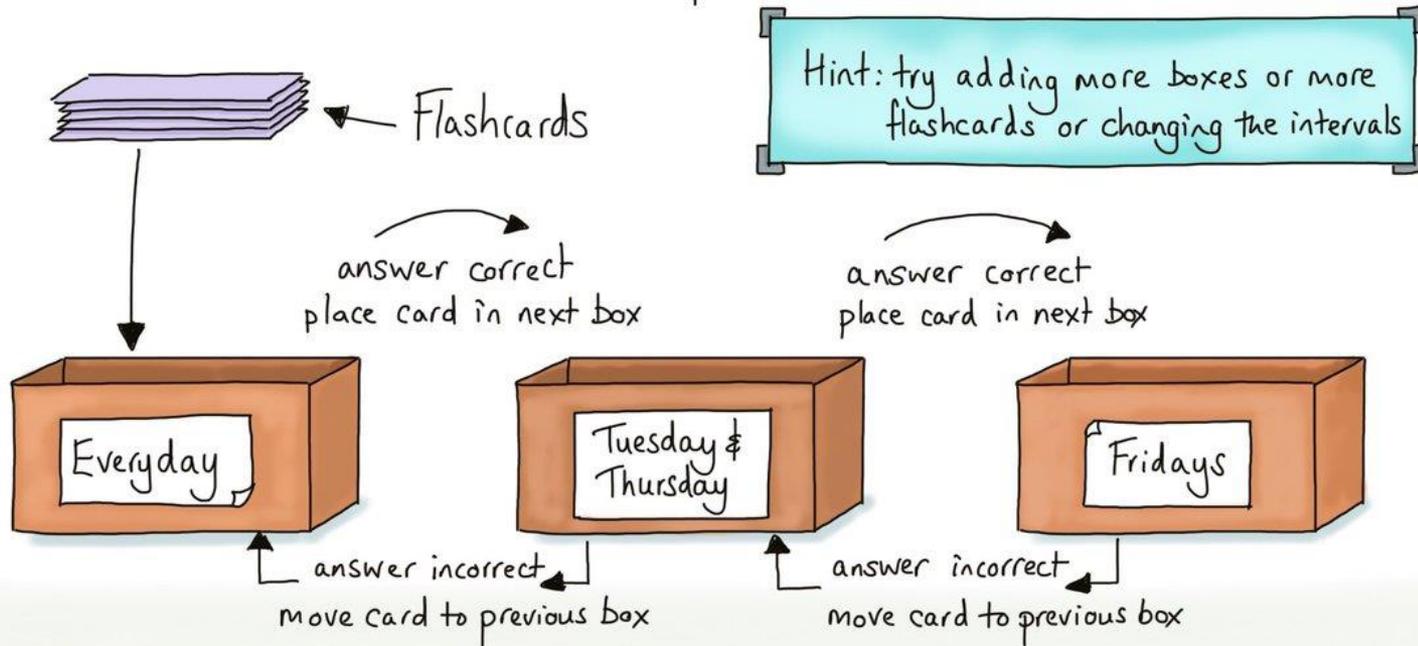
USING FLASH CARDS SUCCESSFULLY

Once flash cards are created, you will need to use them correctly to have an impact. Follow the method below for the best knowledge retention

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LEITNER Flash card method

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An effective use of flashcards to prompt & recall learning using spaced practice proposed by Leitner in the 1970s. It focuses on the proficiency of recall of the learner. Information which is easily recalled has a longer time lapse before the next recall opportunity.

Poetry from Other Cultures			Shakespearean Rhetoric		
	Word	Definition		Word	Definition
1	Dismiss (v) dismissive (adj)	Showing that something is unworthy of consideration	16	Sedition (n)	Rebelling against the government
2	Colonialism (n) Colonial (adj)	Where one country takes, occupies and rules another	17	Credible (adj) Credibility (n)	How believable something is
3	Vague (adj)	Uncertain, not specific or precise	18	Oratory (n) Orator (n)	Public speaking
4	The commonwealth	A group of countries, Most used to be in the British Empire	19	Rouse (v) Rousing (adj)	Exciting and inspiring (of a speech)
5	Indifferent (adj) Indifference (n)	Unconcerned, not caring, having no opinion.	20	Antithesis (n) Antithetical (adj)	Opposites
6	Plight (n)	A difficult or horrible situation	21	Domineer (v) Domineering (adj)	Assert your will in an arrogant way. Bossy
7	Authoritarian (adj) Authoritarianism (n)	Strict, bossy, expecting obedience	22	Patriotism (n) Patriotic (adj)	A love for your country
8	Mundane (adj)	Boring, lacking interest, dull	23	Implore (v)	To beg desperately for something
9	Denounce (v) Denunciation (n)	A public statement that something is wrong	24	Subtle (adj) Subtlety (n)	Using soft or indirect methods to do something
10	Berate (v)	To scold or criticise angrily	25	Defer (v) Deferential (adj)	Showing polite respect to someone powerful
11	Scathing (adj)	Severely and strongly critical	26	Undermine (v)	To lessen the effectiveness or power of something, to go against someone's power
12	Apartheid (n)	Racial segregation in South Africa	27	Futile (adj) Futility (n)	Pointless or useless
13	Oppress (v) Oppression (n)	The exercise of power in a cruel or unfair manner	28	Allude (v) Allusion (n)	Suggest or hint at something
14	Disparity (n)	A great difference	30	Resent (v) Resentment(n)	Feeling bitter towards something
15	Deprive (v) Deprivation (v)	Lacking the basics in life	31	Contempt (n) Contemptuous (adj)	A feeling that something is worthless

	Technique/Vocabulary	Definition	Example/effect
1	Alliteration (n) Alliterative (adj)	When words in a sentence start with the same letter	Silence for spectroscopic flight of fancy,
2	Caesura (n)	A pause within or at the end of a line, often using a full stop	It allows an idea to be given a sense of importance or to highlight something shocking
3	Enjambment (n)	the continuation of a sentence without a pause beyond the end of a line, couplet, or stanza	This allows a poet to continue or develop a train of thought or idea
4	Consonance (n)	Repetition of consonant sounds	Her accent was clinical, crushing in its light Impersonality
5	Assonance (n)	Internal vowel rhyme	Dem tell me bout ole King Cole was a merry ole soul but dem never tell me bout Mary Seacole
6	Sibilance (n) Sibilant (adj)	The 'S' sound, normally several of these in a row.	Silence. Silenced transmission of Pressurized good-breeding
7	Symbolism (n) Symbolic (adj)	The idea of words or phrases representing something else	Red booth. Red pillar box. Red double-tiered Omnibus squeelching tar
8	Onomatopoeia (n) Onomatopoeic (adj)	Words that sound like the noise they describe	to surge of wheels to dull North Circular roar
9	Metaphor (n) Metaphorical (adj)	a figure of speech in which a word or phrase is applied to an object or action to which it is not literally applicable	Toussaint de beacon of de Haitian Revolution
10	Simile (n)	A figure of speech where two things are compared using 'like' or 'as'	Brash with glass, name flaring like a flag
11	Oxymoron (n) Oxymoronic (adj)	When contradictory terms or ideas are put next to each other	crushing in its light Impersonality
12	Rhythm (n) rhythmic (adj)	The pattern or beat of a poem	It contributes to the tone and mood of the text
13	Juxtaposition (n) Juxtapose (v)	Putting two things close together to create a contrasting effect	Dem tell me bout de dish ran away with de spoon but dem never tell me bout Nanny de maroon
14	Stanza (n)	The name for a verse in a poem	N/A
15	Refrain (n)	A repeated part in a poem, like a chorus	N/A
16	Semantic Field	A group of words with similar meanings	It allows a poet to develop a mood, theme or idea across the poem.
17	Polysemic (adj)	More than one meaning	It facilitates multiple interpretations
18	Emotive Language	Language that is charged with emotion	Intending to provoke an emotional reaction
19	Imagery (n)	Creating pictures in the readers' heads using words	N/A
20	Accentuate (v)	To highlight or make something obvious	<i>By repeating the word 'red', Soyinka accentuates his anger at discovering that the Landlady is prejudicial and racist.</i>
21	Connotation (n)	Connected or deeper meanings or feeling behind a word	The word 'bandage' has connotations of pains and suffering
22	Irony (n) Ironic (adj)	Humour using opposites	It is ironic that the landlady thinks Soyinka is stupid as he is clearly the more intelligent person.
23	Satire (n) satirise (v) satirical (adj)	The use of humour to mock or ridicule stupidity or ignorance, often aimed at the powerful	Half Caste satirises racism by criticizing the language of classification.
24	Derogatory (adj) derogate (v)	Rude and disrespectful language	Agard's poem demonstrates the derogatory nature of the phrase 'half-caste'.

	Rhetorical Technique	Definition	Example
1	Anaphora	Starting each sentence with the same word	'This royal throne of kings, this scepter'd isle, This earth of majesty, this seat of Mars' Richard II
2	Hypophora	Asking a question then answering it straight afterwards	'If a Jew wrong a Christian, what is his humility? Revenge.' Merchant of Venice
3	Epiplexis	A series of rhetorical questions	Who is here so base that would be a bondman?...Who is here so rude that would not be a Roman?... Julius Caesar
4	Aposiopesis	A pause-when someone doesn't finish a sentence (...)	'I will have such revenges on you both That all the world shall- I will do such things-' King Lear
5	Antithesis	First you mention one thing, then you mention another. Both elements are often opposites	'The fewer men, the greater share of honour.' Henry V
6	Parallelism	Giving two or more parts of the sentences a similar form and structure so as to give the passage a definite pattern	'Fear'd by their breed and famous by their birth' Richard II
7	Epistrophe	When you end each sentence or clause with the same word	'See, how she leans her cheek upon her hand! O, that I were a glove upon that hand,' Romeo and Juliet
8	Tricolon	Three ideas in a row	'Friends, Romans, Countrymen, lend me your ears.' Julius Caesar
9	Polyptoton	The repeated use of one word as different parts of speech or in different grammatical forms	'With eager feeding food doth choke the feeder' Richard II
10	Imperative	Giving a command or order to the listener or audience	'Stiffen the sinews, summon up the blood' Henry V
	Appeals	Definition	
11	Ethos	An appeal to the authority or credibility of the presenter. It is how well the presenter convinces the audience that he or she is qualified to present (speak) on the particular subject.	
12	Logos	This is logical appeal or the simulation of it, and the term logic is derived from it. It is normally used to describe facts and figures that support the speaker's claims or thesis. Having a logos appeal also enhances ethos because information makes the speaker look knowledgeable and prepared to his or her audience	
13	Pathos	It is an appeal to the audience's emotions, and the terms pathetic and empathy are derived from it. It can be in the form of metaphor, simile, a passionate delivery, or even a simple claim that a matter is unjust	
	Keyword	Definition	Shakespearean Dates
14	Soliloquy	a device often used in drama when a character speaks to himself or herself	20 1.1564- Born in Stratford Upon Avon
15	Philippic	a bitter attack or denunciation, especially a verbal one	21 2. 1599- First Globe theatre built
16	Diatribes	a forceful and bitter verbal attack against someone or something	22 3. 1616- Shakespeare Died
17	Metaphor	a figure of speech in which a word or phrase is applied to an object or action to which it is not literally applicable.	23 4. Queen Elizabeth I ruled from 1558-1603
18	Introspection	the examination or observation of one's own mental and emotional processes	24 5. King James I ruled from 1603-1625
19	Personification	Giving human qualities to something not human	



1 Times Table

$1 \times 1 = 1$
 $2 \times 1 = 2$
 $3 \times 1 = 3$
 $4 \times 1 = 4$
 $5 \times 1 = 5$
 $6 \times 1 = 6$
 $7 \times 1 = 7$
 $8 \times 1 = 8$
 $9 \times 1 = 9$
 $10 \times 1 = 10$
 $11 \times 1 = 11$
 $12 \times 1 = 12$

2 Times Table

$4 \times 2 = 2$
 $2 \times 2 = 4$
 $3 \times 2 = 6$
 $4 \times 2 = 8$
 $5 \times 2 = 10$
 $6 \times 2 = 12$
 $7 \times 2 = 14$
 $8 \times 2 = 16$
 $9 \times 2 = 18$
 $10 \times 2 = 20$
 $11 \times 2 = 22$
 $12 \times 2 = 24$

3 Times Table

$4 \times 3 = 3$
 $2 \times 3 = 6$
 $3 \times 3 = 9$
 $4 \times 3 = 12$
 $5 \times 3 = 15$
 $6 \times 3 = 18$
 $7 \times 3 = 21$
 $8 \times 3 = 24$
 $9 \times 3 = 27$
 $10 \times 3 = 30$
 $11 \times 3 = 33$
 $12 \times 3 = 36$

4 Times Table

$1 \times 4 = 4$
 $2 \times 4 = 8$
 $3 \times 4 = 12$
 $4 \times 4 = 16$
 $5 \times 4 = 20$
 $6 \times 4 = 24$
 $7 \times 4 = 28$
 $8 \times 4 = 32$
 $9 \times 4 = 36$
 $10 \times 4 = 40$
 $11 \times 4 = 44$
 $12 \times 4 = 48$

5 Times Table

$1 \times 5 = 5$
 $2 \times 5 = 10$
 $3 \times 5 = 15$
 $4 \times 5 = 20$
 $5 \times 5 = 25$
 $6 \times 5 = 30$
 $7 \times 5 = 35$
 $8 \times 5 = 40$
 $9 \times 5 = 45$
 $10 \times 5 = 50$
 $11 \times 5 = 55$
 $12 \times 5 = 60$

6 Times Table

$1 \times 6 = 6$
 $2 \times 6 = 12$
 $3 \times 6 = 18$
 $4 \times 6 = 24$
 $5 \times 6 = 30$
 $6 \times 6 = 36$
 $7 \times 6 = 42$
 $8 \times 6 = 48$
 $9 \times 6 = 54$
 $10 \times 6 = 60$
 $11 \times 6 = 66$
 $12 \times 6 = 72$

7 Times Table

$1 \times 7 = 7$
 $2 \times 7 = 14$
 $3 \times 7 = 21$
 $4 \times 7 = 28$
 $5 \times 7 = 35$
 $6 \times 7 = 42$
 $7 \times 7 = 49$
 $8 \times 7 = 56$
 $9 \times 7 = 63$
 $10 \times 7 = 70$
 $11 \times 7 = 77$
 $12 \times 7 = 84$

8 Times Table

$1 \times 8 = 8$
 $2 \times 8 = 16$
 $3 \times 8 = 24$
 $4 \times 8 = 32$
 $5 \times 8 = 40$
 $6 \times 8 = 48$
 $7 \times 8 = 56$
 $8 \times 8 = 64$
 $9 \times 8 = 72$
 $10 \times 8 = 80$
 $11 \times 8 = 88$
 $12 \times 8 = 96$

9 Times Table

$1 \times 9 = 9$
 $2 \times 9 = 18$
 $3 \times 9 = 27$
 $4 \times 9 = 36$
 $5 \times 9 = 45$
 $6 \times 9 = 54$
 $7 \times 9 = 63$
 $8 \times 9 = 72$
 $9 \times 9 = 81$
 $10 \times 9 = 90$
 $11 \times 9 = 99$
 $12 \times 9 = 108$

10 Times Table

$1 \times 10 = 10$
 $2 \times 10 = 20$
 $3 \times 10 = 30$
 $4 \times 10 = 40$
 $5 \times 10 = 50$
 $6 \times 10 = 60$
 $7 \times 10 = 70$
 $8 \times 10 = 80$
 $9 \times 10 = 90$
 $10 \times 10 = 100$
 $11 \times 10 = 110$
 $12 \times 10 = 120$

11 Times Table

$1 \times 11 = 11$
 $2 \times 11 = 22$
 $3 \times 11 = 33$
 $4 \times 11 = 44$
 $5 \times 11 = 55$
 $6 \times 11 = 66$
 $7 \times 11 = 77$
 $8 \times 11 = 88$
 $9 \times 11 = 99$
 $10 \times 11 = 110$
 $11 \times 11 = 121$
 $12 \times 11 = 132$

12 Times Table

$1 \times 12 = 12$
 $2 \times 12 = 24$
 $3 \times 12 = 36$
 $4 \times 12 = 48$
 $5 \times 12 = 60$
 $6 \times 12 = 72$
 $7 \times 12 = 84$
 $8 \times 12 = 96$
 $9 \times 12 = 108$
 $10 \times 12 = 120$
 $11 \times 12 = 132$
 $12 \times 12 = 144$



Important ideas

Multiple: A multiple of an integer is a number in that integers times table

Multiples of 7 = 7, 14, 21, 28, ...

Factor: A factor of an integer is another integer that divides into it without a remainder

Factors of 22

11 is a factor as $22 \div 11 = 2$

9 isn't a factor as $22 \div 9 = 2r4$

Prime number: A number with only 2 factors, 1 and itself

11 is prime as 1, 11 are factors

9 isn't prime as 1, 3, 9 are factors

??Are any even numbers Prime??

Mathswatch clips

Clip 28 Factors, Multiples and Primes

Clip 78 Product of Primes

Clip 30a Prime numbers

Year 7 M1- Numbers and the Number System

Questions and Answers

$$145 \times 23 =$$

$$\begin{array}{r} 145 \\ \times 23 \\ \hline 435 \\ 2900 \\ \hline 3335 \end{array}$$

Start with working out $3 \times 145 = 435$

Now work out 20×145 don't forget the zero

$$1715 \div 7 =$$

$$\begin{array}{r} 0245 \\ 7 \overline{) 173135} \\ \underline{7} \\ 0 \\ \underline{14} \\ 3 \\ \underline{28} \\ 5 \\ \underline{35} \\ 0 \end{array}$$

We cannot do $1 \div 7$ so 'carry' the 1 across and work out $17 \div 7$

$3 \cdot 7 = 4$ (with 3 left over)

$35 \cdot 7 = 5$

$17 \cdot 7 = 2$ (with 3 left over)

Find first 5 Multiples of 9

9, 18, 27, 36, 45, ...

Find ALL factors of 48

$$48 \div 1 = 48$$

$$48 \div 2 = 24$$

$$48 \div 3 = 16$$

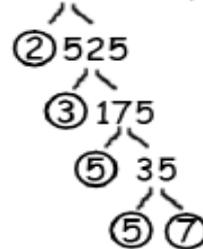
$$48 \div 4 = 12$$

$$48 \div 6 = 8$$

1, 2, 3, 4, 6, 8, 12, 16, 24, 48

Key facts and formula

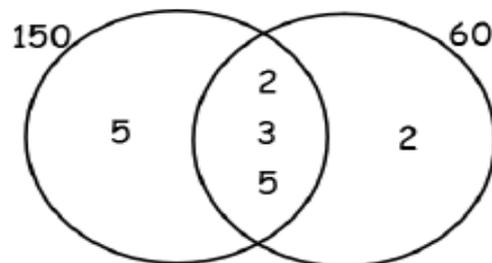
Write 1050 as a Product of Primes $1050 = 2 \times 3 \times 5 \times 5 \times 7$



$$150 = 2 \times 3 \times 5 \times 5$$

$$60 = 2 \times 2 \times 3 \times 5$$

Put this info in a Venn diagram



Vocabulary

Sign: +, -, x, ÷

Product: Means multiply

Factors: Integers that divide fully into a given value

Multiples: Numbers in the times table of a given value

MathsWatch References

2D and 3d shapes	MW10,43,44,122
Constructions	MW45-47,9, 145-147
Symmetries	MW11,48
Algebraic simplifying	MW33-35
Expanding expressions	MW93
Factorising	MW94

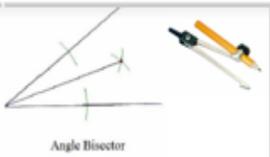
Vocabulary

Parallel	Parallel lines never meet
Perpendicular	Perpendicular lines intersect at right angles
Vertex (vertices plural)	A corner or point where two lines meet
Quadrilateral	A shape with 4 sides and 4 angles
Line symmetry	A line of symmetry is a line through a shape. It shows that on either side of this line that the picture is exactly the same. There can be more than one line of symmetry in a shape. They are 'mirror images' when a shapes are divided by a lines of symmetry
Rotational symmetry	A shape has Rotational Symmetry when it still looks the same after a rotation (of less than one full turn).

Questions Answers

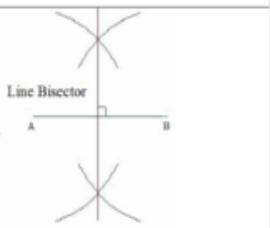
Angle Bisector: Cuts the angle in half.

1. Place the sharp end of a pair of compasses on the vertex.
2. Draw an arc, marking a point on each side.
3. Without changing the compass put the compass on each point and mark a centre point where two arcs cross over.
4. Use a ruler to draw a line through the vertex and centre point.



Perpendicular Bisector: Cuts a line in half and at right angles.

1. Put the sharp point of a pair of compasses on A.
2. Open the compass over half way on the line.
3. Draw an arc above and below the line.
4. Without changing the compass, repeat from point B.
5. Draw a straight line through the two intersecting arcs.



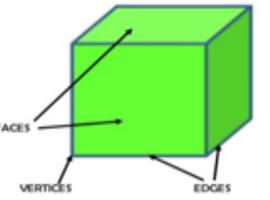
Constructing triangles

1. Draw the base of the triangle using a ruler.
2. Open a pair of compasses to the width of one side of the triangle.
3. Place the point on one end of the line and draw an arc.
4. Repeat for the other side of the triangle at the other end of the line.
5. Using a ruler, draw lines connecting the ends of the base of the triangle to the point where the arcs intersect.



BASIC PROPERTIES
FACES, VERTICES and EDGES

- 3D shapes can be described in 3 ways:
- Faces** – the sides of the shape
 - Vertices** – the corners
 - Edges** – where the faces meet



Key Facts & properties 2D and 3D shapes

Square	Rhombus	Rectangle	Parallelogram	Trapezoid
All sides are the same length; four right angles	Two pairs of parallel sides; All sides are the same length; Two acute angles and two obtuse angles	Opposite sides are parallel and the same length; Four right angles	Two pairs of opposite parallel sides; Two acute angles and two obtuse angles	Only one pair of parallel sides

My 3D Shape Mat

pyramid, sphere, triangular, cube, cone, cylinder, cuboid, hexagonal prism

A Pentagon

- A regular pentagon
- 5 equal sides
- 5 equal angles of 108°
- 5 lines of symmetry
- 0 perpendicular lines
- 0 pairs of parallel lines

A Hexagon

- A regular hexagon
- 6 equal sides
- 6 equal angles of 120°
- 6 lines of symmetry
- 0 perpendicular lines
- 3 pairs of parallel lines

An Equilateral Triangle

- An equilateral triangle
- 3 equal sides
- 3 equal angles of 60°
- 3 lines of symmetry
- 0 perpendicular lines
- 0 pairs of parallel lines

A Heptagon

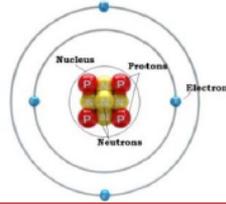
- A regular heptagon
- 7 equal sides
- 7 equal angles of 128.52°
- 7 lines of symmetry
- 0 perpendicular lines
- 0 pairs of parallel lines

YEAR 7 — MICHAELMAS TERM- SCIENCE — ATOMS AND ELEMENTS

1.

Structure of the Atom

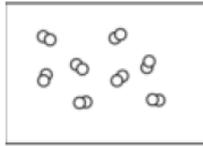
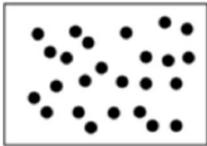
- An atom is made up of three subatomic particles: protons, electrons and neutrons.
- Protons are in the nucleus and have a positive charge.
- Neutrons are in the nucleus and have no charge.
- Electrons are in the shells and have a negative charge.
- Protons and neutrons are the same size, where electrons have hardly any mass.
- In an atom, there are equal numbers of protons and electrons because the positive and negative charges need to balance.



2.

Elements

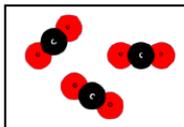
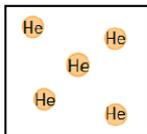
- Elements are substances made up of one type of atom.
- All 118 elements are found listed in the Periodic Table.
- The atoms in an element can either be single, or go around in pairs. It doesn't matter, as long as the atoms are **the same**.
- Elements that go around in pairs are called diatomic elements.



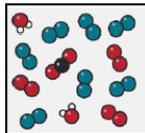
3.

Pure Substances

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


Impure Substances

Impure materials are mixtures of different types of particle (covered more in Topic 7).



4.

The first 20 elements and their Chemical symbols

Element	Symbol
Hydrogen	H
Helium	He
Lithium	Li
Beryllium	Be
Boron	B
Carbon	C
Nitrogen	N
Oxygen	O
Fluorine	F
Neon	Ne
Sodium	Na
Magnesium	Mg
Aluminium	Al
Silicon	Si
Phosphorus	P
Sulfur	S
Chlorine	Cl
Argon	Ar
Potassium	K
Calcium	Ca

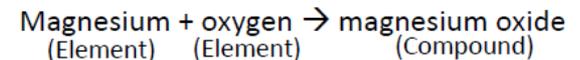
5.

Key Word	Definition
Atom	The smallest unit of an element.
Element	Substances made out of one type of atom.
Compound	Substances made of two or more different types of atoms, chemically bonded.
Pure	A substance that contains only element or compound
Impure	A substance that contains a mixture of elements and compounds

6.

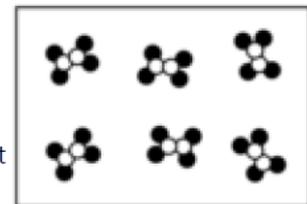
Compounds

- Compounds are substances made up of **different elements** which are chemically bonded.
- Compounds can be formed by chemically reacting elements together e.g.:

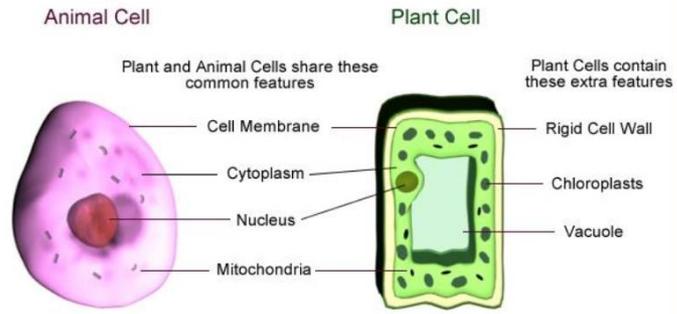


- Often, the compound formed has different properties to the elements that make it. E.g. magnesium is a shiny metal, oxygen is a colourless gas and magnesium oxide is a white powder
- In order to separate the elements in a compound you would need to carry out another chemical reaction.
- Compounds are still pure because, although they contain different atoms, those atoms are bonded to make **one particle**

- Examples of compounds are:
 - Carbon dioxide (CO₂)
 - Water (H₂O)
 - Anything else that has more than one element



Cells
Cells are the building blocks of all living organisms



Plant and animal cells
Copyright © 2009 science-resources.co.uk

3

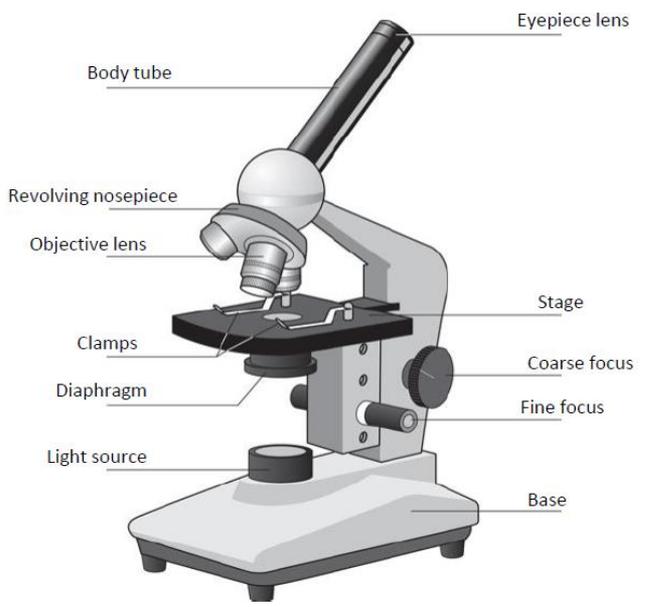
Key Terms	Function
Stage	Area where specimen is placed
Clamps	Hold the specimen still whilst it is being viewed
Light source	Illuminates the specimen
Objective lens	Magnifies the image of the specimen
Eyeiece lens	Magnifies the image of the specimen
Course/fine focus	Used to focus the specimen so it can be seen clearly
Revolving nosepiece	Holds 2 or more objective lenses

4

Key Terms	Definition
Cell wall	Made of cellulose, which supports the cell
Cell membrane	Controls movement of substances into and out of the cell
Cytoplasm	Jelly-like substance, where chemical reactions happen
Nucleus	Contains genetic information and controls what happens inside the cell
Vacuole	Contains a liquid called cell sap, which keeps the cell firm
Mitochondria	Where most respiration reactions happen (glucose + oxygen → carbon dioxide + water)
Chloroplast	Where photosynthesis happens (carbon dioxide + water → glucose + oxygen)

2

Parts of a microscope



5

Using a microscope
To view an object down the microscope we can use the following steps:

1. Plug in the microscope and turn on the power
2. Rotate the objectives and select the lowest power (shortest) one
3. Place the specimen to be viewed on the stage and clamp in place
4. Adjust the course focus until the specimen comes into view
5. Adjust the fine focus until the specimen becomes clear
6. To view the specimen in more detail repeat the process using a higher power objective

6

Magnification
We can use the following equation to calculate the magnification of an object viewed through a microscope:

$$\text{magnification} = \frac{\text{image size}}{\text{actual size}}$$

7

Preparing a microscope slide
To prepare a slide to view onion cells we can use the following steps:

1. cut open an onion
2. use forceps to peel a thin layer from the inside
3. spread out the layer on a microscope slide
4. add a drop of iodine solution to the layer
5. carefully place a cover slip over the layer

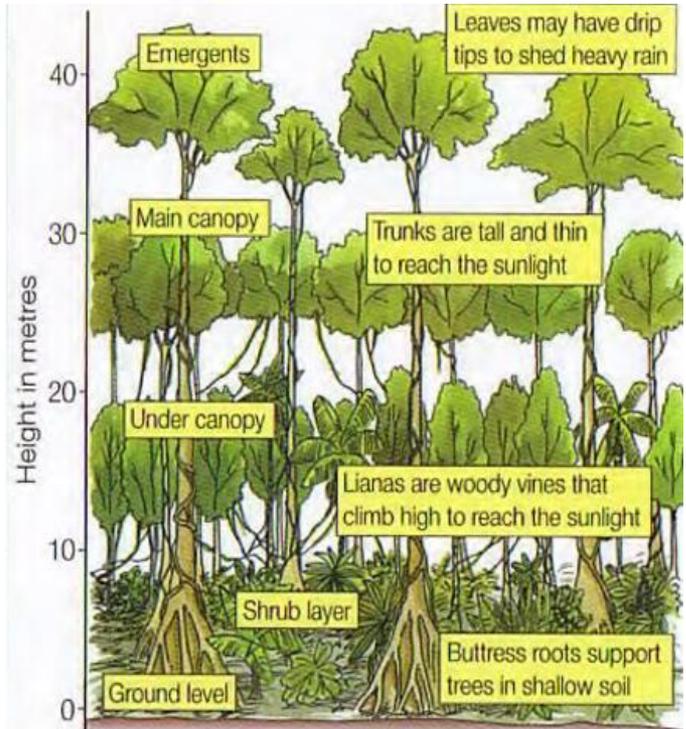
8

Specialised cells

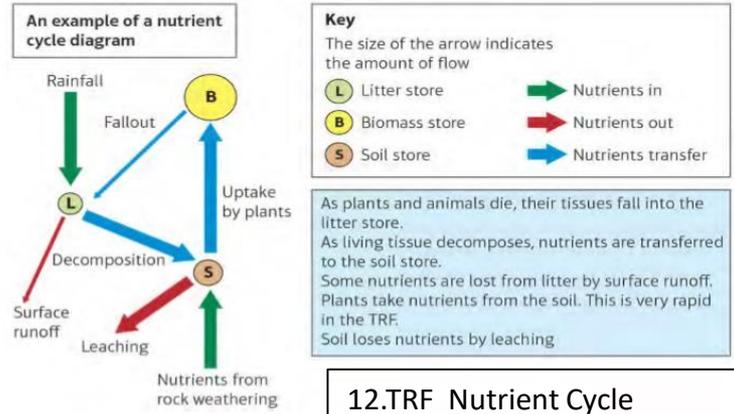
Specialised cells are found in multicellular organisms. Each specialised cell has a particular function within the organism.

	Type of cell	Function	Special features
Animal cells	Red blood cells	To carry oxygen	<ul style="list-style-type: none"> • Large surface area, for oxygen to pass through • Contains haemoglobin, which joins with oxygen • Contains no nucleus
	Nerve cells	To carry nerve impulses to different parts of the body	<ul style="list-style-type: none"> • Long • Connections at each end • Can carry electrical signals
	Male reproductive cell (sperm cell)	To reach female cell, and join with it	<ul style="list-style-type: none"> • Long tail for swimming • Head for getting into the female cell
Plant cells	Root hair cell	To absorb water and minerals	<ul style="list-style-type: none"> • Large surface area
	Leaf cell	To absorb sunlight for photosynthesis	<ul style="list-style-type: none"> • Large surface area • Lots of chloroplasts

1	Tropical Rainforest	A tropical rainforest biome is found in hot, humid environments in equatorial climates. They contain the most diverse range and highest volume of plant and animal life found anywhere on earth
2	Biome	A large scale ecosystem like a Tropic Rainforest
3	Ecosystem	A localized biome made up of living and non living environment
4	Food web	A complex network of overlapping food chains that connect plants and animals in biomes.
5	Biotic	Living part of the biome made of flora (plants) and fauna (animals)
6	Abiotic	The non-living part of a biome includes the atmosphere, water, rock and soil.
7	Services	Often invisible processes that enable the biosphere to function i.e. atmospheric regulation and water purification.
8	Goods	Physical material that are of value to us such as crops, timber, oil, coal and gas.
9	Indigenous	Original populations; the oldest communities in the world.
10	Greenhouse effect	Gases like carbon dioxide and methane that trap heat around the Earth, leading to global warming,



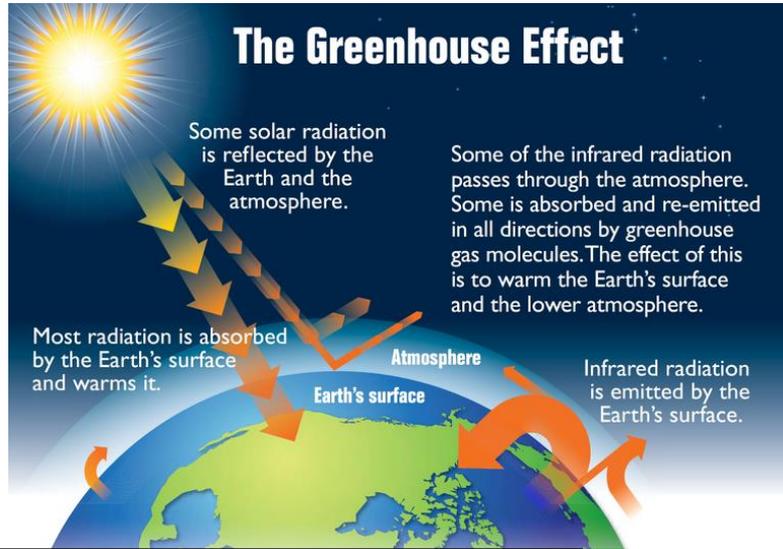
11.Layers of a Tropical Rainforest



12.TRF Nutrient Cycle

	Brazil Key Facts		UK Facts for comparison
13	Continent	South America	Europe
14	Level of affluence	Emerging Country	Developed
15	GDP per capita	\$8902 US	\$39 720 US
16	Population	209.3 million	66.4 million
17	Percentage living in urban areas	79.5%	82%
18	Fertility Rate	2.18	1.8
19	Infant mortality rate	16 per 1000 live births	3.8 per 1000 live births.
20	Average age	31.3 years	40
21	Percentage working in the tertiary sector	70%	79%

	Amazon Rainforest Key Facts	
No,	Size	Biggest rainforest in the world. 5.5 kn ²
22	Biodiversity	Most biodiversity land based biome. Contains 10% of all the world's species.
23	Number of mammals	427
24	Number of insects	2.5 million
25	Number of birds	1500
26	Number of plant species	40 000
27	Level of deforestation	8000m ² per year



28.The greenhouse effect



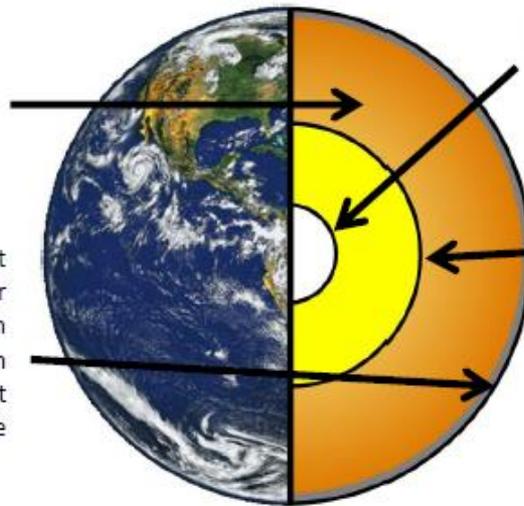
To know the structure of the earth and to know why its unstable

The earth's structure:

The Earth has four main layers : the **inner core**, the **outer core**, the **mantle** and the **crust**.

The mantle is semi-molten and about 3,000 km thick. The closer the mantle is to the core, the more liquid it is.

The crust is the rocky outer layer. It is thin compared to the other sections, approximately 5 to 70 km thick. If the Earth was scaled down to the size of an apple, the crust would be about the thickness of the apple skin.



The inner core is extremely hot (5,500°C). It is a very dense solid made from iron and nickel.

The outer core is 2,000 km thick and is a liquid.

Key words and terms:

Crust:

The rocky outer layer of the earth, made up of oceanic and continental crust.

Mantle:

Semi-molten rock, moving beneath the earth's crust. It is the movement (convection currents) in the mantle which cause tectonic plates to move

Outer core:

A 2000km thick liquid made up largely of iron and nickel.

Inner Core:

A dense solid of extreme temperature (5,500°C) made up of iron and nickel.

Tectonic plates:

Huge plates (oceanic and continental) that make up the earth's crust, and which move because of convection currents.

Convection currents:

Currents in the mantle which cause the tectonic plates to move, caused by extreme heat from the earth's core.

Dense:

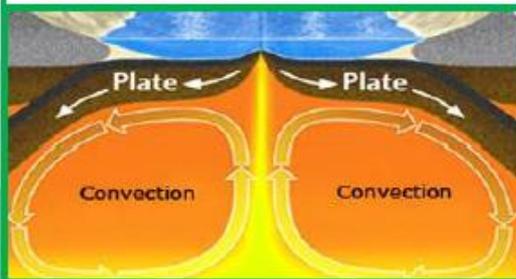
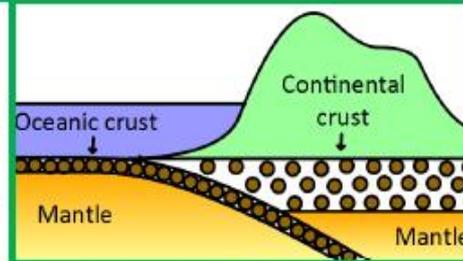
When something is closely packed together.

Molten:

Something which is melted and has become a liquid.

The earth's crust:

- The earth's crust is broken up into plates, called tectonic plates.
- There are two types of tectonic plate oceanic and continental.
- Oceanic plates carry the oceans. They are thinner but more dense than continental plates.
- Continental plates carry the land. They are thicker but less dense than oceanic plates.

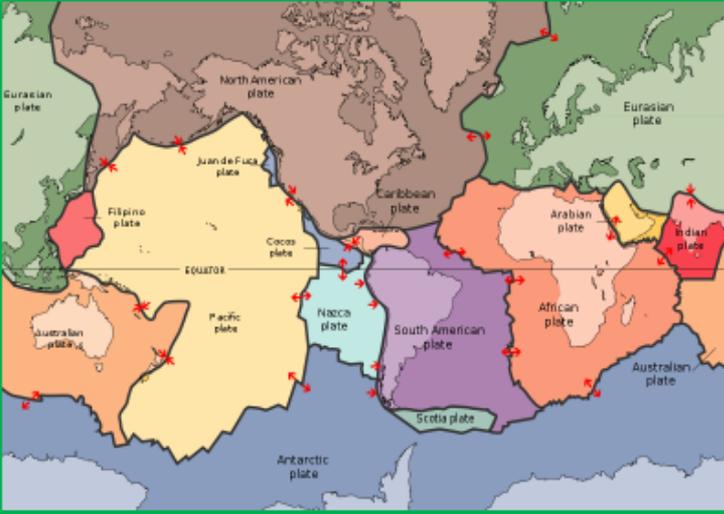


- Heat from the core causes convection currents in the mantle. These cause the mantle to move as it heats and cools.
- These currents slowly move the crust around.
- In some places the crust is destroyed. In other places new crust is formed.

To describe conservative, constructive and destructive plate boundaries.

Plate boundaries:

- The Earth's crust is broken into different plates, which sit on the Earth's mantle.
- These plates move because of **convection currents**.
- The plates move in different directions and meet at **plate boundaries**.
- As the plates move, parts of the crust are **destroyed** and in other areas new crust is **created**.



Key words and terms:

Plate boundaries:
Where two or more tectonic plates meet.

Conservative:
A plate boundary where two plates slide past one another.

Constructive:
A plate boundary where two plates are moving apart.

Destructive:
A plate boundary where two plates are colliding.

Magma:
Molten rock from the mantle before it reaches the surface of the earth.

Lava:
Molten rock released from the earth's core by a volcano.

Fold Mountains:
Mountains formed at collision zones, where two continental plates move towards each other.

Volcano:
A vent in the earth's crust from which lava, ash and gas is released.

Earthquake:
A sudden shaking of the ground, caused by movement in the earth's crust.

Different types of plate boundary:

- There are three different types of plate boundary: **destructive**, **constructive** and **conservative**. Which type they are depends on how the plates move at this boundary.
- Different plates boundaries have different landforms, such as **volcanoes** and **fold mountains**.

Boundary	Movement	Diagram	Example	Landforms
Destructive	The plates either collide or the oceanic plate subducts under the continental plate.		The Nazca plate being forced under the South American plate.	Volcanoes Fold mountains Earthquakes
Constructive	The plates move apart .		The African plate and the South American plate.	Volcanoes
Conservative	The plates move alongside each other.		The Pacific plate and the North American plate.	Earthquakes

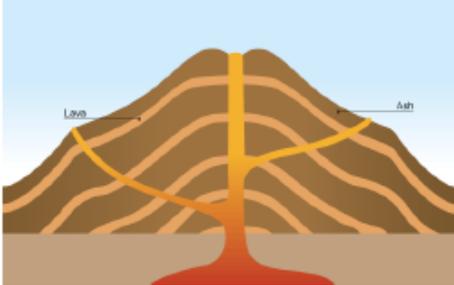
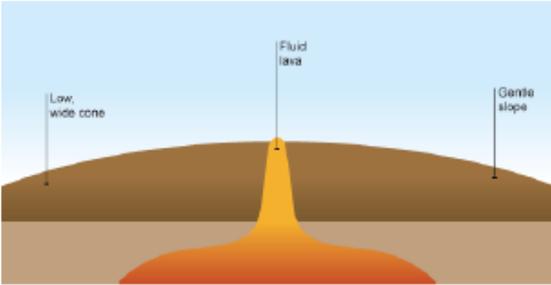
To describe conservative, constructive and destructive plate boundaries.

Volcanoes:

- Volcanoes are a vent in the earth's crust from which lava, ash and gas is released.
- Most volcanoes form at **destructive and constructive** plate boundaries.
- Volcanoes **do not form at conservative** boundaries.
- If a volcano forms at a plate boundary, they are either **composite** or **shield** volcanoes.
- Of these two types, volcanoes can be **active, dormant** or **extinct**.

Composite and shield volcanoes:

There are a number of key differences between composite and shield volcanoes.

	Composite	Shield
Diagram		
Shape	Steep sides.	Gentle sides.
Plate boundary	Form at destructive plate boundaries.	Form at constructive plate boundaries.
Lava	Thick lava.	Thin, runny lava.
Eruptions	Eruptions happen less often but are usually violent . The eruption consists of ash, pyroclastic flow and lava .	Eruptions happen often but they are usually quite gentle . The eruption is mainly lava , with little pyroclastic flow .
Example	Mount Vesuvius in Naples, Italy. Mount St. Helens, USA	Mauna Loa in Hawaii. La Cumbre, The Galapagos Islands

Key words and terms:

Magma chamber:

A large underground pool of magma.

Lava:

Magma, once it reaches the surface.

Crater:

A bowl-shaped basin in the top of the volcano.

Vent:

The central tube which magma travels through.

Cone:

A hill produced around a volcano by the eruption of lava and ash.

Pyroclastic flow:

A mass of hot ash, gases and lava fragments which is ejected from a volcano at great speeds.

Active:

Volcanoes which erupt frequently.

Dormant:

Volcanoes which have not recently erupted by which can still erupt.

Extinct:

A volcano which is unlikely to ever erupt again.

Key Terms		
1	Medieval	The period between 1066-1500
2	Chronology	Putting events in the order that they happened
3	Century	100 years
4	Source	Something from the time which we can use to find out about the past.
5	Celts	The dominant population of Britain before the arrival of the Romans and Anglo-Saxons
6	Romans	Group who ruled England after invading from 40AD. They left around 410AD due to invasions in their homeland.
7	Anglo-Saxons	People who lived in Britain from the 5th century. They included people from Germanic tribes who migrated to the island from Europe.
8	Vikings	Originally from Scandinavia, a vicious warriors group who invaded and settled from around 800AD
9	Longboats	The Viking ships that combined oars and sails
10	Danegeld	A large sum of money, given to Vikings to prevent further invasions.
11	Shires	The individual counties that the Anglo-Saxons divided England into
12	Earl	Noble title used by the Anglo-Saxons use to describe the ruler of a county
13	Heir	a person who is legally allowed to take the rank and property of someone who has died.
14	Witan	Kings Council, made up of powerful Bishops and Earls, helped the king run the country
15	Normans	People from the Normandy region of France, led by King William
16	Bayeux Tapestry	An embroidery telling the story of the Norman Conquest
17	Conquest	Taking an area by using force
18	Fyrd	Local farmers that fight for Harold Godwinson's army
19	Housecarls	Paid, experienced soldiers that fought for Harold's army
20	Cavalry	William's soldiers that fought on horses
21	Harrying	To completely destroy
22	Pope	Head of the Catholic Church
23	Villein	A type of peasant.
24	Peasant	Poor people. Farmers. They worked for the knights and nobles.

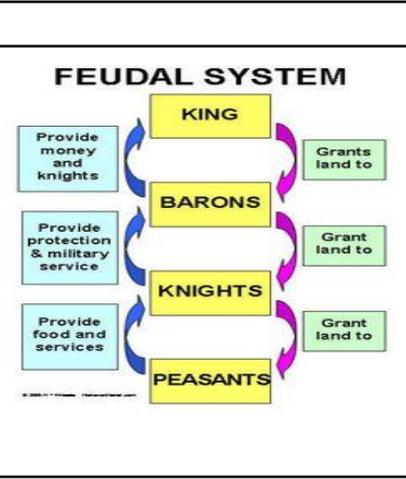
Key people	
1	<p>Edward the Confessor: 1042-1066</p> <p>-Edward became king of England in 1042 after his half-brother died. Before this he had been living in Normandy.</p> <ul style="list-style-type: none"> • Edward married but had no children. It was not clear who Edward wanted to be king after him. For a king to die without an heir was a disaster! • He was made a saint and 'the confessor' means someone that is saint-like but not a martyr.
2	<p>Harald Hardrada</p> <p>-Viking King of Norway</p> <p>-Vikings had ruled Britain before.</p> <p>-Most feared warrior in Europe –Hardrada means 'hard ruler' and his nickname was 'the Ruthless'.</p> <p>-Harald was supported by Tostig, Harold Godwinson's brother who wanted revenge.</p>
3	<p>Harold Godwinson</p> <p>-Anglo-Saxon. Earl of Wessex, one of the most powerful men in England</p> <p>-Harold's sister was married to King Edward. Harold was a brave and respected soldier with a tough streak.</p> <p>-The Witan, wanted Harold to be the next king.</p>
4	<p>William of Normandy</p> <p>-Duke of Normandy, France.</p> <p>-William came from a fighting family. He was a brave soldier.</p> <p>-Edward's cousin. Edward had lived in Normandy from 1016-1042. Edward had supposedly promised that William should become King of England</p>

Key events		
1	Battle of Stamford Bridge	<p>-The battle where the Anglo-Saxons defeat the Vikings in September 1066.</p> <p>-It took the Anglo-Saxon army 4 days to march to meet the Vikings, once they had invaded northeast England</p> <p>-Harold Godwinson was betrayed by his brother Tostig by joining the Vikings</p>
2	Battle of Hastings	<p>- The battle took place in October, 1066</p> <p>-The winds suddenly changed at the end of September, allowing William's Norman army to invade</p> <p>-William's heavily armoured soldiers on horseback, Knights, were used throughout the battles.</p> <p>-Harold's army positioned themselves at the start of the battle on top of Senlac Hill</p> <p>-The Normans carried out a Fake Retreat to tempt the Saxons away from their high ground?</p> <p>-According to the Bayeux Tapestry, Harold Godwinson died by being shot with an arrow to the eye</p> <p>-According to the first account, Harold Godwinson died by being disembowelled by Norman knights</p>

Key Terms		
1	Feudal system	The social structure of Medieval England
2	Villein	Peasant at the bottom of the Feudal system
3	Baron	Noble land owner that pledged their loyalty to the King
4	Normans	People from the Normandy region of France, led by King William
5	Motte and Bailey	The first type of castle made by William. It was made out of wood and had a higher Motte part and a lower Bailey part
6	Stone Keep castle	Similar to Motte and Bailey but made of stronger materials such as stone
7	Taxes	Money collected from people by the King
8	Pope	Head of the Catholic Church
9	Hierarchy	Form of social organisation ranks people according to status or power
10	Loyalty	
11	Harrying	To completely destroy
12	Domesday book	vitaly important book did William the Conqueror commission in 1086
13	Baron	rank came just below the king in the feudal system, and ruled land on his behalf
14	Vassal	anyone below you in the feudal system
15	Peasant	usually a farm labourer, was at the bottom of medieval society
16	Westminster Abbey	Where William the Conqueror was crowned king of England.

Key changes

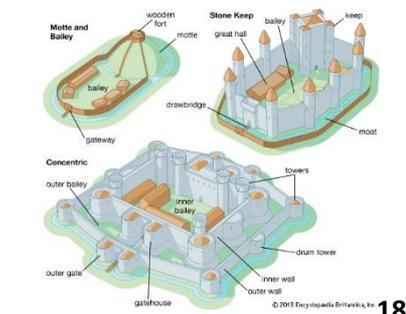
1 **The Feudal System**
 -William also sets up the **Feudal System**. This forces the English to give William their taxes and promises of **loyalty**, in return for protection and land to farm.
 -It is based on a system of **hierarchy**
 -William is at the top of the system, as he holds all the land and money, which he gives to the Barons.
 -They promise William their money, soldiers and loyalty. They give the land to the Knights in return for loyalty and military service.
 -Finally the knights give the land to the peasants. The peasants farm the land and give food, money and services to the knights.



2 **Harrying of the North**
 -Took place in 1069, following an Anglo-Saxon rebellion in Durham. After taking the throne in 1066, William did not trust the English lords, who do not like him. He had to force the English to accept him as King and many of the English are rebelling and fighting against him.
 -**To stop rebellions and show his power**, William crushes the rebellions and took the land away from the English lords and gave it to his supporters instead. William now has his supporters helping him to control the whole country.

3 **The Domesday Book**
 In 1086, William sent out surveyors to every part of England, with orders to list:
 -How much land was there
 -Who had owned it in 1066 and who owned it now
 -What was the place like, and who lived there
 -How much it was worth in 1066 and how much now
 William did this to allow him to effectively tax the land and earn money. William also needed to have an idea of what could be seized from landowners who did not show him loyalty. All of this was recorded in the Domesday Book.

4 **Castles**
 William also kept control by building castles.
Motte and Bailey – The first castles built to help fight against rebellions. They were built quickly and made out of wood, meaning that they were not very strong, and could be easily destroyed.
Stone Keep – This castle was now made out of stone and had towers as a form of defence. The main part of the castle was the Keep.



1	Heaven	Where those that have paid in purgatory can now go and live with God.
2	Purgatory	People will pay for their sins here before going to either heaven or hell.
3	Hell	Where people go if their sins are so terrible.
4	Succession	The person that will become King after the current King has died.
5	Crusades	The 'Wars of the Crosses', a Holy war in which crusaders from Europe set out to fight Muslim Turks.
6	Turks	A tribe of Muslim warriors who moved to the Holy Land.
7	Christian	A person who believes in God and follows the teachings of his son, Jesus Christ.
8	Muslim	People who believe in a God called Allah, and that a prophet called Muhammad was a messenger from Allah.
9	Prophet	Someone sent by God to tell His message.
10	Crucified	The method by which Jesus was put to death on a cross.
11	Jerusalem	Was the most important city on earth for Christians and Muslims during the period as it was the place where Jesus had lived, been crucified and buried.
12	Holy Land	The area linked to the life of Jesus.
13	Pilgrimage	A religious journey.
14	The First Crusade	The first crusade began in 1096. The idea of going on crusade appealed to Christians in Europe including those in England.
15	Why fight?	A lot of the people who went to fight were younger sons who would not inherit any family land as it went to the eldest son.
16	Cost of war	The Crusades cost Christendom from 2,000,000 to 6,000,000 lives.
17	Who did the crusades help?	The Crusades contributed to increase the wealth of the Church. The knowledge of the science and learning of the East helped the crusaders gain knowledge.

18	King Richard 1: 1189 – 1199	Richard was the third son of Henry II. He was a fantastic soldier, brave and courageous. Although crowned King of England, Richard spent all but 6 months of his reign abroad. He did not speak English.
19	Saladin: 1137 - 1193	Salah ad-Din or Saladin, was the first sultan of Egypt and Syria and the founder of the Ayyubid dynasty. A Sunni Muslim of Kurdish ethnicity, Saladin led the Muslim military Levant.
20	King John: 1199 - 1216	John Lackland was the fourth child of Henry II. Short and fat, he was jealous of his dashing brother Richard I whom he succeeded. He was cruel, self-indulgent and selfish. On 15th June 1215 the barons forced John to sign Magna Carta, John died – from over-eating – a fugitive from all his enemies. He has been termed “the worst English king”.
21	1154	King Henry II appointed Thomas Beckett as his Chancellor. His job was to look after the church and the King’s law courts. During this time Henry and Thomas became good friends.
22	1161	Henry asked Thomas to become the new Archbishop of Canterbury. Beckett was asked to make the church courts fairer, as they favoured the churchmen. Beckett refused and made Henry very angry.
23	1164	Henry announced that he would be in charge of the church court, and Beckett agreed but then changed his mind. Sensing danger, Beckett fled to France.
24	June 1170	Henry ordered the Archbishop of York to crown the next king. This was usually the job of the Archbishop of Canterbury. Beckett was furious.
25	July 1170	Henry and Beckett met in France. They ended their argument.
26	November 1170	Despite making up, Beckett removed Henry’s supporters from the church.
27	December 1170	Henry found out that Beckett had removed his supporters from the church. Henry was furious and shouted: “Will no one rid me of this troublesome priest?”
28	29th December 1170	Four knights heard Henry’s shout and went to Canterbury Cathedral. They found Beckett and tried to force him to change his mind. Beckett refused and the four knights stabbed him to death in the church.

29	Chancellor	Person responsible for the production of all official documents.
30	Why Magna Carta?	King John levied taxes for a war in Normandy but the Barons refused to pay and formed an army to defeat the King.
31	Magna Carta	King John was forced to make a deal called Magna Carta by the Barons in England.
32	What did it contain?	63 promises of what the King could and could not do, it also set up a council of 25 Barons that would ensure the King kept those promises.
33	What remains today?	Only three of the promises of Magna Carta remain in force today: That the English Church shall be free from royal interference. To respect the rights and freedoms of the City of London and other towns and ports. That no freeman shall be arrested or imprisoned without a proper trial by a jury of peers.
34	Monk	A man who devotes his life to serving God.
35	Nun	A woman who devotes her life to serving God.
36	Monastery	a building or buildings occupied by a community of monks living under religious vows.
37	Nunnery	A building or buildings occupied by a community of nuns living under religious vows.
38	Doom painting	A painting that depicted heaven and hell and were used in churches for people who could not understand Latin.

39	Why was the Medieval Church important?
40	<ul style="list-style-type: none"> The church has an important role in the lives of people during the Medieval era. Most people in the Middle Ages lived their lives fully believing in the reality of a spiritual realm all around them, and in heaven or hell when they died
41	<ul style="list-style-type: none"> In the Middle Ages, the Church provided for people's religious lives – baptism of babies, marriages, confession, the last rites for the dying and burying the dead.
42	<ul style="list-style-type: none"> However, the church was much more than a place to go to pray or look for guidance
43	<ul style="list-style-type: none"> Monasteries and nunneries looked after the old and sick, provided somewhere for travellers to stay, gave alms to the poor and sometimes looked after people's money for them. Monasteries had running water and good toilet facilities, and were much healthier than medieval towns and villages.
44	<ul style="list-style-type: none"> Monks could often read and write, so they copied books and documents and taught children. Monasteries often had libraries. Church festivals and saints' days were 'holy days', when people didn't have to work. The Church put on processions and 'miracle plays'.
45	<ul style="list-style-type: none"> The Church played a big part in government: <ul style="list-style-type: none"> Bishops sat in the House of Lords. They could raise an army for the king in times of war
46	<ul style="list-style-type: none"> Anybody who was not a Roman Catholic Christian was persecuted: Jewish people were often attacked and in 1290 were expelled from England.
47	<ul style="list-style-type: none"> Monks and nuns took vows of poverty (no money), chastity (no sex) and obedience (obeying the Abbot or Abbess).
48	<ul style="list-style-type: none"> There were many different orders of monks – eg Benedictines, known as 'black monks', and Cistercians, known as 'white monks', named after the colour of the habits they wore. Monks usually live in closed communities.
49	<ul style="list-style-type: none"> Monks built huge monasteries, such as Fountains Abbey in Yorkshire.

BOX 1 - Christian Beliefs about God.

1. Christians base their beliefs about God on the Bible, the official teachings of the Church, the views of Christian leaders and their personal experience.
2. Christianity is a **monotheistic** religion which is a belief that there is only one God.
3. Christianity teaches that God is **transcendent** which means that God is above and beyond anything else that exists on Earth.
4. God is seen as a supreme being who has supernatural powers that defy the physical laws of the universe; he is therefor considered **divine**.
5. God is referred to as **holy** and **sacred** which means he is extremely special and set apart from human beings and worthy of upmost respect.
6. Christians believe God has no gender as male and female are human and not divine.

BOX 2 - The Trinity (1)

7. One of the ways Christians explain the different characteristics and qualities of God is through a teaching known as the **Doctrine of Trinity**. It is unique and fundamental to Christian belief.
8. Christians believe that God has appeared in the world in three ways; the Father, Son and Holy Spirit.
9. Christians do NOT believe there are three Gods but believe that all three are equal but distinct persons within the **Oneness of one God** which is called the Trinity.

BOX 3 - The Trinity (2)

10. Christians believe that each part of the Trinity performs a special function.
 - 10a:- God as the Father created Heaven and Earth.
 - 10b. God as the Son, Jesus is the saviour of the World. He is believed to be the Messiah promised in Jewish scripture.
 - 10c. God as the Holy Spirit is an invisible spiritual power, which guides, helps and inspires human beings.

BOX 5 - Sources of Authority.

*We believe in God,
The Father, the Almighty,
Maker of heaven and earth.....
We believe in one Lord, Jesus Christ,
The only Son of God.....
We believe in the Holy Spirit,
The Lord, the giver of life.....
Who with the Father and the Son is worshipped and
Glorified.
(Nicene Creed)*

BOX 4 – The Nicene Creed

12. Christian belief in the Trinity is set out in a statement or profession of faith called the **Nicene Creed**. The word Creed comes from the Latin credo, which means “I believe”.
13. Christian leaders thought it was important that everyone knew and agreed on the same basic beliefs on which Christianity is founded so during the 4th Century that produced the **Nicene Creed** stated this basic beliefs. In some churches the creed is still recited during services. Another way it is recited is through prayer.

BOX 1 - Creation according to Genesis 1.1-2.3:

Day 1: God created light and separated it from the darkness. God named the light 'day' and the darkness 'night'.

Day 2: God created the sky. God used the sky to divide the water that covered the Earth into two halves.

Day 3: God gathered the water into one place, called the 'seas', and made land appear, called 'Earth'. God also created all of the plants and trees to grow on the 'Earth'.

Day 4: God created the sun, moon and stars to light up the sky, govern night and day and mark the passing of time.

Day 5: God created all of the species of animals that live on Earth.

Day 6: God created human beings and put them in charge of everything on the Earth that had been created.

Day 7: God rested, blessed the seventh day and made it holy. The universe was complete.

BOX 2 - Different Christian beliefs about Creation

Creation in Genesis 1:1-3 - God created the world in 6 days and rested on day 7. *"In the beginning God created the heavens and the earth"* God created the perfect world in the beginning. *"it was good"*

Creation in John 1:1-3 – *"In the beginning was the word....through him all things were made..."*. The word refers to Jesus and therefore he was present at the beginning of the world and involved in the creation of the world. This also shows the importance of the Trinity being involved in the whole creation.

BOX 3 -The Fall:

Many Christians refer to Adam and Eve's sin 'the Fall' because it represents falling out with God, or rather losing his favour. It is also known as a fall from grace. Christians believe that as a result of the Fall, humankind were in need of a saviour.

BOX 4 - How is the Bible used?

1) Personal Bible study:

Many Christians set aside a time each day when they pray and read the Bible (often called Quiet Time). They believe that God speaks to them through the words of the Bible and they spend some time praying beforehand that this will happen.

2) Readings during services:

Passages from the Bible are read aloud in almost all church services. Another important part of a service is the sermon. This is when the priest or minister explains part of the Bible to the congregation.

3) Bible study with others:

Many church congregations meet regularly in smaller groups in someone's house. It is at these meetings that a part of the Bible's teachings is discussed. In the Anglican and Roman Catholic Churches the season of Lent is an important part of the Church year and a time when many house groups get together.

BOX 5 - Key Words

Monotheistic: A religion which believes in one God.

Holy: Separate and set apart for a special purpose by God.

Omnipotent: Almighty – unlimited power.

Trinity: God the father, Son and Holy Spirit.

Genesis: The first book in the Bible which has the creation story in it.

Sin: Any action against God.

Original Sin: first sin in the world committed by Adam and Eve which means all humans are born with this in them.

BOX 6 - Why is Abraham important to Christians, Muslims and Jews?

Jews regard Abraham (as he was later called) as the first Patriarch of the Jewish people.

Abraham was the first person to teach the idea that there was only one God; before then, people believed in many gods.

Muslims know Abraham as Ibrahim, and regard him as an important prophet of their faith. Ibrahim's first son Ishmael, known as Isma'il, is regarded as the father of the Arab people. Many Christians believe that they are descendants of Abraham (Galatians 3.29).

BOX 7 - What is a covenant?

1. A covenant is an agreement between two parties.
2. There are two types of covenants: **conditional and unconditional**.
3. A conditional or bilateral covenant is an agreement that is binding on both parties for its fulfillment. Both parties agree to fulfill certain conditions. If either party fails to meet their responsibilities, the covenant is broken and neither party has to fulfill the expectations of the covenant.
4. An unconditional or unilateral covenant is an agreement between two parties, but only one of the two parties has to do something. Nothing is required of the other party.

BOX 8 - What is Passover?

1. Passover commemorates the most important event in Jewish history.
2. The scriptures tell that after 400 years of slavery the Jews were finally set free.
3. It took another 40 years for their journey back to Israel. This journey is known as the **Exodus**. It is a journey which is remembered at Passover.
4. Most of the celebrations take place at home. On the night of Passover, children play games such as searching for any pieces of unleavened bread that has been hidden in the house. This reminds Jews of the time when they were in a rush to leave Egypt so they had no time for the bread to rise in the ovens.
5. Therefore the only bread they eat during Passover is **matzah** – bread made without yeast.

BASIC RULES	BASIC STROKE TECHNIQUES
<p>1. What is the aim of table tennis? The aim of table tennis is to score more points than your opponent by volleying the ball across the net and landing on the table.</p>	<p>7. The Backhand Push Stand close to the table, front ways on to the table, hit the ball at the top of the bounce, 50% of stroke action before hitting it, and 50% of stroke action after you have hit it (so its not too powerful)</p> 
<p>2. When is a point won? A point is won by you if your opponent is unable to return the ball to your side of the table (e.g. they miss the ball, they hit the ball but it misses your side of the table, or the ball hits the net), or if they hit the ball before it bounces on their side of the table.</p>	<p>8. The Forehand Drive Stand close to the table, sideways on, facing the line of play. Using a medium stroke, racket arm should move slightly upwards in direction that the ball is going to travel. During the stroke your upper body should rotate 45 degrees to the right then turn back to face the ball, moving from right foot to your left.</p> 
<p>3. How is table tennis scored? The winner of a game is the first to 11 points. There must be a gap of at least two points between opponents at the end of the game though, so if the score is 10-10, the game goes in to extra play until one of the players has gained a lead of 2 points. The point goes to the player who successfully ends a rally, regardless of who has served. A match can consist of the number of games you like, just make sure you agree this in advance!</p>	<p>9. The Serve Table tennis serve is the most important stroke in the game because it provides the only situation in which you have total control over how and where you play the ball.</p> <ul style="list-style-type: none"> - On your backhand side, position yourself at the side of the table, hold the racket at an open angle (like backhand push). - Balance the ball in the palm of your free hand and project the ball upwards, as near vertically as possible, so that it rises at least 6inches after leaving your hand. - Allow the ball to drop and then hit the ball with your racket – so that it bounces your side of the table then goes over the net and bounces on your opponent’s side. 
<p>4. What is the ready position? Neutral starting position, slightly bent arm, racket in front of you so you can just reach the end of the table, feet shoulder width apart and knees bent, racket in a neutral position so you can play either a backhand or forehand.</p>	<p>10. What shot do I play when? If the ball is played short (just over the net) return the ball with a defensive shot (the push). If the ball is played long (to the baseline on your side of the table) return the ball with an attacking shot such (the drive).</p> <p>11. Vary your shots used - Try not to use the same shot every time you return the ball because then this becomes predictable to your opponent. 12. Vary the placement – Try to hit the ball into different spaces on the opponents side of the table so they have to move more – aiming for the backline, corners, sidelines and just over the net is the best place to aim.</p>
<p>5. What is the correct racket grip? Shake hands or western grip – v shape formed with thumb and forefinger, should be firm grip but not too tight – imagine the bat is just an extension of your hand and forearm.</p>	
<p>6. What happens if the ball hits the net? The ball must pass ‘cleanly’ over the net. If the ball ‘clips’ the net and goes over it is a ‘let’ and the point is retaken. If the ball hits the net and doesn’t go over the point goes to the other player / team. There are no second serves.</p>	
BASIC TACTICS AND STRATEGIES	

Skills	Teaching Points
1. The Straddle Jump	<ul style="list-style-type: none"> As you take off, bring your legs apart and extend them out to the sides of you more than 90 degrees and horizontal. Straighten your arms, place them out to sides like legs, and place hands on knees/legs. Keep your upper body and head as still as possible. Ensure your toes are pointed and you are looking forwards.
2. The Tuck Jump	<ul style="list-style-type: none"> As you take off, bring your arms away from your sides and extend them out in front of you and elevate your arms quickly above your head. Keep your upper body and head as still as possible. As you begin to reach the peak of the jump, bring your knees upwards and into the chest. Ensure that both knees are tucked tight into the chest and the shins are vertical with the floor and parallel to your back. Bring the arms down from the extended position and touch the hands just below the front of the knees.
3. The Pike Jump	<ul style="list-style-type: none"> As you take off, keep your legs together and straight and extend them out in front of you. Knees should be straight and both knees and feet together touching. Straighten your arms, extend them out forwards and place hands on knees/legs. Keep your upper body and head as still as possible. Ensure your toes are pointed and you are looking forwards.
4 Seat Drop	<ul style="list-style-type: none"> As you take off, bring your arms away from your sides and extend them out in front of you and elevate your arms quickly above your head. Begin to tilt your pelvis upwards slightly to create a natural leg lift. Keep straight legs and do not purposely lift them up. Keep your upper body and head as still as possible. Maintain position. As you begin to lose height, bring your arms down to make contact with the bed just behind your bottom and extend your feet forwards. Ensure you land with your back close to upright and hands tucked in just behind your bottom with the fingers pointing forwards in the same way as your toes

Safety Information

- You bounce in the middle of the trampoline on the X
- You bend your knees to cur the bounce and stop safely.
- Walk to end of trampoline – do not run!
- Get off the trampoline, by sitting down on the edge, and wriggling legs off
- When not performing, you are a ‘spotter’ facing the student on the trampoline, hands up ready to push them back in the middle in case they fall.
- You only perform the skills the teacher has advised you to and will progress through more difficult skills when teacher is happy for you to do so

Performance

Control	You must be able to land safely in the middle of the trampoline by bending your knees and cutting your bounce quickly.
Fluency	Being able to link your performances together without extra bounces.

- Routine 1**
- Tuck Jump
 - Seat Drop to Feet
 - Half Twist
 - Seat Drop to Feet
 - Pike Jump
 - Half Twist
 - Straddle/Star Jump

- Routine 2**
- Straddle
 - Full Twist
 - Tuck Jump
 - Seat Drop to feet
 - Half Twist
 - Seat Drop to Feet
 - Pike Jump
 - Straddle Jump

- Routine 3**
- Half Twist
 - Tuck Jump
 - Seat Drop into a Half Twist
 - Seat Drop to Feet
 - Straddle Jump
 - Full Twist
 - Seat Drop to Feet

- Routine 4**
- Full Twist
 - Tuck Jump
 - Swivel Hips to Feet
 - Pike Jump
 - Seat drop to Feet
 - Straddle Jump
 - Half Twist

BASIC RULES

1. What is the aim of wallball? Wallball is a simple activity played by hitting a ball against a wall with your hands. The aim of wallball is to score more points than your opponent by hitting a ball against a wall and landing inside the correct area on the floor.

2. When is a point won? A point is won by you if your opponent is unable to return the ball to the wall (e.g. they miss the ball, they hit the ball but it misses the wall, or the ball hits the floor before the wall).

3. How is wallball scored? The winner of a game is the first to 11, 15 or 21 points or played a timed game (commonly 15/20 minutes). There must be a gap of at least two points between opponents at the end of the game though, so if the score is 10-10, the game goes in to extra play until one of the players has gained a lead of 2 points. The point goes to the player who successfully ends a rally, regardless of who has served.
A match can consist of the number of games you like, just make sure you agree this in advance!

4. What is the ready position? Neutral starting position, feet shoulder width apart and knees bent, both arms in a neutral position so you can play either.

5. What is the correct equipment needed to play wallball? It is recommended to use an official wallball when playing the sport, however, any ball that can be struck safely with the hand can be used e.g. tennis ball, soft play ball, etc. Wallball gloves are optional and usually the player will decide if needed or not. Goggles are required for official tournaments.

6. Do we need a referee to play wallball? Wallball is a self-contained game and players are also expected to be referees, giving them experience of controlling a game, making decisions and taking ownership of their actions. It is recommended that the loser referees the next match.

7. How do we start the game?
The game will start by one of the players serving against the wall and the ball must return beyond the service line and inside the court.

BASIC TACTICS AND STRATEGIES

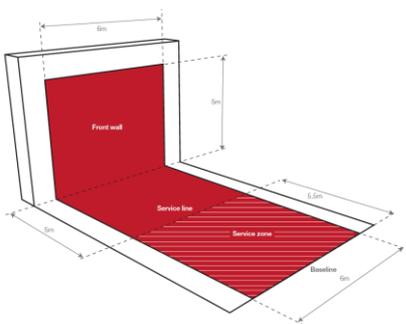
8. The Target Serve
Most professional players believe that a well-controlled serve is the most important shot in the game. Services that rebound and bounce low near the short lines makes it even more difficult for the retriever, specially if he/she does not know which the direction the serve is being aimed.



9. What are the pass shots?
The pass shot is just what the name implies, a shot that is hit past the opponent. Control the passing angles is very important in order to move the opponent out of the advantageous front court position. These shots are usually classified as “cross court” and “down the line” passes.

10. Important tactics to win games:

- a) Always serve first if you win the toss at the beginning of the game
- b) Serve deep to push your opponent back
- c) Dominate the centre of the court
- d) Hit to the player weaker hand
- e) Kill the ball, by hitting it low at the wall



Characterisation The act of changing voice, body language, movement, gesture etc. when in role is called characterisation. All people are different. The actor must use their skills to portray a character consistently throughout their performance. When creating characters, you need to consider voice, body language, facial expression and gesture .	
Characterisation: Voice Does your character have an accent? What is the tone of their voice like? How quickly do they speak? Do they have any vocal mannerisms that are particular to them? Key Words Volume: Loud to quiet Crescendo: Increasing volume Pitch: Deep or squeaky Pace/Tempo: Fast or slow Rhythm: Fluctuations in pace Pause: Breaks in speech Inflection: Emphasis on a word Articulation: Emphasis on letters. Tone: Emotion Clarity: Clearly say words Accent: A way of speaking that denotes where you are from	Characterisation: Body Language This is what your character's movements and way of using their body says about them. A character who is very nervous and stressed may fidget a lot or have their shoulders hunched up tight to indicate tension. Key Words Movement: e.g. rushing in or stamping their foot excitedly. Stance: How the character stands. Gait: The way the character walks. Posture: How the character stands or sits e.g. slouch or straight. Proxemics: The space between the characters creates meaning. e.g. distance may mean enemies and contact may mean intimacy Levels: Suggest status e.g. a dominant character may be higher up Use of space: The character can demand a lot of space or hide in a small corner.
Characterisation: Facial Expression Does your character move their face a lot? What does their facial expression say about their character? Do they have a very expressive face or do they try not to give much of themselves away? Performing in a large theatre auditorium might mean that many of the audience are a long way away. It's the actors' job to communicate their role to fit the space effectively. Facial expressions, like body language, may be heightened or exaggerated so that the character's intentions are clear for all.	Characterisation: Gesture A gesture is a movement expresses meaning. For example, the wagging admonitory finger accompanying words like 'I have told you time and time again that this behaviour is unacceptable' is probably among the most familiar of all gestures. They tend to work as emphasis. However, gestures can also amplify a question, such as pointing in a particular direction as you say 'Do you mean this way?' They can also convey a mood, such as a shrug of the shoulders to convey indifference.
	

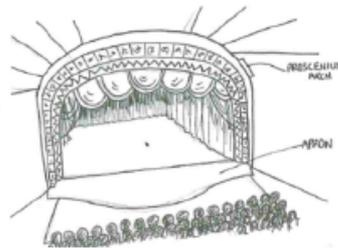
Rehearsal Techniques These are exercises that the actors engage in BEFORE they perform live to an audience. They help the actors to understand their characters and realise their intentions . They also help to develop the plot and structure of a devised play. Understand your character The rehearsal techniques below help the actor to deepen their understanding of the character they are playing and become more familiar with their intentions .
<ul style="list-style-type: none"> Hot-Seating An actor sits in the hot-seat and is questioned in role. They spontaneously answer questions. Role on the Wall Draw an outline of your character. Annotate it to reflect the character's thoughts, feelings, fears, circumstances etc. Inner Thoughts Whilst rehearsing a scene, one person will shout "Freeze, inner thoughts". The actor should freeze and spontaneously say out loud what the character is thinking. Conscience Corridor Performers make two lines facing each other. The protagonist poses a question such as "Should I put Grandad in a basket and leave him by the side of the road"? Actors on each side of the corridor give reasons for and against.
Improve how you play your character These rehearsal techniques improve how you perform physically on stage.
<ul style="list-style-type: none"> Bigger Bigger Bigger Rehearse one scene several times increasing the energy in gesture/movement, exaggeration of facial expression and volume Non-Verbal Body Language Perform a scene without speaking. Create meaning through mime.

Foundation Skills Foundation skills are the drama strategies that can be used to help improve the way that you reveal your plot to your audience . Always remember, it's not just the story you tell that is important, but also how you tell it!
Role Play Pretending to be somebody else.
Improvisation Performing a scene spontaneously without rehearsal.
Marking the Moment This is a way of highlighting the most important moment in a scene in order to draw the audience's attention to its significance.
Still Image This is a frozen picture which communicates meaning. It's sometimes called a freeze frame or tableau .
Narration A narrator is like a storyteller informing the audience about the plot.
Thoughts in the Head This is when a character steps out of a scene to address the audience about how they're feeling.
Alter Ego Allowing the audience to hear/see the positive and negative thoughts of a character. It is sometimes called Angels and Devils .
Chorus A group on stage say the same words and gestures.
Flashback A performance of a scene from the past.
Soundscape Performers make sounds to create an atmosphere.
Slow Motion Acting as if time has slowed down. Often used to highlight an important movement.
Mime Telling a story through movement. Creating characters and objects without spoken word.
Diaries & Letters Allowing the audience to hear or see the content of a diary or letter on stage.

Please turn over to learn about staging and stage positions.

Staging Configurations and Stage Positions

Proscenium Arch



Proscenium Arch is a common form of theatre. The proscenium is the frame around the stage. The area in front of the arch is called an **apron**.

- **Advantages:** Backdrops and large scenery can be used without blocking sightlines. There may be **fly space** and **wing space** to store scenery. The frame around the stage adds to the effect of a fourth wall.
- **Disadvantages:** Audience members may feel distant from the stage. **Audience interaction** is more difficult. It can feel very formal and rigid.

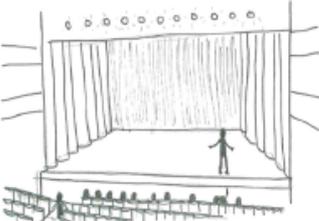
Thrust Staging



In a Thrust Stage, there is audience on three sides of the stage. This is one of the oldest theatre types of stage.

- **Advantage:** As there is no audience on one side of the stage, **backdrops, flats, cycloramas** or large **scenery** can be used. The audience may feel closer to the action as there are three front rows (one on each of the stages three sides).
- **Disadvantage:** **Sight lines** for those on extreme sides may be limited. The audience on the right and left have each other in view. **Box sets** (three sides of the room are constructed) cannot be used as this would block audience views.

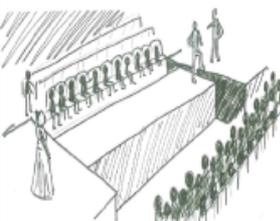
End on Staging



End on Staging is similar to a Proscenium stage as the audience sit on one side of the stage directly facing it. However it doesn't have the large proscenium frame.

- **Advantages:** The audience all have a similar view. Stage pictures are easy to create. Large backdrops or projections onto a **cyclorama** may be used.
- **Disadvantages:** Audience members in the back rows may feel distant from the stage. It may not have **wing** or **fly** areas.

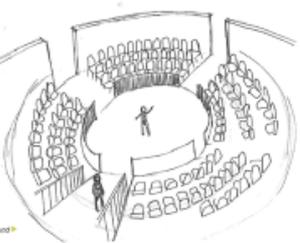
Traverse Staging



On a Traverse Stage the acting area is a long central space with audience seated on either side facing each other. Like a catwalk.

- **Advantages:** Audience feel very close to the stage. They can see the reaction of the other side who are facing them which can work well for interaction. Sometimes extreme ends of the stage can be used to create extra acting space.
- **Disadvantages:** Big **scenery, backdrops** and **sets** block **sightlines**. The long and thin acting area makes **blocking** difficult. Does not have **wing** or **fly** areas.

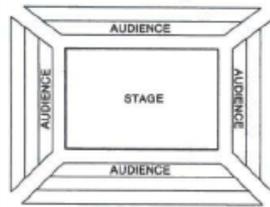
Theatre in the Round



Theatre in the Round is a staging configuration when the audience are seated in a circle all around the stage.

- **Advantages:** Intimate space for a performance. It engages the audience because the actors enter and exit the stage through the audience. There is also no 'forth wall'
- **Disadvantages:** One cannot use **backdrops** or **flats**. Stage furniture needs to be small so as not to obstruct **sightlines**. Actors have to be carefully **blocked** so that they do not always have their back to one section of the audience.

Arena Staging



Arena Staging is a similar configuration to Theatre in the Round. The audience sit on all sides of the stage, however they tend to sit in straight lighes. This type of staging is often used in sporting venues.

- **Advantages:** Intimate space for a performance. It engages the audience because the actors enter and exit the stage through the audience. There is also no 'forth wall'
- **Disadvantages:** One cannot use **backdrops** or **flats**. Stage furniture needs to be small so as not to obstruct **sightlines**. Actors have to be carefully **blocked** so that they do not always have their back to one section of the audience.

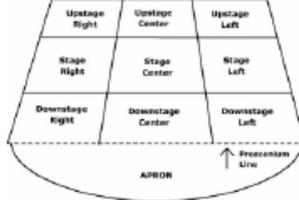
Promenade Theatre



Promenade Theatre is where the audience stand or follow the actors through a performance. This can happen in a theatre, but more often happens in a **site specific** show.

- **Advantage:** It is an interactive and exciting type of theatre where the audience feel involved.
- **Disadvantage:** Audience may get tired standing and walking. Actors or crew need to be skilled at moving the audience around. There can be health and safety risks.

Stage Positions



In order to discuss theatre, you need to be able to explain quickly and simply where you want something to occur. To do this, theatre makers divide the stage up into a grid.

Points to Remember

- Some stages are **raked** which means they are higher at the back. Therefore **upstage** is at the back and **downstage** at the front.
- The direction of stage is always seen from the perspective of the actor. This can be confusing as you will need to swap your left and right if looking at the stage from an audience perspective.

KEYWORDS

- 1-Pitch: how high or low a note is.
- 2-Notation: any system used to visually represent music played with instruments or sung through the use of written, printed, or otherwise-produced symbols.
- 3-Staff: a set of five horizontal lines and four spaces that each represent a different musical pitch.
- 4-Grand Staff: two staves are joined by a brace, or is intended to be played at once by a single performer (usually a keyboard instrument or harp). Typically, the upper staff uses a treble clef and the lower staff has a bass clef.
- 5-Treble Clef: A symbol indicating that the second line from the bottom of a staff represents the pitch of G above middle C. Also called G clef.
- 6-Bass Clef: the clef that establishes F a fifth below middle C on the fourth line of the staff. Also called F clef.
- 7-Ledger line: used in notation to notate pitches above or below the lines and spaces of the regular staff.
- 8-Octave: an interval whose higher note has a sound-wave frequency of vibration twice that of its lower note; the octave is an interval of eight notes.
- 9-Accidental: a note of a pitch that is not a member of the scale indicated by the key signature. The sharp (#), flat (b), and natural (♮) symbols mark such notes—those symbols are also called accidentals.
- 10-Sharp (♯): an accidental that indicates a slight increase in pitch.
- 11-Flat (♭): an accidental that indicates a slight decrease in pitch.
- 12-Natural (♮): an accidental, which cancels previous accidentals and represents the unaltered pitch of a note.
- 13-Bar: Each bar usually has the same number of beats in it. Music that feels like 1-2-3-4 will be divided into bars with four beats worth of music in each bar.
- 14-Barline: The bar line is a vertical line written in the music which separates the bars.
- 15-Time Signature: to specify how many beats are to be contained in each bar and which note value is equivalent to one beat.
- 16-Semibreve: a note, which lasts for 4 beats.

- 17-Minim: a note, which lasts for 2 beats.
- 18-Crotchet: a note, which lasts for 1 beat.
- 19-Quaver: a note, which lasts for 1/2 a beat. It is commonly 'beamed' to another quaver to equal 1 whole beat.
- 20-Semiquaver: a note, which lasts for 1/4 of a beat. It is commonly 'beamed' to another 3 semiquavers to equal 1 whole beat.
- 21-Rest: an interval of silence in a piece of music, marked by a symbol that corresponds to a particular note value.

- KEY QUESTIONS -

- Q1: What is the mnemonic for the lines on the treble clef?
Every Good Boy Deserves Football
- Q2: What is the word spelt out by the spaces on the treble clef?
FACE
- Q3: What is the mnemonic for the lines on the bass clef?
Good Boys Do Fine Always
- Q4: What is the mnemonic for the spaces on the bass clef?
All Cows Eat Grass

1: Grand Staff

Time Signature: Tells you the number of beats to play each measure

Bar Line: Separates the measures of a staff

Bar/Measure: Broken sets within a staff to determine how many notes to be played according to the time signature

Brace: Holds the top and bottom staves together

Treble Clef: Determines notes that should be played on the right side of your keyboard

Staff Lines: Defines the keys to be played on the piano keyboard

Bold Double Barline: Marks the end of a song

Bass Clef: Determines notes that should be played on the left side of your keyboard

Understanding Sharps & Flats

SHARP (#) = RAISES 1/2 TONE

FLAT (b) = LOWERS 1/2 TONE

NATURAL (♮) = CANCELS OUT PREVIOUS # OR b

2: Accidentals: symbols applied to notes which change the normal pitch of that note:

3: PITCH - The notes on the staff

Treble Clef Mnemonics
FACE in the space
Every Good Boy Deserves Football

Bass Clef Mnemonics
All Cows Eat Grass
Good Boys Do Fine Always

F A C E E G B D F

A C E G G B D F A

4: Durations: the lengths of the notes you play. These are combined to create rhythms.

Note	Name	Beats	Rest	Note	Name	Beats	Rest
	Semibreve, Whole Note	4 beats			Dotted Semibreve, Dotted Whole Note	6 beats	
	Minim, Half Note	2 beats			Dotted Minim, Dotted Half Note	3 beats	
	Crotchet, Quarter Note	1 beat			Dotted Crotchet, Dotted Quarter Note	1 1/2 beats	
	Quaver, Eighth Note	1/2 beat			Dotted Quaver, Dotted Eighth Note	3/4 beat	
	Semiquaver, Sixteenth Note	1/4 beat			Dotted Semiquaver, Dotted Sixteenth Note	3/8 beat	

Strings (Violin, Viola, Cello, Double Bass)

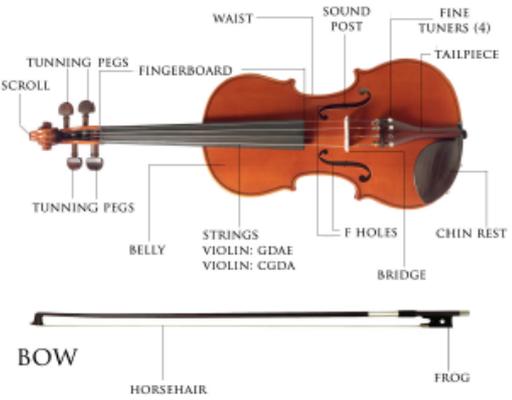
To play a string instrument, your left hand presses down on the strings to change the pitch while your right hand moves the bow or plucks the strings.

How to Practice

IDENTIFY THE PROBLEM AREAS: Practice the parts you can't play (not the parts you can) first:

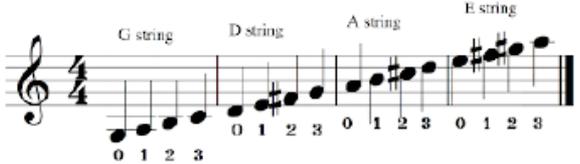
- Use a metronome
- Play it slowly, then speed it up
- Try the part in different rhythms so that you get the pitches accurate
- Aim to play it correctly **three time in a row** – if you make a mistake, start again!

VIOLIN/VIOLA

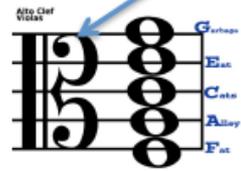


Basic notes on the Violin

A violinandviola.co.uk Helpful Handout

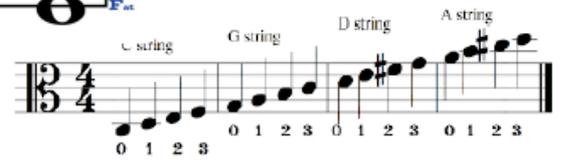


***Violas use a different 'clef' to most instruments: The ALTO clef**
-Middle C is on the middle line!-



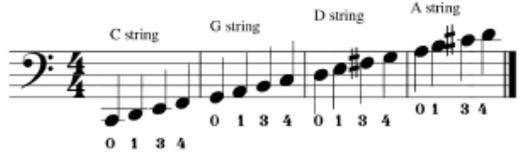
Basic notes on the Viola

A violinandviola.co.uk Helpful Handout



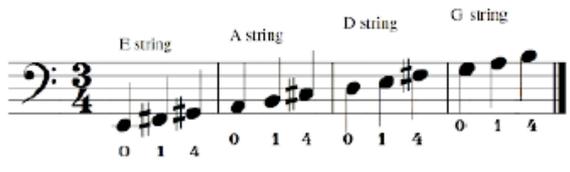
Basic notes on the Cello

A violinandviola.co.uk Helpful Handout



Basic notes on the Double Bass

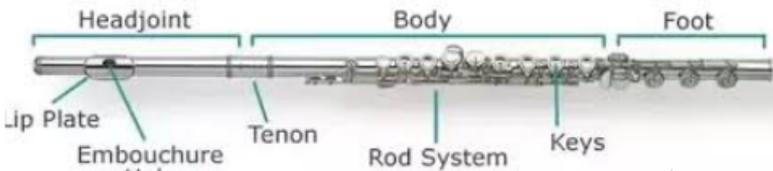
A violinandviola.co.uk Helpful Handout



Woodwind (Flute, Oboe, Clarinet, Saxophone, Bassoon)

In woodwind instruments the player either: causes a reed to vibrate, which agitates the column of air (as in a clarinet, oboe or bassoon) or blows across the edge of an open hole (as in a flute).

How to Practice: IDENTIFY THE PROBLEM AREAS: Practice the parts you can't play (not the parts you can) first:
 - Use a metronome - Play it slowly, then speed it up - Try the part in different rhythms so that you get the pitches accurate
 - Aim to play it correctly **three time in a row** – if you make a mistake, start again!



Flute Fingering Chart www.jennifercluff.com

Low octave

C	C# or D \flat	D	D# or E \flat
E	F	F# or G \flat	G
G# or A \flat	A	A# or B \flat	B

Essential Range Oboe Fingering Chart

Left-Hand Notes

C	B	B \flat	A	A \flat	G
---	---	-----------	---	-----------	---

Right-Hand Notes

F	F	E	E \flat	D	D \flat
---	---	---	-----------	---	-----------



Essential Range Clarinet Fingering Chart

Throat Tones & P's

B	A	G	G	F	F
---	---	---	---	---	---

Left-Hand Notes

B	B	A	G	G	F
---	---	---	---	---	---

Saxophone Fingering

C	D	E	F	G	A	B	C
---	---	---	---	---	---	---	---

Bassoon Fingering

A \flat - B \flat	B	C	C \sharp - D \flat	D	D \sharp - E \flat
E	F	F \sharp - G \flat	G	G \sharp - A \flat	A

A. Key Terms

Keyword	Description
1. Line	Line is the path left by a moving point. For example, a pencil or a brush dipped in paint. A line can be horizontal, diagonal or curved and can also change length.
2. Shape	A shape is an area enclosed by a line. It could be just an outline or it could be shaded in. Shapes can be geometric or irregular.
3. Form	Form is a three dimensional shape, such as a cube, sphere or cone. Sculpture and 3D design are about creating forms.
4. Colour	Red, yellow and blue are primary colours, which means they can't be mixed using any other colours. In theory, all other colours can be mixed from these three colours.
5. Tertiary Colours	Tertiary colours are created by mixing a primary colour and the secondary colour next to it on the colour wheel.
6. Complementary Colours	Complementary colours are colours that are opposite each other on the colour wheel. When complementary colours are used together they create contrast. Adding a colour's complimentary colour will usually make a darker shade. This is often preferable to adding black.
7. Pattern	A design that is created by repeating lines, shapes, tones or colours. The design used to create a pattern is often referred to as a motif. Motifs can be simple shapes or complex arrangements

Keyword	Description
8. Apply	To use knowledge, skills and understanding and to employ appropriate techniques when developing and progressing ideas.
9. Develop	To take forward, change, improve or build on an idea, theme or starting point.
10. Investigate	To enquire into, examine in depth, and/or analyse the relevance of a chosen subject and associated sources.
11. Realise	To achieve, attain and/or accomplish your intentions.

C. Art Styles



- 16. Ndebele art originates from the Ndebele tribe in South Africa
- 17. Traditionally Ndebele women would paint their houses in this style to celebrate events in their family
- 18. Traditionally locally available materials such as clay and dung were used.
- 19. Today acrylic paint is used
- 20. Esther Mahlangu is a famous Ndebele Artist
- 21. Esther Mahlangu was born in 1935 and is still alive.

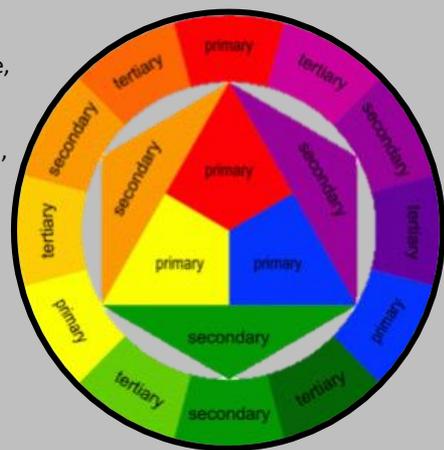
C. Colour Theory

Key terms 4 – 6 refer to the colour wheel.

- 13. Warm colours are colours on the red side of the wheel. These are red and include orange, yellow and browns.
- 14. Cool colours are colours on the blue side of the wheel. These are blue and include green, purple and most greys.
- 15.

Primary	Secondary
red + yellow	=orange
red + blue	=purple
blue + yellow	=green

12. This is called a **Colour Wheel**.



Key words:

- 1. Bacteria** – single celled organisms. Some can be harmful to humans.
- 2. Pathogenic** – harmful or causing disease
- 3. Equipment** – the tools used in practical lessons

Hygiene – routines that are necessary for good health. These usually involve cleanliness

- 4. Food hygiene** – routines that should be followed to avoid potential health hazards in food.
- 5. Personal hygiene** – routines that should be followed by people handling food to avoid contaminating food. E.g. Contaminated hands will spread bacteria around a kitchen very quickly, so having good personal hygiene is important
- 5. The four C's** - Essential for maintaining food safety. They are **Cleaning, Cooking, Chilling, Cross contamination**
- 6. Cross contamination**– transferring bacteria that should not be in food from one place to another. E.g. bacteria on unwashed hands will contaminate food.
- 9. Potential** – The possibility of something happening in the future
- 10. Hazard** - anything that can cause harm or danger
- 11. Recipe** – A plan used to inform the cook or chef how to make a 'dish'.
- 12. Ingredients** – the raw food used to make a recipe

- 8 guidelines for a healthy diet**
1. Base your meals on **starchy carbohydrates**
 2. Eat lots of fruit and vegetables (**5-7 portions per day**)
 3. Eat plenty of fish
 4. Cut down on **sugar** and **saturated fats**
 5. Have no **more than 6gs of salt** a day
 6. Be active and be a healthy weight
 7. Drink **6-8 glasses of water** a day
 8. Don't skip breakfast

Key routines for Food Hygiene and Safety in the food room					
Personal Hygiene		Why?	Safety rules		Why?
P1. Wash hands in hot soapy water		To kill bacteria on your hands to stop contamination	S1. Use oven gloves		To stop injury – burns from baking trays
P2. Tie long hair back		To prevent hair going into the products you cook	S2. Wash up in hot soapy water		To stop cross contamination and kill bacteria
P3. Wear an apron		To protect your uniform and to prevent bacteria from your clothes contaminating your food	S3. Bags, blazers and coats on hooks at all times		To prevent injury – tripping up or falling over
P4. Roll sleeves up		To prevent bacteria contaminating your food	S4. Pan handles in 'safe' position		To prevent a fire and injuring from burns
P5. Remove jewellery		To prevent contamination of food by bacteria that live on jewellery.	S5 Chairs under the desk or stacked		To prevent injury – tripping up or falling over

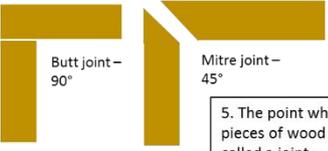
Keywords : skills and equipment					
Skills		How?	Equipment		Function?
SK1. Claw grip		Fingers are held in a claw shape to hold food steady while slicing or cutting.	E1. Knife (plural - knives)		to cut, chop and slice food
SK2. Bridge hold		Use thumb and forefinger and grip either side of the ingredient. Use knife under bridge to cut.	E2. Grater		To quickly reduce the size of food products to very small pieces or shreds.
SK3. peeling		Removing the outer skin or covering of fruit and vegetables	E3. chopping board		To prepare food on especially when using knives. Using a colour coded system helps to prevent cross contamination
SK4. slicing		Cutting food into slices. e.g. Slice the carrot thinly	E4. saucepan		Used to boil, simmer or poach foods in.
SK5. chopping		To cut food into small pieces e.g. chop the onion in small, evenly sized pieces.	E5. Vegetable peeler		A special knife for removing skin or peel from fruit and vegetables.
SK6. grating		To reduce food into fine shreds by rubbing it on a grater.	E6. Measuring jug		Used to measure liquids e.g. water , milk accurately in millilitres (ml)

Materials And Keywords

<p>Manufactured— made by machine.</p> 	<p>Ball bearing—A circular hard steel ball.</p> 	<p>Acrylic plastic— Flat plastic that resembles glass.</p> 	<p>Plywood— A sandwich of thin pieces of wood.</p> 	<p>Mitre—A 45° cut in any material.</p> 
---	--	---	---	--



1. Measure the wood carefully with a steel rule. Draw a line with a sharp pencil.
2. You must use a tri square to draw a 90° line on the wood
3. You must cut in a waste part of the wood. Draw TWO lines (black) and cut in the middle (white).
4. Cut the wood using a bench hook and tenon saw
5. The point where two pieces of wood meet is called a joint.
6. If you have a joint that is not 90° you must cut it so it fits perfectly.



Steel— metal with hardness, elasticity, and strength.

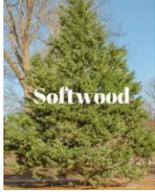


Wood fibres— small particles of wood - often glued together to make manufactured board.

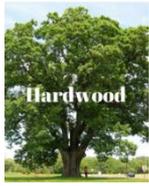


Types Of Wood

Softwood—noun The wood from a conifer (such as pine, fir, or spruce) as distinguished from that of broadleaved trees.



Hardwood—noun The hard, compact wood or timber of various trees, as the oak, cherry, maple, or mahogany.



Properties and characteristics of materials

	Absorbency	To be able to soak up liquid easily.
	Strength	The capacity of an object or substance to withstand great force or pressure.
	Elasticity	The ability of an object or material to resume its normal shape after being stretched or compressed; stretchiness.
	Plasticity	The quality of being easily shaped or moulded.
	Malleability	To be able to be hammered or pressed into shape without breaking or cracking.
	Density	The quantity of mass per unit volume of a substance
	Effectiveness	The degree to which something is successful in producing a desired result; success.
	Durability	The ability to withstand wear, pressure, or damage.

Understand the making Process

1 Preparation	Drawing, CAD, sketches, plans.
2 Marking Out	Pencil, scribe, steel rule, tri square, marking gauge, calipers, centre punch.
3 Modification	Saw, jigsaw, scroll saw, laser cutter, pliers, hammer, drill, file, glass paper.
4 Joining	Riveting gun, spanner, screwdriver, hot glue, gun, soldering iron, nail gun.
5 Finishing	Hand sander, glass paper, disc sander, buffing wheel, polish, spray paint, varnish.

Tools And Equipment

<p>Coping saw – cutting curves</p> 	<p>Tenon Saw – cutting straight</p> 	<p>Bench hook – holding wood</p> 	<p>Glass paper – file filing</p> 
<p>Hand file – rapid filing</p> 	<p>Pillar drill – making holes</p> 	<p>Steel rule – accurate measure</p> 	<p>Disc sander – rapid sanding</p> 

Health & Safety Legislation

Health and Safety at work Act	Personal Protective Equipment	Manual Handling Operations	Control of Substances Hazardous to Health	Reporting of Injuries RIDDOR
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Environmental Issues

- Negative Impacts
 - Energy Consumption
 - E-Waste and health →
- Recycling and Sustainability
- Positive Impacts
 - Climate monitoring
 - Teleworking
 - Reduced printing



Privacy and Security

- Location monitoring
- Mobile Phone providers
- Surveillance Cameras
- Encrypted messaging
- Data Protection Act
- Cybersecurity
 - Threats and Defences

Types of Software

- Proprietary
 - e.g. Windows, iOS and MacOS
 - Microsoft Office, Adobe Photoshop
- Open Source
 - e.g. Linux and Android
 - LibreOffice, The GIMP
- Cost versus support model



Emerging Technologies

- Robotics, AI
- Internet of Things. Quantum Computing.

Legislation

- Copyrights, Designs & Patents Act 1988
 - Intellectual Property
 - Hardware patents
- Computer Misuse Act
 - Hacking / viruses
- Data Protection Act 1998
 - Protects Personal data
 - 8 principles
 - Privacy, accuracy, security
- Software Licensing
 - Volume Licensing
 - Personal use licensing

Ethical Impact

- Inclusion / Accessibility
- The Digital Divide
- Professionalism
- Codes of Conduct

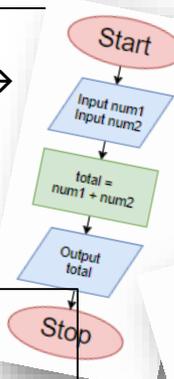
Use Quizlet study sets 06... to learn the definitions associated with this



Emerging trends, issues and impact	6.1.1	understand the environmental impact of technology (health, energy use, resources) on society
	6.1.2	understand the ethical impact of using technology (privacy, inclusion, professionalism) on society
	6.1.3	understand the legal impact of using technology (intellectual property, patents, licensing, open source and proprietary software, cyber-security) on society

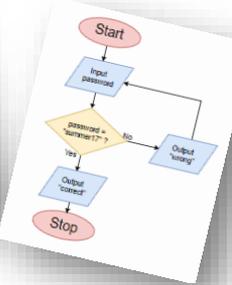
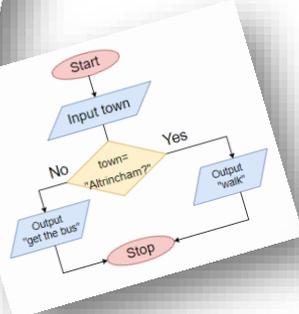
Algorithms

- Sequence, Selection, Iteration →
- Flowcharts
 - Interpreting
 - Creating your own
 - Using symbols correctly



```

for passes in range(count-1):
    for num in range(count-1):
        if a[num+1] < a[num]:
            temp = a[num]
            a[num] = a[num + 1]
            a[num+1] = temp
    
```



Pseudo-code

- Written Description
- Write an Algorithm
- Complete an unfinished Algorithm
- Code in a HLL (e.g. Python)

Evaluating Algorithms

- Importance of data structure
- Fitness for purpose
- Efficiency (Big "O" Notation)

Designing Solutions

- Analyse a Problem
- Decompose it
- Abstract the Data Structure
- Identify inputs, process, outputs
- Design an Algorithm

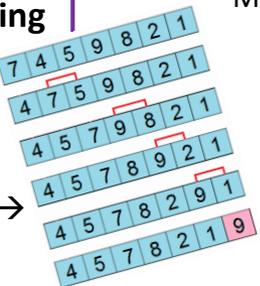
Bubble sort	Works by repeatedly going through the list to be sorted, comparing each pair of adjacent elements. If the elements are in the wrong order they are swapped, else they are left in position.
Insertion sort	Sorts data one element at a time. The algorithm takes one data item from the list and places it in the correct location in the list. This process is repeated until there are no more unsorted items in the list. More efficient than bubble sort.
Merge sort	This is a two-stage sort. Firstly the list is split in half into sublists repeatedly. The algorithm stops splitting the lists when each list has only 1 element in it. The second stage involves repeatedly merging the lists in order until there is only one sub list remaining.

Interpreting Algorithms

- Purpose of a given algorithm
- Explain how it works
- Determine output for given inputs
- Write a Trace Table
- Identify Logic Errors
- Discuss efficiency

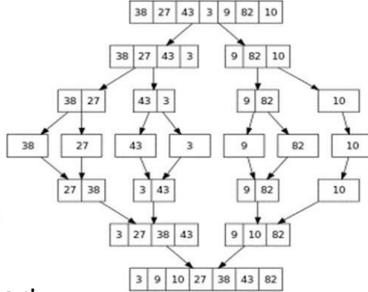
Searching & Sorting

- Searches
 - Binary
 - Linear
- Sorts
 - Bubble →
 - Merge
- Pros and Cons



Bubble sort

Merge sort



```

SET <var> TO <expression>
SEND <expression> TO DISPLAY
RECEIVE <var> FROM (<type>)
KEYBOARD
    
```

```

IF <expression> THEN
    code to run if true
ELSE
    code to run if false
END IF
    
```

```

FOR <counter> FROM <a> TO <b>
    code that repeats
END FOR
    
```

```

WHILE <condition> DO
    code that repeats
END WHILE
or
REPEAT code UNTIL ...
    
```

Semana 1

Saludos Greetings

¡Hola!	Hello!	¿Cómo te llamas?	What are you called?
¿Qué tal?	How are you?	Me llamo...	I am called...
Bien, gracias.	Fine, thanks.	¿Dónde vives?	Where do you live?
fenomenal	great	Vivo en...	I live in...
regular	not bad	¡Hasta luego!	See you later!
fatal	awful	¡Adiós!	Goodbye!

Semana 2

¿Qué tipo de persona eres? What sort of person are you?

Soy...	I am...	listo/a	clever
divertido/a	amusing	serio/a	serious
estupendo/a	brilliant	simpático/a	nice, kind
fenomenal	fantastic	sincero/a	sincere
generoso/a	generous	tímido/a	shy
genial	great	tonto/a	silly
guay	cool	tranquilo/a	quiet, calm

Semana 3

Mi pasión My passion

Mi pasión es...	My passion is...	el fútbol	football
Mi héroe es...	My hero is...	la música	music
el deporte	sport	el tenis	tennis

¿Tienes hermanos? Do you have any brothers or sisters?

Tengo...	I have...	un hermano	a half- brother/stepbrother
una hermana	a sister	No tengo hermanos.	I don't have any brothers or sisters.
un hermano	a brother	Soy hijo único/hija única.	I am an only child. (male/ female)
una hermanastra	a half-sister/stepsister		

Semana 4

Los números 1 - 31 Numbers 1 - 31

uno	1	seis	6
dos	2	siete	7
tres	3	ocho	8
cuatro	4	nueve	9
cinco	5	diez	10

once	11	diecisiete	17
doce	12	dieciocho	18
trece	13	diecinueve	19
catorce	14	veinte	20
quince	15	veintiuno	21
dieciséis	16	treinta	30

¿Cuántos años tienes? How old are you?

Tengo... años.	I am... years old.	mayo	May
¿Cuándo es tu cumpleaños?	When is your birthday?	junio	June
Mi cumpleaños es el... de...	My birthday is the... of...	julio	July
enero	January	agosto	August
febrero	February	septiembre	September
marzo	March	octubre	October
abril	April	noviembre	November
		diciembre	December

Semana 6

Los colores Colours

blanco/a	white	gris	grey
amarillo/a	yellow	marrón	brown
negro/a	black	azul	blue
rojo/a	red	rosa	pink
verde	green	naranja	orange

¿Tienes mascotas? Do you have pets?

Tengo...	I have...	un pez	a fish
un caballo	a horse	un ratón	a mouse
una cobaya	a guinea pig	una serpiente	a snake
un conejo	a rabbit	No tengo mascotas.	I don't have any pets.
un gato	a cat	¿Cómo es?	What is it like?
un perro	a dog	¿Cómo son?	What are they like?

Palabras muy frecuentes High-frequency words

bastante	quite	también	also, too
no	no/not	tu/tus	your
mi/mis	my	un poco	a bit
muy	very	y	and
pero	but		

Semana 1

¿Qué te gusta hacer? What do you like to do

Me gusta...	I like...
Me gusta mucho...	I really like...
No me gusta...	I don't like...
No me gusta nada...	I don't like at all...
chatear	to chat online
escribir correos	to write emails
escuchar música	to listen to music
jugar a los videojuegos	to play videogames
leer	to read
mandar SMS	to send text messages

Semana 2

navegar por Internet	to surf the net
salir con mis amigos	to go out with my friends
ver la televisión	to watch TV
porque es...	because it is...
porque no es...	because it is not...
interesante	interesting
guay	cool
divertido/a	amusing, funny
estúpido/a	stupid
aburrido/a	boring

Semana 5

¿Qué deportes haces? What sports do you do?

Hago artes marciales.	I do martial arts.	Juego al tenis.	I play tennis.
Hago atletismo.	I do athletics.	Juego al voleibol.	I play volleyball.
Hago equitación.	I do/go horseriding.	iMe gusta!	I like it!
Hago gimnasia.	I do gymnastics.	iMe gusta mucho!	I like it a lot!
Hago natación.	I do/go swimming.	iMe gusta muchísimo!	I really, really like it!
Juego al baloncesto.	I play basketball.	iMe encanta!	I love it!
Juego al fútbol.	I play football.		

Los días de la semana The days of the week

lunes	Monday	domingo	Sunday
martes	Tuesday	los lunes	on Mondays, every Monday
miércoles	Wednesday	los martes	on Tuesdays, every Tuesday
jueves	Thursday		
viernes	Friday		
sábado	Saturday		

Semana 3

¿Qué haces en tu tiempo libre? What do you do in your spare time?

bailo	I dance	monto en bici	I ride my bike
canto karaoke	I sing karaoke	saco fotos	I take photos
hablo con mis amigos	I talk with my friends	toco la guitarra	I play the guitar

Expresiones de frecuencia Expressions of frequency

a veces	sometimes	nunca	never
de vez en cuando	from time to time	todos los días	every day

Algunas preguntas Some questions

¿Qué...?	What/Which...?	¿Cómo...?	How/What...?
¿Cuándo...?	When...?	¿Cuántos...?	How many...?
¿Dónde...?	Where...?		

Palabras muy frecuentes High-frequency words

con	with	pero	but
cuando	when	porque	because
generalmente	generally	sí	yes
mucho	a lot	también	also, too
no	no	y	and
o	or	¿Y tú?	And you?

Semana 4

¿Qué tiempo hace? What's the weather like?

hace calor	it's hot	llueve	it's raining
hace frío	it's cold	nieva	it's snowing
hace sol	it's sunny	¿Qué haces cuando	What do you do when
hace buen tiempo	it's nice weather	llueve?	it's raining?

Las estaciones The seasons

la primavera	spring	el otoño	autumn
el verano	summer	el invierno	winter

Estrategia 2

Cognates and near-cognates

A **cognate** is spelt the same in English as in Spanish. Most of the time they mean exactly the same, too, for example:
piano → piano

In Spanish there are also lots of words that look similar to English words but are not identical. These words are called **near-cognates**. They often have exactly the same meaning as the English (but not always!). How many of these words can you find on these two pages? Here's one to get you started:
música → music

However, there are some words that look identical, or almost identical, to English words but have different meanings. These are often called **false friends**. For example, you have met the Spanish word **once**. This doesn't mean the same as the English word 'once'! Can you remember what it does mean, and how to pronounce it?

So the lesson from this is to use your knowledge of English to help you work out the meanings of Spanish words, but be careful. There are some that can trip you up.



Semaine 1

**On se rencontre
(Meeting people)**

Bonjour! Hi!
 Comment t'appelles-tu? What is your name?
 Je m'appelle... my name is...
 Comment ca s'écrit? How do you spell that?
 Ca s'écrit ... It is spelt...
 Ca va? how are you?
 Oui, ca va bien, merci Yes, I am OK, thanks.
 Pas mal. Not bad.
 Comme ci, comme ca so-so
 Non ca ne va pas No, I am OK.

**Les salutations
(Greetings)**

Salut Hi
 Bonne après-midi Good afternoon
 Bon weekend Have a nice weekend
 Bonne journée Have a nice day
 Bon appetit Have a nice meal
 Bonsoir Good evening
 Au revoir! Good Bye
 A bientôt! See you soon
 A plus tard! See you later
 A Dieu! Farewell

Semaine 2

**Les nombre 1 -10
(Numbers 1-10)**

Zero	0	Six	6
Un	1	Sept	7
Deux	2	Huit	8
Trois	3	Neuf	9
Quatre	4	Dix	10
Cinq	5		

Semaine 3

**Les nombre 11-31
(Numbers 11-31)**

onze	11	vingt-et-un	21
douze	12	vingt-deux	22
treize	13	vingt-trois	23
quatorze	14	vingt-quatre	24
quinze	15	vingt-cinq	25
seize	16	vingt-six	26
dix-sept	17	vingt-sept	27
dix-huit	18	vingt-huit	28
dix-neuf	19	vingt-neuf	29
vingt	20	trente	30
trente-et-un	31		

Semaine 4

**Les affaires pour le collège
(School subjects)**

Qu'est-ce que c'est?	What is this?
C'est ...	it is ...
Un cahier	an exercise book
Un carnet de textes	a homework diary
Un crayon	a pencil
Un sac	a bag
Un stylo	a pen
Un livre	a book
Un portable	a mobile phone
Un porte-monnaie	a purse
Une gomme	a rubber
Une règle	a ruler
Une calculatrice	a calculator
Une trousse	a pencil case
Une gomme	a rubber
Une règle	a ruler
Une calculatrice	a calculator
Une trousse	a pencil case
Une cle USB	a USB drive
Ce sont ...	these are...
Des ciseaux	scissors
Des feutres	markers
Des feuilles	(line) papers
Des jeux	games

**Les jours de la semaine
(The days of the week)**

lundi	Monday
mardi	Tuesday
mercredi	Wednesday
jeudi	Thursday
vendredi	Friday
samedi	Saturday
dimanche	Sunday

Stratégie 1

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Semaine 5

**Les ages et les anniversaires
(Ages and birthdays)**

Quel age as-tu?	How old are you?
J'ai ... ans	I am ... years old
Quelle est la date de ton anniversaire?	When is your birthday?
Mon anniversaire est le ...	My birthday is on the

**Les mois de l'année
(The months of the year)**

Janvier	January	Juillet	July
Février	February	Aout	August
Mars	March	Septembre	September
Avril	April	Octobre	October
Mai	May	Novembre	November
Juin	June	Decembre	December

Semaine 6

**Ma famille
(my family)**

J'ai ...	I have...		
Je n'ai pas de...	I do not have ...		
Tu as ...?	do you have ...?		
As-tu ...?	do you have ...?		
un frère	A brother	une sœur	a sister
un frère qui s'appelle ...	a brother called...		
deux sœurs qui s'appellent...	two sisters called...		
un/mon ami(e)	a/my friend		
un/mon copain	a/my friend	une/ma copine	a/my friend
un/mon demi-frère	a/my brother in law	une/ma demi-sœur	a/my sister-in-law
un/mon grand-père	a/my grandfather	une/ma grand-mère	a/my grandmother
un/mon oncle	a/my uncle	une/ma tante	a/my aunt
un/mon père	a/my father	une/ma famille	a/my family
Je suis fils unique	I am the only child (male)		
Je suis fille unique	I am the onlychild (female)		

Semaine 7

**Les animaux domestiques
(Pets)**

As-tu un animal?	Do you have a pet?	Une araignée	a spider
J'ai ...	I have ...	Une souris	a mouse
C'est ...	It is ...	Une girafe	a giraffe
Un animal domestique	a pet	Une tortue	a tortoise
Un chat	a cat	Une vache	a cow
Un chien	a dog	Une sirène	a mermaid
Un cheval	a horse	Une fée	a fairy
Un rat	a rat		
Un serpent	a snake		
Un hamster	a hamster	Ce sont ...	these are...
Un cochon d'inde	a guinea-pig	Des chevaux	horses
Un lapin	a rabbit	Des animaux	animals
Un oiseau	a bird	Des oiseaux	birds
Un poisson	a fish	Des dragons	dragons
Je n'ai pas d'animal	I don't have an any pets.		



Mon autoportrait • My self-portrait

les animaux (m pl)	<i>animals</i>
les araignées (f pl)	<i>spiders</i>
la capoeira	<i>a Brazilian dance</i>
les chats (m pl)	<i>cats</i>
les chiens (m pl)	<i>dogs</i>
le cinéma	<i>cinema</i>
les consoles de jeux (f pl)	<i>games consoles</i>
la danse	<i>dancing</i>
le foot	<i>football</i>
les gâteaux (m pl)	<i>cakes</i>
le hard rock	<i>hard rock</i>
l'injustice (f)	<i>injustice</i>
les insectes (m pl)	<i>insects</i>
les jeux vidéo (m pl)	<i>video games</i>
les livres (m pl)	<i>books</i>
la musique	<i>music</i>
les mangas (m pl)	<i>mangas</i>
les maths (f pl)	<i>maths</i>
les pizzas (f pl)	<i>pizzas</i>

Semaine 1

la poésie	<i>poetry</i>
le racisme	<i>racism</i>
le rap	<i>rap</i>
le reggae	<i>reggae</i>
les reptiles (m pl)	<i>reptiles</i>
le roller	<i>roller-skating</i>
le rugby	<i>rugby</i>
le skate	<i>skateboarding</i>
les spaghettis (m pl)	<i>spaghetti</i>
le sport	<i>sport</i>
la tektonik	<i>tektonik (dance)</i>
la télé	<i>TV</i>
le tennis	<i>tennis</i>
le théâtre	<i>theatre, drama</i>
les voyages (m pl)	<i>journeys</i>
la violence	<i>violence</i>

Semaine 4

Moi et les autres • Me and other people

je suis	<i>I am</i>
je ne suis pas	<i>I am not</i>
tu es	<i>you are</i>
il/elle s'appelle	<i>he/she is called</i>
il/elle est	<i>he/she is</i>
beau/belle	<i>good-looking</i>
branché(e)	<i>trendy</i>
charmant(e)	<i>charming</i>
cool	<i>cool</i>
curieux/curieuse	<i>curious</i>
de taille moyenne	<i>average height</i>
drôle	<i>funny</i>
généreux/généreuse	<i>generous</i>
gentil(le)	<i>nice</i>
grand(e)	<i>tall</i>
impatient(e)	<i>impatient</i>
intelligent(e)	<i>intelligent</i>
modeste	<i>modest</i>
petit(e)	<i>small</i>
poli(e)	<i>polite</i>

Semaine 5

Les yeux et les cheveux • Eyes and hair

j'ai	<i>I have</i>
tu as	<i>you have</i>
il/elle a	<i>he/she has</i>
mon ami(e) a	<i>my friend has</i>
J'ai les yeux bleus/verts/ gris/marron.	<i>I have blue/green/grey/ brown eyes.</i>
J'ai les cheveux ...	<i>I have ... hair.</i>
longs/courts/mi-longs	<i>long/short/ medium-length</i>
frisés/raides	<i>curly/straight</i>
blonds/bruns/noirs/roux	<i>blond/brown/black/red</i>

Les opinions • Opinions

j'aime	<i>I like</i>
je n'aime pas	<i>I don't like</i>
Tu aimes ... ?	<i>Do you like ... ?</i>
il/elle aime	<i>he/she likes</i>
Oui, j'aime ça.	<i>Yes, I like that.</i>
Non, je n'aime pas ça.	<i>No, I don't like that.</i>
Tu es d'accord?	<i>Do you agree?</i>
Je suis d'accord.	<i>I agree.</i>
Je ne suis pas d'accord.	<i>I don't agree.</i>
C'est ...	<i>It's ...</i>
génial	<i>great</i>
cool	<i>cool</i>
bien	<i>good</i>
ennuyeux	<i>boring</i>
nul	<i> rubbish</i>
essentiel	<i>essential</i>
important	<i>important</i>
Ce n'est pas bien.	<i>It's not good.</i>

Semaine 2

Semaine 3

Mon kit de survie • My survival kit

j'ai	<i>I have</i>
je n'ai pas de	<i>I don't have</i>
tu as	<i>you have</i>
il/elle a	<i>he/she has</i>
un appareil photo	<i>a camera</i>
une barre de céréales	<i>a cereal bar</i>
un bâton de colle	<i>a gluestick</i>
des chips (f pl)	<i>crisps</i>
des clés (f pl)	<i>keys</i>
une clé USB	<i>a memory stick</i>
une gourde	<i>a water bottle</i>
des kleenex (m pl)	<i>tissues</i>
des lunettes de soleil (f pl)	<i>sunglasses</i>
un magazine	<i>a magazine</i>
un miroir	<i>a mirror</i>
un portable	<i>a mobile phone</i>
un portemonnaie	<i>a purse</i>
un paquet de mouchoirs	<i>a packet of tissues</i>
un sac	<i>a bag</i>
des surligneurs fluo (m pl)	<i>fluorescent highlighters</i>
une trousse	<i>a pencil case</i>

Les musiciens • Musicians

Il/Elle joue ...	<i>He/She plays ...</i>
de la batterie	<i>the drums</i>
de la guitare	<i>the guitar</i>
Il/Elle chante.	<i>He/ she sings.</i>
Il/Elle a beaucoup de talent.	<i>He/She has a lot of talent.</i>

Semaine 6

Les mots essentiels • High-frequency words

et	<i>and</i>
aussi	<i>also</i>
mais	<i>but</i>
très	<i>very</i>
assez	<i>quite</i>
toujours	<i>always</i>
Qu'est-ce que ... ?	<i>What ... ?</i>
Qui ... ?	<i>Who ... ?</i>

+ vocabulary learnt in the half term

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