Knowledge Navigator 2022/2023 Cycle 1

Year 7

Name:

Form:

Determination | Integrity | Trust

DIXONS COTTINGLEY ACADEMY

		Week 1		Week 2		Week 3		Week 4		Week 5
Monday	29/08/22	Bank holiday	05/09/22	French Page 20 Week 2	12/09/22	French Page 20 Week 3	19/09/22	French Page 20 Week 4 Hegarty Maths	26/09/22	French Page 20 Week 5 Hegarty Maths
Tuesday	30/08/22	Year 7 only	06/09/22	Science Page 12 Box 1/2/7	13/09/22	Science Page 12 Box 3/4/7	20/09/22	Science Page 12 Box 5/6/7	27/09/22	Science Page 9 Box 1/2
Wednesday	31/08/22	All students	07/09/22	History Page 24 Box A Sparx Maths	14/09/22	Geography Page 22 Box 1 Sparx Maths	21/09/22	History Page 24 Box B Sparx Maths	28/09/22	Geography Page 22 Box 2 Sparx Maths
Thursday	01/09/22	All students	08/09/22	English Page 2 Box B	15/09/22	English Page 3 Box C	22/09/22	English Page 3 Box D	29/09/22	English Page 3 Box E
Friday	02/09/22	All students	09/09/22	Spellings Week 2	16/09/22	Spellings Week 3	23/09/22	Spellings Week 4	30/09/22	Spellings Week 5

		Week 6		Week 7		Week 8		Week 9		Week 10
Monday	03/10/22	French Page 21 Week 6 Hegarty Maths	10/10/22	French Page 21 Week 7 Hegarty Maths	17/10/22	French Page 21 Week 8 Hegarty Maths	07/11/22	French Page 21 Week 9 Hegarty Maths	14/11/22	French Page 21 Week 10 Hegarty Maths
Tuesday	04/10/22	Science Page 9 Box 3/4	11/10/22	Science Page 9 Box 2/5	18/10/22	Science Page 9 Box 3/4	08/11/22	Science Page 10 Box 1/2	15/11/22	Science Page 10 Box 3/4
Wednesday	05/10/22	History Page 24 Box C Sparx Maths	12/10/22	Geography Page 22 Box 3 Sparx Maths	19/10/22	History Page 25 Box D Sparx Maths	09/11/22	Geography Page 23 Box 4 Sparx Maths	16/11/22	History Page 25 Box E Sparx Maths
Thursday	06/10/22	English Page 4 Box F	13/10/22	English Page 2 Box A	20/10/22	English Page 2 Box B	10/11/22	English Page 3 Box C	17/11/22	Staff only
Friday	07/10/22	Spellings Week 6	14/10/22	Spellings Week 7	21/10/22	Spellings Week 8	11/11/22	Spellings Week 9	18/11/22	Staff only

		Week 11		Week 12		Week 13
Monday	21/11/22	French Page 21 Week 11 Hegarty Maths	28/11/22	French Page 21 Week 12 Hegarty Maths	05/12/22	French Page 21 Week 13 Hegarty Maths
Tuesday	22/11/22	Science Page 10 Box 1/2	29/11/22	Science Page 11 Box 2/4	06/12/22	Science Page 11 Box 1/2
Wednesday	23/11/22	Geography Page 23 Box 5 Sparx Maths	30/11/22	History Page 25 Box F Sparx Maths	07/12/22	Geography Page 23 Box 6 Sparx Maths
Thursday	24/11/22	English Page 3 Box E	01/12/22	English Page 4 Box F	08/12/22	English Page 2 Box A
Friday	25/11/22	Spellings Week 11	02/12/22	Spellings Week 12	09/12/22	Spellings Week 13

DIXONS COTTINGLEY ACADEMY

YEAR 7

CYCLE 1 HOMEWORK

YEAR 7 KNOWLEDGE NAVIGATOR
CYCLE 1
CONTENTS PAGE

Box A: Key Themes		Box B: Key Terminology	
Power and cruelty	One of the main messages of the novel is that it underscores the danger in placing a cruel and manipulative person in a position of power	1. **Imagery**	Painting a picture with words. E.g.: 'there was a sickly-sweet stench about the place that had to be more than stagnant mud and water' (p137)
		2. **Flashback**	Looking back at something that has already happened. E.g.: Charlie is re-telling stories from home whilst imprisoned.
Family	Importantly, it is the reassurance and support of his family that ultimately helps relieve Tommo's guilt about the death of his father	3. **Tense**	Past, present and future. E.g.: Present tense relating to Charlies time in prison. Past tense recalling happier times.
		4. **Foreshadowing**	Hinting at or giving clues as to what is about to happen. E.g.: 'We are back at last at rest camp, **most of us anyway**' (p133) - suggesting that some won't make it back
Guilt and Grief	Morpurgo shows that guilt is often a natural accompaniment to grief, but that healing is only possible when one rids oneself of this guilt.	5. **Pathetic Fallacy**	When the weather or change in light reflects the feelings of the character or suggests something bad is about to happen. E.g.: 'At that moment the light floods into the trench…' (p130) symbolising the impending death of a soldier – the light resembling heaven.
		6. **Semantic Field**	A groups of words that have a similar meaning. E.g.: 'The blast of it throws us all to the ground, putting out lamps and plunging us into pungent darkness' (p165) words associated with violence.
Courage	Morpurgo's message is the inherent value of courage and suggests that people must always strive for bravery even in the face of potential consequences.	7. **Narrative Voice**	The person telling the story. Charlie is telling the story of Private Peaceful
		8. **Protagonist**	The main character of the story. E.g.: Charlie
Religion and Faith	*Private Peaceful* begins with an optimistic impression of religion and spirituality. Eventually he decides that there is only earth and mankind after all, and that there is no point in trying to believe otherwise.	9. **Antagonist**	A character who interferes with the protagonist. E.g.: Sergeant Hanley who hates Charlie and makes a point of causing him problems.
		10. **Colloquialism**	Styles of speech that are unique to a different parts of the country. E.g: 'Off you go, you **scallywag**, you,' (p13)

Box C: Context

1. World War 1 (WW1) 28th July 1914 to 11 November 1918

2. It is thought that approximately 16 million people died during World War 1.

3. Rural life in the early 1900's meant there was a class divide between the Lord of the Manor and his farm workers. Workers lived in tied properties, meaning that if you lost your job, you lost your home as well.

4. The Trenches – the front line where soldiers lived in readiness for the assault into no-mans land.

5. 306 soldiers were executed for cowardice, desertion and sleeping at their posts during WW1. These soldiers were pardoned in 2006.There is a memorial for those men at the National Arboretum.

Box D: key Vocabulary

1. Propaganda	Information that is biased or misleading and used to promote a political cause or point of view.
2. Conscription	Compulsory enrolment for a state service, typically the armed forces.
3. Cowardice	Excessive fear that prevents an individual from taking risks or facing danger.
4. Patriotism	The feeling of loving your country and being proud of it. Will protect your country
5. Desertion	The act of leaving the armed forces without permission.
6. Court Martial	A judicial court for trying soldiers of the armed forces accused of offences against military law
7. Enlistment	Voluntary action of joining the armed forces.
8. Mustard Gas	A poisonous gas used by the Germans in trench warfare against the British. Caused blindness, choking and breathing problems,. In severe cases, caused death.

Box E: Key Grammar Terminology to help you develop your analytical reading and writing and make it more interesting and accurate.

1. Declarative Sentence	A sentence that is a statement (declaration of fact) - e.g. 'Private Peaceful is a novel set in world war 1'
2. Interrogative Sentence	This is a sentence that is a question. E.g. 'What was the main message of Private Peaceful?'
3. Imperative Sentence	This sentence is a command. E.g. 'Do your homework now!'
4. Exclamatory Sentence	An exclamatory sentence carries a lot of emotion: excitement, anger, anticipation. E.g.' I have just been conscripted to go to war!'
5. Useful Conjunctions-Because, But, So-useful for joining ideas/sentences together	**Because** explains why something is true, **but** indicates a change of direction and **so** tells us that something has happened as a result of something else- in other words cause and effect.
6.Most frequently used Subordinating Conjunctions (These will help you to expand your sentences)	Before, after, If, when, even though, although, since, while, unless, whenever.
7. Topic Sentence	A topic sentence is a sentence that explains what your paragraph is about.
8. Concluding sentence	A sentence that summarises and concludes what your paragraph is about
9. Noun Phrase	The main character of the story. Eg: Charlie
10. Summarising	You will often be asked to summarise. This means to look for the key information iin a text (see box 10 for question prompts
11. Question words (these help to find key information in a text)	Who, what, where, when, why, how

English	Private Peaceful / War Poetry	CYCLE 1	Year 7

Box F: Poetry Terms

Free verse	A poem which has no regular rhythm or rhyme scheme.
Juxtaposition	A stark contrast between two ideas, words or phrases
Metaphor	Where two things are compared WITHOUT using as or like. They are compared by saying that one IS the other.
Personification	A figure of speech in which nonhuman things or abstract ideas are given human attributes.
Simile	A figure of speech in which two things are compared using the word "like" or "as."
Viewpoint	The position, place or perspective from which we are encouraged (or forced) to consider the events and characters within a text. Our view may be deliberately restricted so that we only receive one point of view, while other potential viewpoints are misrepresented or missing altogether.
Elegy	A mournful, melancholy poem, especially a funeral song or a lament for the dead
Caesura	A natural pause or break in a line of poetry, usually near the middle of the line.
Blank verse	A poem written in iambic pentameter (10 syllables per line) but doesn't rhyme
Alliteration	The repetition of the same consonant sounds at any place, but often at the beginning of words.
Enjambment	The running-over of a sentence or phrase from one poetic line to the next, without terminal punctuation.
Assonance	The repetition or a pattern of (the same) vowel sounds, as in the tongue twister.
symbolism	The use of symbols to represent ideas or qualities.
Connotation	Different meanings of a word.
Ambiguity	A word, statement, or situation with two or more possible meanings is said to be ambiguous.

BOX 1: Key facts

Symbols
= means equal to
≠ means not equal to
≡ means identical to
≤ means less than or equal to
< means less than
≥ means more than or equal to
> means more than
$\sqrt{}$ means square root

Metric conversions

mm is short for millimeters
cm is short for centimetres
m is short for metres
km is short for kilometres
ml is short for millilitres
cl is short for centilitres
l is short for litres
mg is short for milligrams
g is short for grams
kg is short for kilograms
t is short for tonne

Milli means one thousandth
Centi means one hundredth
Deci means one tenth
Deka means one ten
Hecto means one hundred
Kilo means one thousand

There are 10mm in 1cm
There are 100cm in 1m
There are 1000mm in 1m
There are 1000m in 1km

There are 10ml in 1cl
There are 1000ml in 1l
There are 1000 litres in 1 cubic metre

There are 10mg in 1cg
There are 100cg in 1g
There are 1000mg in 1g
There are 1000g in 1kg
There are 1000kgs in 1 tonne

Root - The inverse of an index.	
Square Root	e.g. $\sqrt{16}$ = **4**
Cube Root	e.g. $\sqrt[3]{64}$ = **4**

Index - Tells us how many times to use the number in a repeated multiplication.	
Square Number	e.g. 4^2 = **4 x 4 = 16**
Cube Number	e.g. 4^3 = **4 x 4 x 4 = 64**
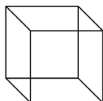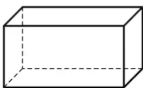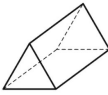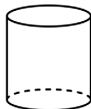
ONE	TWO	THREE	FOUR	FIVE	SIX
1 x 1 = 1	2 x 1 = 2	3 x 1 = 3	4 x 1 = 4	5 x 1 = 5	6 x 1 = 6
1 x 2 = 2	2 x 2 = 4	3 x 2 = 6	4 x 2 = 8	5 x 2 = 10	6 x 2 = 12
1 x 3 = 3	2 x 3 = 6	3 x 3 = 9	4 x 3 = 12	5 x 3 = 15	6 x 3 = 18
1 x 4 = 4	2 x 4 = 8	3 x 4 = 12	4 x 4 = 16	5 x 4 = 20	6 x 4 = 24
1 x 5 = 5	2 x 5 = 10	3 x 5 = 15	4 x 5 = 20	5 x 5 = 25	6 x 5 = 30
1 x 6 = 6	2 x 6 = 12	3 x 6 = 18	4 x 6 = 24	5 x 6 = 30	6 x 6 = 36
1 x 7 = 7	2 x 7 = 14	3 x 7 = 21	4 x 7 = 28	5 x 7 = 35	6 x 7 = 42
1 x 8 = 8	2 x 8 = 16	3 x 8 = 24	4 x 8 = 32	5 x 8 = 40	6 x 8 = 48
1 x 9 = 9	2 x 9 = 18	3 x 9 = 27	4 x 9 = 36	5 x 9 = 45	6 x 9 = 54
1 x 10 = 10	2 x 10 = 20	3 x 10 = 30	4 x 10 = 40	5 x 10 = 50	6 x 10 = 60
1 x 11 = 11	2 x 11 = 22	3 x 11 = 33	4 x 11 = 44	5 x 11 = 55	6 x 11 = 66
1 x 12 = 12	2 x 12 = 24	3 x 12 = 36	4 x 12 = 48	5 x 12 = 60	6 x 12 = 72

SEVEN	EIGHT	NINE	TEN	ELEVEN	TWELVE
7 x 1 = 7	8 x 1 = 8	9 x 1 = 9	10 x 1 = 10	11 x 1 = 11	12 x 1 = 12
7 x 2 = 14	8 x 2 = 16	9 x 2 = 18	10 x 2 = 20	11 x 2 = 22	12 x 2 = 24
7 x 3 = 21	8 x 3 = 24	9 x 3 = 27	10 x 3 = 30	11 x 3 = 33	12 x 3 = 36
7 x 4 = 28	8 x 4 = 32	9 x 4 = 36	10 x 4 = 40	11 x 4 = 44	12 x 4 = 48
7 x 5 = 35	8 x 5 = 40	9 x 5 = 45	10 x 5 = 50	11 x 5 = 55	12 x 5 = 60
7 x 6 = 42	8 x 6 = 48	9 x 6 = 54	10 x 6 = 60	11 x 6 = 66	12 x 6 = 72
7 x 7 = 49	8 x 7 = 56	9 x 7 = 63	10 x 7 = 70	11 x 7 = 77	12 x 7 = 84
7 x 8 = 56	8 x 8 = 64	9 x 8 = 72	10 x 8 = 80	11 x 8 = 88	12 x 8 = 96
7 x 9 = 63	8 x 9 = 72	9 x 9 = 81	10 x 9 = 90	11 x 9 = 99	12 x 9 = 108
7 x 10 = 70	8 x 10 = 80	9 x 10 = 90	10 x 10 = 100	11 x 10 = 110	12 x 10 = 120
7 x 11 = 77	8 x 11 = 88	9 x 11 = 99	10 x 11 = 110	11 x 11 = 121	12 x 11 = 132
7 x 12 = 84	8 x 12 = 96	9 x 12 = 108	10 x 12 = 120	11 x 12 = 132	12 x 12 = 144

BOX 1: Key facts

3D SOLIDS: PRISMS

Prism	A 3D solid with a consistent **cross section.**	
Cube	**6** faces. **12** edges. **8** vertices.	
Cuboid	**6** faces. **12** edges. **8** vertices.	
Triangular Prism	**5** faces. **9** edges. **6** vertices.	
Cylinder	**3** faces. **2** edges. **No** vertices.	

3D SOLIDS: OTHERS

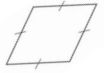| Sphere	**1** face. **No** edges. **No** vertices	
Frustum	A frustum is a solid (usually a **cone** or **pyramid**) with the **top removed.**	

3D SOLIDS: PYRAMIDS
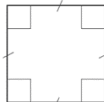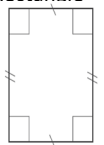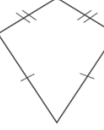
Pyramid	a solid three-dimensional shape with a polygon **base**, and triangular faces that meet at the **apex** (a vertex)	
Triangular based pyramid (Tetrahedron)	**4** faces. **6** edges. **4** vertices	
Square based pyramid	**5** faces. **8** edges. **5** vertices.	
Cone	**2** faces. **1** edge. **1** vertex	

REGULAR POLYGONS

Regular polygons are 2D shapes that are equiangular (all angles are equal in measure) and equilateral (all sides have the same length)

| equilateral triangle | square | regular pentagon | regular hexagon | regular heptagon | regular octagon |
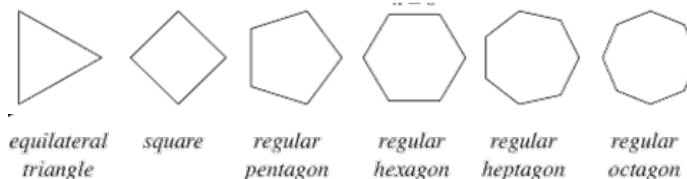
PROPERTIES OF QUADRILATERALS

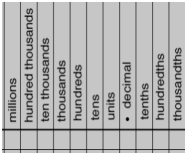| Square	**Four** equal sides **Four** right angles Opposite sides **parallel** Diagonals bisect each other at **right angles** **Four** lines of symmetry Rotational symmetry of order **four**
Rectangle	**Two pairs of** equal sides **Four** right angles Opposite sides **parallel** Diagonals bisect each other, **not at right angles** **Two** lines of symmetry Rotational symmetry of order **two**
Rhombus	**Four** equal sides **Diagonally opposite** angles are equal Opposite sides **parallel** Diagonals bisect each other **at right angles** **Two** lines of symmetry Rotational symmetry of order **two**
Parallelogram	**Two pairs of** equal sides **Diagonally opposite** angles are equal Opposite sides **parallel** Diagonals bisect each other, **not at right angles** **No** lines of symmetry Rotational symmetry of order **two**
Kite	Two pairs of **adjacent sides** of equal length **One pair of diagonally opposite** angles are equal (where different length sides meet) Diagonals intersect **at right angles**, but do not bisect **One** line of symmetry **No** rotational symmetry
Trapezium	**One** pair of parallel sides **No** lines of symmetry **No** rotational symmetry Special Case: **Isosceles** Trapeziums have one line of symmetry.

BOX 3: Sequences

VOCABULARY

Sequence	A **pattern** of terms/numbers which follow a **rule**
Term	Each **value in a sequence** is called a term.
Position	The place it is **located**. *e.g. In the sequence: 3, 5, 7, 9 the term '5' has a position of **2** (as is the **2nd term**).*

RULES

Term-to-term rule	A rule which allows you to find the **next term** in a sequence if you know the **previous term.**
Position-to-term rule *(nth Term)*	A rule which allows you to calculate the term that is in the **nth position** of the sequence.
Generate	To **produce** or **create**

TYPES OF SEQUENCES

Linear Sequences	A sequence where the **difference between terms** is the **same** amount each time. Also known as a **Arithmetic** Sequence, can be increasing or decreasing. *Algebraically:* $x_n = an + b$
Common Difference	The amount we **add** each time in a linear sequence
Quadratic Sequences	A sequence of numbers with an n^2 in the position to term rule. The **second difference** between consecutive terms is constant. Algebraically: $x_n = an^2 + bn + c$
Geometric Sequences	A sequence of numbers where each term is found by **multiplying** the previous one by a number called the common ratio, r. Algebraically: $x_n = ar^{n-1}$
Common Ratio (r)	The amount we **multiply** by each time in a geometric sequence
Fibonacci Sequences	A sequence where the next number is found by **adding up the previous two terms.** The Fibonacci sequence: 1,1,2,3,**5,8,13 ...**

BOX 4: Algebraic manipulation, equality and equivalence

ALGEBRAIC NOTATION

Unknown value	A value that is **not known**. In algebra, they are represented by **a letter.**
Variable	A value that **can change.** In algebra, they are represented by **a letter.**
Coefficient	A number used to **multiply** a variable. Algebraically, it is the number that comes **in front** of a letter. e.g. 3b means 3xb. The coefficient is **3.** The variable is **b.**
Constant	Something that **doesn't change** in a formula.
Indices	**Power** of a variable or number.
Term	A **number or letter** on its own, or **numbers and letters** multiplied together. *e.g. -2, 3x or 5a²*
Like terms	Like terms are the same apart from their numerical coefficients: they are the same **variable** and have the same **power**.

ALGEBRAIC SHORTHAND: EXAMPLES

b	**1 x *b***
3b	**3 x *b***
b³	***b* x *b* x *b***
3b³	**3 x *b* x *b* x *b***
(3b)³	**(3 x *b*) x (3 x *b*) x (3 x *b*)**
$\frac{a}{b}$	***a* ÷ *b***

EXPRESSIONS, EQUATIONS, IDENTITIES AND FORMULA

Expression	A set of **terms** combined using the 2 operations +, -, x or ÷. There is **no "="** sign. *e.g. 4x-3, 5a - 3xy + 17*
Equation	Where two expressions are **equal** in value – there is always an **"="** sign. *e.g. 4b = 18.*
Inequality	Where two expressions are **not always equal** in value.
	Strict: < **less** than / > **greater** than
	Non-strict: ≤ **less** than or **equal** to / ≥ **greater** than or **equal** to
Formula	A special type of equation, used to **find the value** of a specific thing. *e.g. F = ma²*
Identity	An equation that is **true for all** of its variables. *e.g. b + b = 2b*
Function	A special type of equation where each input has a **single output.**
	Input – A variable you **choose**. Output – A variable that is **calculated.**

BOX 4: Place value and ordering decimals

NUMBER SENSE

Integer	A **whole number**. Can be positive or negative.	
Place Value	The **value** of a digit in a number based on **where it lies**.	*millions, hundred thousands, ten thousands, thousands, hundreds, tens, units, • decimal, tenths, hundredths, thousandths*
Decimal	**Not** a whole number. It has a **decimal point** in it. Can be positive or negative.	
Terminating Decimals	Decimals which have a **finite** number of place values.	
Recurring Decimals	Decimals with an infinite number of **repeating** digits or **repeating patterns** of digits.	
Negative	A number that is **less than zero**. Can be decimals.	
Ascending	Numbers ordered from **smallest to largest**.	
Descending	Numbers ordered from **largest to smallest**.	
Fraction	Represents the **division** of one integer by another. *E.g.* $\frac{2}{3}$= **2÷3**	
Mixed Number	A number formed of both an **integer** part and a **fractional** part. *E.g.* $3\frac{2}{5}$	

BOX 5: Fractions, decimals and percentages

FRACTION NOTATION

Vinculum → $\frac{3}{5}$ ← Numerator
← Denominator

COMMON FDP CONVERSIONS

Fraction	Decimal	Percentage
1/2	0.5	50%
1/4	0.25	25%
3/4	0.75	75%
1/10	0.1	10%

FDP CONVERSIONS

Decimal —x100→ Percentage —÷100→ Decimal

Percentage → Fraction (Write over 100 and simplify) (Use equivalent fractions to write with a denominator of 100)

$\frac{numerator}{denominator}$ = numerator ÷ denominator

Fraction ⇄ Decimal (Use place value to write out of 10,100,1000... (then simplify))

BOX 6: Time

CLOCKS AND TIME

Analogue clock	a clock or watch that has moving hands and (usually) hours marked from 1 to 12 to show you the time
Digital clock	a clock in which the hours, minutes, and sometimes seconds are indicated by digits, often in 24 hour format
AM	The abbreviation for the Latin phrase ante meridiem, meaning "before noon."
PM	The abbreviation for the Latin phrase post meridiem, meaning "after noon" in the 12-hour clock.

Analogue clock	Must write am or pm to show whether the time is 'morning' or 'afternoon'											
AM	Midnight	1am	2am	3am	4am	5am	6am	7am	8am	9am	10am	11am
PM	Midday	1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm	10pm	11pm
Digital clock	Has a colon in between the hours (2 digits) and minutes (2 digits). Must **not** write am or pm as well.											
AM	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00
PM	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00

Science	Cells and Life Processes	CYCLE 1	YEAR 7

1. Multicellular vs. unicellular

Multicellular organisms are composed of cells which are organised into tissues, organs and systems to carry out life processes.

There are many types of cell. Each has a different structure or feature so it can do a specific job.

Specialised cells include; sperm cells, nerve cells, red blood cells, palisade cells, root hair cells.

Cell: The unit of a living organism, contains parts to carry out life processes.

Uni-cellular: Living things made up of one cell.

Multi-cellular: Living things made up of many types of cell.

2. Cell organelles

Organelle	Function
Nucleus	Contains genetic material (DNA) which controls the cell's activities.
Cell membrane	Surrounds the cell and controls movement of substances in and out.
Cytoplasm	Jelly-like substance where most chemical processes happen.
Mitochondria	Site of respiration, where energy is released from food molecules.
Ribosomes	Site of protein synthesis.
Cell wall	Supports & strengthens the cell, in plant cells it is made of cellulose.
Chloroplast	Absorbs light energy so the plant can make food.
Vacuole	Contains liquid, and used to keep the cell rigid and store substances.

3. Specialised cells
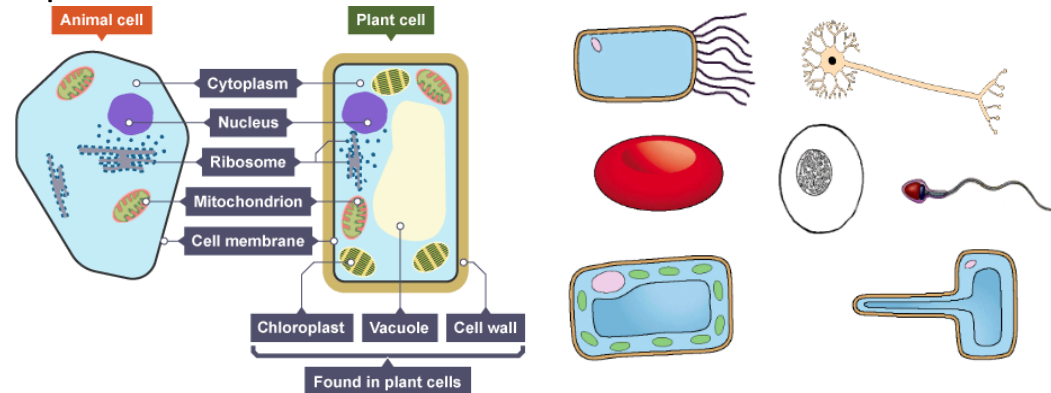
4. Levels of organisation

Tissue: Group of one type of cells working together to perform a function.

Organ: Group of different tissues working together to carry out a job.

Organ system: Group of different organs working together to perform a function.

Diffusion: One way for substances to move into and out of cells.

Structural adaptations: Special features to help a cell carry out its functions.

5. Systems of the body

Immune system: Protects the body against infections.

Reproductive system: Produces sperm and eggs, and is where the foetus develops.

Digestive system: Breaks down and then absorbs food molecules.

Circulatory system: Transports substances around the body.

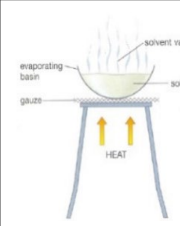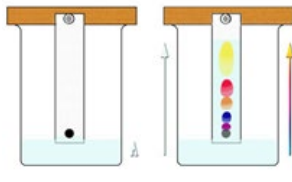Respiratory system: Replaces oxygen and removes carbon dioxide from blood.
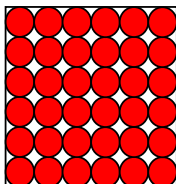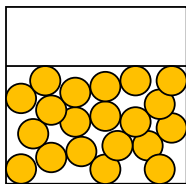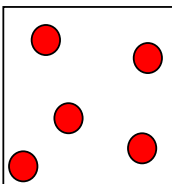
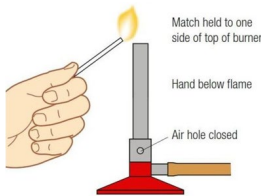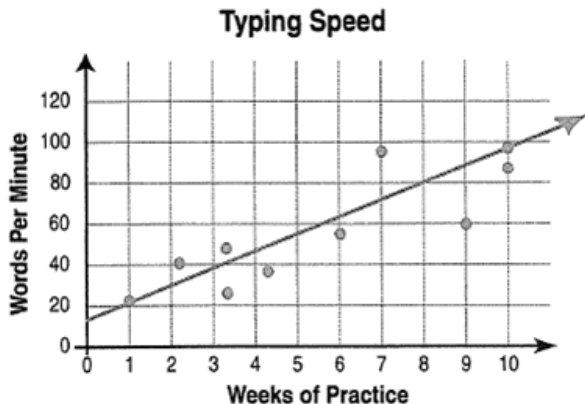Muscular skeletal system: Muscles and bones working together to cause movement and support the body.

6. Using a light microscope

1. Place the microscope of a flat surface and switch on the light (or tilt the mirror) and ensure the stage is fully down.	5. Rotate the coarse focusing knob until an image is seen.
2. Turn to the smallest objective lens (usually x4).	6. Use the fine focusing knob to get a clear image.
3. Place the specimen on the slide and cover with a cover slip. This protects the specimen and the objective lens. Always hold the edges of the slide and handle with care to avoid cuts.	7. Turn the objective lens to the x10 magnification objective lens and adjust with the fine focusing knob.
4. Place the slide on the microscope stage and secure with the clips.	8. If possible, turn to the x40 objective lens. Again, only use the fine focusing knob to achieve a clear image.

1. Mass and weight

Mass and weight are different but related. Mass is a property of the object; weight depends upon mass but also on gravitational field strength.

Every object exerts a gravitational force on every other object. The force increases with mass and decreases with distance. Gravity holds planets and moons in orbit around larger bodies. On Jupiter your weight would be more than on earth because it has more gravity: but your mass would be the same on both.

Weight can be calculated by using the formula:

weight (in N) = mass (in kg) x gravitational field strength (in N/kg)

Weight: The force of gravity on an object (N).

Mass: The amount of stuff in an object (kg).

Gravitational field strength, g: The force from gravity on 1 kg (N/kg), g on Earth = 10 N/kg but on the moon it is only 1.6 N/kg.

Field: The area where other objects feel a gravitational force.

Non-contact force: One that acts without direct contact.

2. Balancing forces

Balanced force	Unbalanced force
Equal and opposite forces	When two forces acting on an object are NOT EQUAL.
An object that is not moving stays still (stationary)	An object that is not moving starts to move
An object that is moving continues to move at the same speed and in the same direction	An object that is moving changes speed (accelerating /negative accelerating) or direction

3. The Solar system

The solar system consists of the Sun at the centre, with 8 planets and smaller objects such as asteroids and comets in orbit around it.

Mercury	Mercury is the closest to the Sun and Neptune the furthest.
Venus	Neptune takes the longest time to orbit the Sun and Mercury the shortest.
Earth	
Mars	Jupiter is the largest planet.
Jupiter	Jupiter has 63 moons
Saturn	The red spot on Jupiter is a storm bigger than the Earth.
Uranus	Neptune is the coldest of the eight planets.
Neptune	Earth is the only planet (that we know of) that has life on it.
	Pluto is further away than Neptune and is a dwarf planet.

This sentence is a way to remember the correct order:
My Very Enthusiastic Mother Just Served Us Noodles!

4. Days and nights

A planet spins on its axis as it orbits the Sun. A day is the time it takes for a planet to turn once on its axis. An Earth day is 24 hours long

The Sun lights up one-half of the Earth, and the other half is in shadow. As the Earth spins, we move from shadow to light and back to shadow and so on.

The Sun appears to move from east to west. This is because the Earth turns from west to east.	The Sun appears to: • Rise in the east • Set in the west • Be due south at midday

One way to remember which way the Earth turns is to remember 'we spin', which means that we (the Earth) spins from west to east.

1. Particle model

Properties of solids, liquids and gases can be described in terms of particles in motion but with differences in the arrangement and movement of these same particles: closely spaced and vibrating (solid), in random motion but in contact (liquid), or in random motion and widely spaced (gas).

Observations where substances change temperature or state can be described in terms of particles gaining or losing energy.
A substance is a solid below its melting point, a liquid above it, and a gas above its boiling point.

Particle: A very tiny object such as an atom or molecule, too small to be seen with a microscope.
Particle model: A way to think about how substances behave in terms of small, moving particles.
Diffusion: The process by which particles in liquids or gases spread out through random movement from a region of high concentration to a region of low concentration.
Gas pressure: Caused by collisions of particles with the walls of a container.
Density: How much matter there is in a particular volume, or how close the particles are.

2. Properties of solids, liquids and gases

Solids	Liquids	Gases
Have a fixed shape	Take the shape of their container	Take the shape of their container
Have a fixed volume	Have a fixed volume	Don't have a fixed volume
Cannot be compressed	Cannot be compressed	Can be compressed easily
Cannot flow	Can flow	Can flow

3. Separating mixtures

Pure substance: Single type of material with nothing mixed in.
Mixture: Two or more pure substances mixed together, whose properties are different to the individual substances.

Solvent: A substance, normally a liquid, that dissolves another substance.
Solute: A substance that can dissolve in a liquid.
Dissolve: When a solute mixes completely with a solvent.
Solution: Mixture formed when a solvent dissolves a solute.
Soluble (insoluble): Property of a substance that will (will not) dissolve in a liquid.
Solubility: Maximum mass of solute that dissolves in a certain volume of solvent.

Filtration: Separating substances using a filter to separate an insoluble solid from a filtrate (solution). e.g. separating sand and water		Distillation: Separating substances by boiling and condensing liquids. e.g. separating water and alcohol	
Evaporation: A way to separate a solid dissolved in a liquid by the liquid turning into a gas. e.g. separating water from salt water		Chromatography: Used to separate different coloured substances. e.g. separating different dyes in ink	

4. Changes of state

Evaporate: Change from liquid to gas at the surface of a liquid, at any temperature.

Boil: Change from liquid to a gas of all the liquid when the temperature reaches boiling point.

Condense: Change of state from gas to liquid when the temperature drops to the boiling point.

Melt: Change from solid to liquid when the temperature rises to the melting point.

Freeze: Change from liquid to a solid when the temperature drops to the melting point.

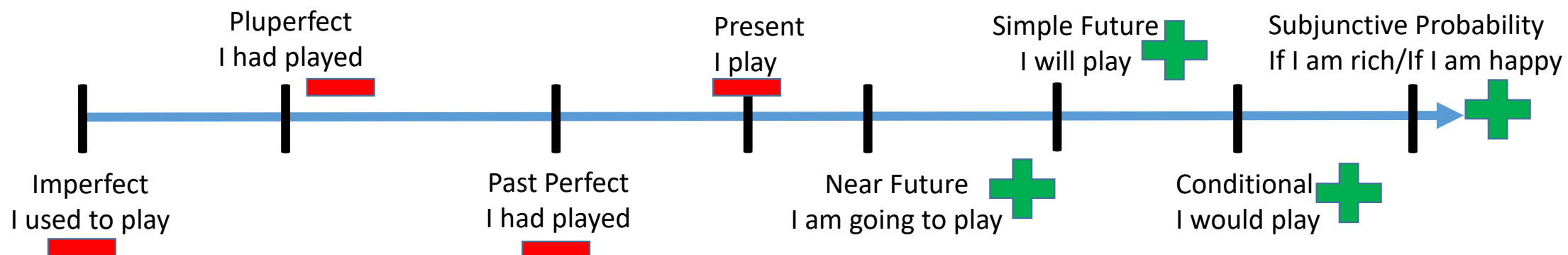Sublime: Change from a solid directly into a gas.

1. Equipment

Heat proof mat
Protects the desk from spills or heat damage

Bunsen burner
Air hole open = blue flame
Air hole closed = safety flame
Only pick it up by the blue base

Tripod
Holds equipment safely above a Bunsen burner

Gauze
Goes on top of the tripod, beakers can then be placed safely on top

Beaker
Used to carry out reactions in.
Can also be heated

Measuring cylinder
Used to accurately measure a volume of liquid

Thermometer
Used to measure the temperature of liquids

2. Table of results

When drawing a table of results you need to remember 5 rules;
1. Use a ruler and a sharp pencil to draw your table.
2. Make sure that there is space for all of your data (inc. repeats and a mean if necessary).
3. Include headings with units (if required).
4. Complete the table with the data.
5. Calculate the mean if required.

Independent variable (units)	Dependent variable (units)			
	1st time	2nd time	3rd time	Mean
XX	22	23	23	22.7

To calculate the mean average add up all the results (22+23+23) = 68
Then divide by the number of test you did 68/3 = 22.6666666

3. Graphs

When drawing a table of results you need to remember 5 rules;
1. Use a pencil and ruler to draw the axes.
2. Label both axes, including units if required.
3. Make sure each scale goes up in even amounts.
4. Plot all points carefully.
5. Draw a line-of-best-fit as close to all the points as possible. The line-of-best-fit may be a straight line or a curve.

Typing Speed

Words Per Minute vs *Weeks of Practice*

4. Conclusion

In the conclusion you need to explain what your results have shown you.
For instance: In my experiment I found out that as X increases, Y decreases.
e.g. From the graph in section 3, the conclusion would be:
As the number of weeks practice increases the number of words typed per minute increases, up to a maximum of 100 words per minute.

5. Graphs

Continuous variable: Has values that can be any number.
Discontinuous variable: Has values that are words or discrete numbers.
Bar chart/column graph: Displays the values of categories.
Line graph: Shows the relationship between two continuous variables.
Pie chart: Shows the proportions or percentages that make up a whole.
Line of best fit: A straight or curved line drawn to show the pattern of data points.

6. Variables

Scientific enquiries: Different ways to investigate including observation over time, fair test and pattern seeking.
Variable: A factor that can be changed, measured and controlled.
Independent variable: What you change in an investigation to see how it affects the dependent variable.
Dependent variable: What you measure or observe in an investigation.
Control variable: What needs to be kept the same throughout the experiment

7. How to light a Bunsen burner

1. Connect hose to gas tap
2. Make sure the air hole is closed
3. LIGHT THE MATCH and place near the top of the Bunsen burner
4. Turn on gas LAST

Match held to one side of top of burner
Hand below flame
Air hole closed

Les jours de la semaine

lundi
mardi
mercredi
jeudi
vendredi
samedi
dimanche

Les mois

janvier
février
mars
avril
mai
juin
juillet
août
septmebre
octobre
novembre
décembre

Les nombres en français

0 zero	10 dix	20 vingt	30 trente
1 un	11 onze	21 vingt-et-un	31 trente-et-un
2 deux	12 douze	22 vingt-deux	32 trente-deux
3 trois	13 treize	23 vingt-trois	33 trente-trois
4 quatre	14 quatorze	24 vingt-quatre	34 trente-quatre
5 cinq	15 quinze	25 vingt-cinq	35 trente-cinq
6 six	16 seize	26 vingt-six	36 trente-six
7 sept	17 dix-sept	27 vingt-sept	37 trente-sept
8 huit	18 dix-huit	28 vingt-huit	38 trente-huit
9 neuf	19 dix-neuf	29 vingt-neuf	39 trente-neuf
40 quarante	50 cinquante	60 soixante	70 soixante-dix
41 quarante-et-un	51 cinquante-et-un	61 soixante-et-un	71 soixante-onze
42 quarante-deux	52 cinquante-deux	62 soixante-deux	72 soixante-douze
43 quarante-trois	53 cinquante-trois	63 soixante-trois	73 soixante-treize
44 quarante-quatre	54 cinquante-quatre	64 soixante-quatre	74 soixante-quatorze
45 quarante-cinq	55 cinquante-cinq	65 soixante-cinq	75 soixante-quinze
46 quarante-six	56 cinquante-six	66 soixante-six	76 soixante-seize
47 quarante-sept	57 cinquante-sept	67 soixante-sept	77 soixante-dix-sept
48 quarante-huit	58 cinquante-huit	68 soixante-huit	78 soixante-dix-huit
49 quarante-neuf	59 cinquante-neuf	69 soixante-neuf	79 soixante-dix-neuf

80 quatre-vingt	90 quatre-vingt-dix
81 quatre-vingt-et-un	91 quatre-vingt-onze
82 quatre-vingt-et-deux	92 quatre-vingt-douze
83 quatre-vingt-et-trois	93 quatre-vingt-treize
84 quatre-vingt-et-quatre	94 quatre-vingt-quatorze
85 quatre-vingt-et-cinq	95 quatre-vingt-quinze
86 quatre-vingt-et-six	96 quatre-vingt-seize
87 quatre-vingt-et-sept	97 quatre-vingt-sept
88 quatre-vingt-et-huit	98 quatre-vingt-dix-huit
89 quatre-vingt-et-neuf	99 quatre-vingt-dix-neuf

French SPAG marking

sp	Spelling
art	Article
vb	Verb
T	Tense
Acc	Accent
adj	Adjective incorrect/agreement
C	Capital
ww	Wrong word
?	Re-phrase/no sense
	Word re-order

100 cent	600 six cents	105 cent cinq	1,001 mille et un	74,000 soixante-quatorze mille
200 deux cents	700 sept cents	149 cent quarante-neuf	1,500 mille cinq cents	100,000 cent mille
300 trois cents	800 huit cents	181 cent quatre-vingt-un	1,766 sept cent soixante-six	1,000,000 un million
400 quatre cents	900 neuf cents	501 cinq cent un	2,001 deux mille un	3,000,000 trois millions
500 cinq cents	1,000 mille	565 cinq cent soixante-cinq	40,000 quarante mille	1,000,000,000 un-millard

French		Marking Sticker		CYCLE 1	All Years

Title:

Detail	WWW	EBI	Tenses	WWW	EBI
Connectives	1 2 3		Present tense	1 2 3	
Opinions	1 2 3		Past Perfect	1 2 3	
Reasons (adjectives)	1 2 3		Imperfect	1 2 3	
Intensifiers	1 2 3		Conditional	1 2 3	
Time expressions	1 2 3		Simple Future	1 2 3	
Adverbs	1 2 3		Pluperfect	1 2 3	
Negatives	1 2 3		Perfect Conditional	1 2 3	
			Subjunctive	1	
Comparatives	plus moins		Modal Verbs	1	
Superlatives	le plus le moins le pire le meilleur		Other Persons	1 2 3	
			Quality of Work	Si j'avais le choix	
Si clause	1 2 3				
Openers	1 2 3		**1 Excellent**	Quand j'étais plus jeune	
Exclamation	1 2 3		**2 Good**	Pour que je sois contente	
Questions	1 2 3			Quand je serai plus âgé	
Total:			**4 Poor**	vu que	
				tandis que	
				Si je pourrais	
				Pour que je puisse	

14

Pluperfect
I had played

Present
I play

Simple Future
I will play

Subjunctive Probability
If I am rich/If I am happy

Imperfect
I used to play

Past Perfect
I had played

Near Future
I am going to play

Conditional
I would play

Tense	Add or Remove ending	Meaning	Example
Imperfect	Remove ending ER IR RE OIR	I used to play	Jouer – remove er – je jouais
Pluperfect	Remove ending ER IR RE OIR	I had played	Jouer – remove er – J'avais joué
Past perfect	Remove ending ER IR RE OIR	I have played	Jouer – remove er – j'ai joué
Present	Remove ER IR RE OIR	I play	Jouer – remove er – je joue
Near future	Add the infinitive	I am going to play	Jouer – add to the structure – je vais jouer
Simple future	Add to the infinitive ER IR RE	I will play	Jouer – add the ending to the end – je jouerai
Conditional	Add to the infinitive ER IR RE	I would play	Jouer – add the ending to the end – je jouerais
Subjunctive	Probability – If I am rich /If I am happy		Learn set sentences (marking sticker& writing frame)

*imperfect and conditional share endings

15

Connectives

car / parce que = because
puisque = since
aussi = also
donc = therefore
puis = then
après = after
Ensuite = next/then
ou = or
cependant = however
par conséquent = as a result
étant donné que = given that
tandis que = whereas
vu que = considering that
Malgré = despite
Afin que = so that
Pourvu que = given that
Sauf = except
Magré = despite
En outre furthermore
Pour que = so that

Openers

D'abord = firstly
Par contre = On the other hand
Premièrement = Firstly
Deuxièment = Secondly
Troisièmement = Thirdly
Finalement = Finally
Pour moi = As for me

Subjunctive

Pour que je sois = so that I am
Pour que je puisse = so that I can
Il faut que = It is necessary that
Il est essential qu'il aie = it is essential that there is…
Il est necessaire qu'on fasse = it is necessary that we do

Questions

Pourquoi? = Why
Qui? = Who?
Quand? = When?
Comment? = How?
Que = What?
N'est-ce pas? = Isn't it?
As-tu / Avez-vous? = Do you have?

Intensifiers

très = very
assez = quite
un peu = a little
vraiment = really
beaucoup = a lot

Complex Opinions

Je pense que = I think that
J'estime que = I consider that
Je crois que = I believe that
Il me semble que = It seems to me that
Je trouve que = I find that
À mon avis = in my opinion
En ce qui me concerne = Concerning me
Je suis d'accord car = I agree because

Time Phrases

Aujourd'hui = Today
Hier = Yesterday
Demain = Tomorrow
En été = In summer
En hiver = In winter
L'année dernière = Last year
L'année prochaine = Next year
À l'avenir = In the future
La semaine dernière = Last week
Le mois prochain = Next month

Adjectival Agreement

un garçon intelligent = a clever boy
une fille intelligente = a clever girl
un pull bleu = a blue jumper
une veste grise = a grey blazer
une cravate violette = a purple tie
une chemise blanche = a white shirt

Adverbs

d'habitude = Usually
normalement = normally
quelquefois = sometimes
tous les jours = every day
généralement = generally

Superlatives

le / la moins = the least
le / la plus = the most
le / la pire = the worst
le / la mieux = the best

Exclamation

Quel surprise! = What a surprise!
Quel chance! = What luck!
Quel dommage! = What a shame!
Quel horreur! = What horror!

Negatives

ne… pas = not
ne… jamais = never
ne… que = only
ni… ni = neither… nor
ne… plus = not anymore

Comparatives

plus… que = more… than
moins… que = less… than

Reasons (Adjectives)

c'est… = it is…
c'était… = it was…
ce sera… = it will be…
ce serait…=it would be…

intéressant = interesting
passionnant = exciting
sympa = nice
époustouflant = mind-blowing
triste = sad
affreux = terrible
épouvantable = dreadful
bizarre = strange
sale = dirty
propre = clean
bruyant = noisy
tranquille = calm
beau/joli = nice
cher = expensive
différent = different
ennuyeux = boring
mauvais/mal = bad
paresseux = lazy
vieux = old
propre = clean
facile = easy
moche/ laid = ugly
grand = big
petit = small

Pluperfect	Past Imperfect	Past Perfect	Present Tense	Near Future	Simple Future	Conditional	Perfect Conditional

INFINITIVE: porter = to wear (Regular er)

I had worn	I used to wear	I wore	I am wearing/I wear	I am going to wear	I will wear	I would wear	I would have worn
Je (J') avais **porté**	Je (J') port **ais**	Je (J') ai **porté**	Je (J') port **e**	Je (J') vais **porter**	Je (J') porter **ai**	Je (J') porter **ais**	Je (J') aurais **porté**
Tu avais **porté**	Tu port **ais**	Tu as **porté**	Tu port **es**	Tu vas **porter**	Tu porter **as**	Tu porter **ais**	Tu aurais **porté**
Il avait **porté**	Il port **ait**	Il a **porté**	Il port **e**	Il va **porter**	Il porter **a**	Il porter **ait**	Il aurait **porté**
Elle avait **porté**	Elle port **ait**	Elle a **porté**	Elle port **e**	Elle va **porter**	Elle porter **a**	Elle porter **ait**	Elle aurait **porté**
On avait **porté**	On port **ait**	On a **porté**	On port **e**	On va **porter**	On porter **a**	On porter **ait**	On aurait **porté**
Nous avions **porté**	Nous port **ions**	Nous avons **porté**	Nous port **ons**	Nous allons **porter**	Nous porter **ons**	Nous porter **ions**	Nous aurions **porté**
Vous aviez **porté**	Vous port **iez**	Vous avez **porté**	Vous port **ez**	Vous allez **porter**	Vous porter **ez**	Vous porter **iez**	Vous auriez **porté**
Ils avaient **porté**	Ils port **aient**	Ils ont **porté**	Ils port **ent**	Ils vont **porter**	Ils porter **ont**	Ils porter **aient**	Ils auraient **porté**
Elles avaient **porté**	Elles port **aient**	Elles ont **porté**	Elles port **ent**	Elles vont **porter**	Elles porter **ont**	Elles porter **aient**	Elles auraient **porté**

INFINITIVE: finir = to finish (ir)

I had finished	I used to finish	I finished	I am finishing/ I finish	I am going to finish	I will finish	I would finish	I would have finished
Je (J') avais **fini**	Je (J') finiss **ais**	Je (J') ai **fini**	Je (J') fin **is**	Je (J') vais **finir**	Je (J') finir **ai**	Je (J') finir **ais**	Je (J') aurais **fini**
Tu avais **fini**	Tu finiss **ais**	Tu as **fini**	Tu fin **is**	Tu vas **finir**	Tu finir **as**	Tu finir **ais**	Tu aurais **fini**
Il avait **fini**	Il port **ait**	Il a **fini**	Il fin **it**	Il va **finir**	Il finir **a**	Il finir **ait**	Il aurait **fini**
Elle avait **fini**	Elle finiss **ait**	Elle a **fini**	Elle fin **it**	Elle va **finir**	Elle finir **a**	Elle finir **ait**	Elle aurait **fini**
On avait **fini**	On finiss **ait**	On a **fini**	On fin **it**	On va **finir**	On finir **a**	On finir **ait**	On aurait **fini**
Nous avions **fini**	Nous finiss **ions**	Nous avons **fini**	Nous fin **issons**	Nous allons **finir**	Nous finir **ons**	Nous finir **ions**	Nous aurions **fini**
Vous aviez **fini**	Vous finiss **iez**	Vous avez **fini**	Vous fin **issez**	Vous allez **finir**	Vous finir **ez**	Vous finir **iez**	Vous auriez **fini**
Ils avaient **fini**	Ils finiss **aient**	Ils ont **fini**	Ils fin **issent**	Ils vont **finir**	Ils finir **ont**	Ils finir **aient**	Ils auraient **fini**
Elles avaient **Fini**	Elles finiss **aient**	Elles ont **fini**	Elles fin **issent**	Elles vont **finir**	Elles finir **ont**	Elles finir **aient**	Elles auraient **fini**

INFINITIVE: attendre = to wait (re)

I had waited	I used to wait	I waited	I am waiting/ I wait	I am going to wait	I will wait	I would wait	I would have waited
Je (J') avais **attendu**	Je (J') attend **ais**	Je (J') ai **attendu**	Je (J') attend **s**	Je (J') vais **attendre**	Je (J') attendr **ai**	Je (J') attendr **ais**	Je (J') aurais **attendu**
Tu avais **attendu**	Tu attend **ais**	Tu as **attendu**	Tu attend **s**	Tu vas **attendre**	Tu attendr **as**	Tu attendr **ais**	Tu aurais **attendu**
Il avait **attendu**	Il attend **ait**	Il a **attendu**	Il attend **_**	Il va **attendre**	Il attendr **a**	Il attendr **ait**	Il aurait **attendu**
Elle avait **attendu**	Elle attend **ait**	Elle a **attendu**	Elle attend **_**	Elle va **attendre**	Elle attendr **a**	Elle attendr **ait**	Elle aurait **attendu**
On avait **attendu**	On attend **ait**	On a **attendu**	On attend **_**	On va **attendre**	On attendr **a**	On attendr **ait**	On aurait **attendu**
Nous avions **attendu**	Nous attend **ions**	Nous avons **attendu**	Nous attend **ons**	Nous allons **attendre**	Nous attendr **ons**	Nous attendr **ions**	Nous aurions **attendu**
Vous aviez **attendu**	Vous attend **iez**	Vous avez **attendu**	Vous attend **ez**	Vous allez **attendre**	Vous attendr **ez**	Vous attendr **iez**	Vous auriez **attendu**
Ils avaient **attendu**	Ils attend **aient**	Ils ont **attendu**	Ils attend **ent**	Ils vont **attendre**	Ils attendr **ont**	Ils attendr **aient**	Ils auraient **attendu**
Elles avaient **attendu**	Elles attend **aient**	Elles ont **attendu**	Elles attend **ent**	Elles vont **attendre**	Elles attendr **ont**	Elles attendr **aient**	Elles auraient **attendu**
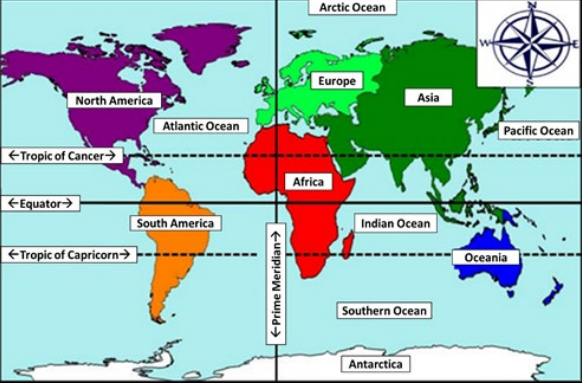
Present Tense Regular Verbs

ER verb habiter = to live			IR verb finir = to finish			RE verb attendre = to wait		
Je (J')	habit **e**	*I live*	Je (J')	fin **is**	*I finish*	Je (J')	attend **s**	*I wait*
Tu	habit **es**	*You live (s/informal)*	Tu	fin **is**	*You finish (s/informal)*	Tu	attend **s**	*You wait (s/informal)*
Il	habit **e**	*He lives*	Il	fin **it**	*He finishes*	Il	attend **_**	*He waits*
Elle	habit **e**	*She lives*	Elle	fin **it**	*She finishes*	Elle	attend **_**	*She waits*
On	habit **e**	*We live*	On	fin **it**	*We finish*	On	attend **_**	*We wait*
Nous	habit **ons**	*We live*	Nous	fin **issons**	*We finish*	Nous	attend **ons**	*We wait*
Vous	habit **ez**	*You live (pl/formal)*	Vous	fin **issez**	*You finish (pl/formal)*	Vous	attend **ez**	*You wait (pl/formal)*
Ils	habit **ent**	*They live (m/mixed)*	Ils	fin **issent**	*They finish (m/mixed)*	Ils	attend **ent**	*They wait (m/mixed)*
Elles	habit **ent**	*They live (f)*	Elles	fin **issent**	*They finish (f)*	Elles	attend **ent**	*They wait (f)*

Present Tense Irregular Verbs

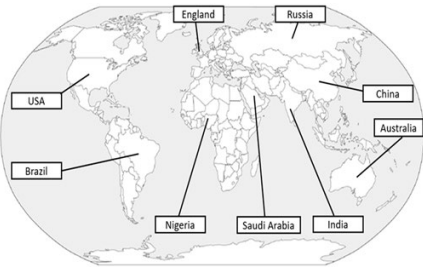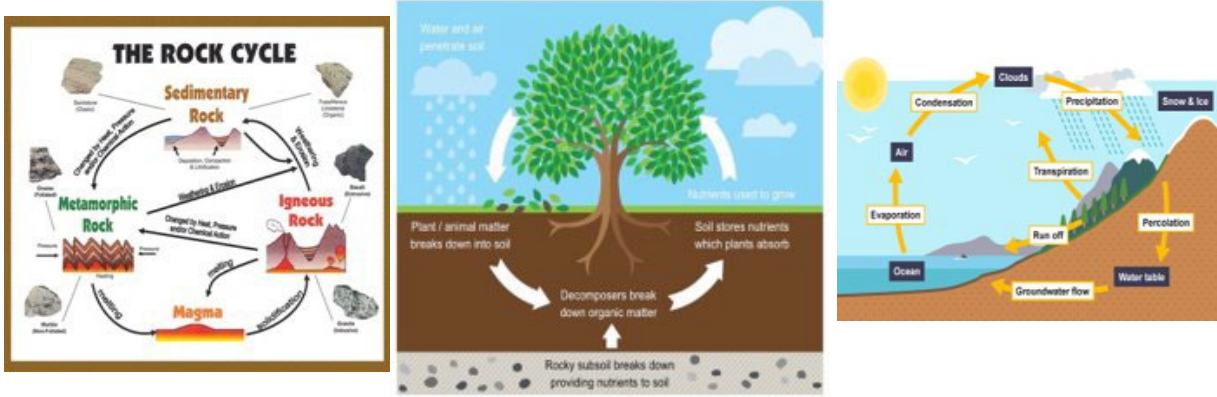| avoir = to have			être = to be			faire = to do			aller = to visit		
Je (J')	ai	*I have*	Je (J')	suis	*I am*	Je (J')	fais	*I do*	Je (J')	vais	*I go*
Tu	as	*You have (s/informal)*	Tu	es	*You are (s/informal)*	Tu	fais	*You do (s/informal)*	Tu	vais	*You go (s/informal)*
Il	a	*He has*	Il	est	*He is*	Il	fait	*He does*	Il	va	*He goes*
Elle	a	*She has*	Elle	est	*She is*	Elle	fait	*She does*	Elle	va	*She goes*
On	a	*We have*	On	est	*We are*	On	fait	*We do*	On	va	*We go*
Nous	avons	*We have*	Nous	sommes	*We are*	Nous	faisons	*We do*	Nous	allons	*We go*
Vous	avez	*You have (pl/formal)*	Vous	êtes	*You are (pl/formal)*	Vous	faites	*You do (pl/formal)*	Vous	allez	*You go (pl/formal)*
Ils	ont	*They have (m/mixed)*	Ils	sont	*They are (m/mixed)*	Ils	font	*They do (m)*	Ils	vont	*They go (m/mixed)*
Elles	ont	*They have (f)*	Elles	sont	*They are (f)*	Elles	font	*They do (f)*	Elles	vont	*They go (f)*

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Present Tense	Past Perfect	Immediate Future	Conditional	Simple Future	Past Imperfect	Past Pluperfect	Perfect Conditional

INFINITIVE: aller = to go (Irregular)

I am going / I go	I have gone / I went	I am going to go	I would go	I will go	I was going / I used to go	I had gone	I would have gone
Je (J') **v ais**	Je (J') suis **allé(e)**	Je (J') vais **aller**	Je (J') ir **ais**	Je (J') ir **ai**	Je (J') all **ais**	Je (J') étais **allé(e)**	Je (J') serais **allé(e)**
Tu **v as**	Tu es **allé(e)**	Tu vas **aller**	Tu ir **ais**	Tu ir **as**	Tu all **ais**	Tu étais **allé(e)**	Tu serais **allé(e)**
Il **v a**	Il est **allé(e)**	Il va **aller**	Il ir **ait**	Il ir **a**	Il all **ait**	Il était **allé(e)**	Il serait **allé(e)**
Elle **v a**	Elle est **allé(e)**	Elle va **aller**	Elle ir **ait**	Elle ir **a**	Elle all **ait**	Elle était **allé(e)**	Elle serait **allé(e)**
On **v a**	On est **allé(e)**	On va **aller**	On ir **ait**	On ir **a**	On all **ait**	On était **allé(e)**	On serait **allé(e)**
Nous **all ons**	Nous sommes **allé/s**	Nous allons **aller**	Nous ir **ions**	Nous ir **ons**	Nous all **ions**	Nous étions **allé(e/s)**	Nous serions **allé(e/s)**
Vous **all ez**	Vous êtes **allé(e/s)**	Vous allez **aller**	Vous ir **iez**	Vous ir **ez**	Vous all **iez**	Vous étiez **allé(e/s)**	Vous seriez **allé(e/s)**
Ils **v ont**	Ils sont **allé(e/s)**	Ils vont **aller**	Ils ir **aient**	Ils ir **ont**	Ils all **aient**	Ils étaient **allé(e/s)**	Ils seraient **allé(e/s)**
Elles **v ont**	Elles sont **allé(e/s)**	Elles vont **aller**	Elles ir **aient**	Elles ir **ont**	Elles all **aient**	Elles étaient **allé(e/s)**	Elles seraient **allé(e/s)**

INFINITIVE: faire = to do / make (Irregular)

I am doing/ I do	I have done / I did	I am going to do	I would do	I will do	I was doing / I used to do	I had done	I would have done
Je (J') **f ais**	Je (J') ai **fait**	Je (J') vais **faire**	Je (J') fer **ais**	Je (J') fer **ai**	Je (J') fais **ais**	Je (J') avais **fait**	Je (J') aurais **fait**
Tu **f ais**	Tu as **fait**	Tu vas **faire**	Tu fer **ais**	Tu fer **as**	Tu fais **ais**	Tu avais **fait**	Tu aurais **fait**
Il **f ait**	Il a **fait**	Il va **faire**	Il fer **ait**	Il fer **a**	Il fais **ait**	Il avait **fait**	Il aurait **fait**
Elle **f ait**	Elle a **fait**	Elle va **faire**	Elle fer **ait**	Elle fer **a**	Elle fais **ait**	Elle avait **fait**	Elle aurait **fait**
On **f ait**	On a **fait**	On va **faire**	On fer **ait**	On fer **a**	On fais **ait**	On avait **fait**	On aurait **fait**
Nous **f aisons**	Nous avons **fait**	Nous allons **faire**	Nous fer **ions**	Nous fer **ons**	Nous fais **ions**	Nous avions **fait**	Nous aurions **fait**
Vous **f aitez**	Vous avez **fait**	Vous allez **faire**	Vous fer **iez**	Vous fer **ez**	Vous fais **iez**	Vous aviez **fait**	Vous auriez **fait**
Ils **f ont**	Ils ont **fait**	Ils vont **faire**	Ils fer **aient**	Ils fer **ont**	Ils fais **aient**	Ils avaient **fait**	Ils auraient **fait**
Elles **f ont**	Elles ont **fait**	Elles vont **faire**	Elles fer **aient**	Elles fer **ont**	Elles fais **aient**	Elles avaient **fait**	Elles auraient **fait**

DR/MRS VANDERTRAMP verbs take <u>être</u> not <u>avoir</u>

Descendre – je suis descendu(e)(s) - to come down (stairs)
Rester – je suis resté(e)(s) - to stay
Monter – je suis monté(e)(s) - to climb
Revenir – je suis revenu (e)(s) - to return
Sortir – je suis sorti(e)(s) - to go out
Venir – Je suis venue (e)(s) - to come
Aller – je suis allé(e)(s) - to go
Naître - je suis né(e)(s) - to be born

Devenir – je suis devenu(e)(s) - to become
Entrer – je suis entré(e)(s) - to enter
Rentrer – je suis rentré(e)(s) - to re-enter
Tomber – je suis tombé(e)(s) - to fall
Retourner – je suis retourné(e)(s) - to return
Arriver- je suis arrivé(e)(s) - to arrive
Mourir – je suis mort(e)(s) - to die
Partir – je suis parti(e)(s) - to leave

French		Introduction		CYCLE 1	Year 7

Week 1		Week 2		Week 3	
Introductions		Introductions		Numbers	
Bonjour/ salut	Hello/hi	Comme ci comme ça	So so	un	one	onze	eleven
Je m'appelle	I am called	Bof!	Whatever!	deux	two	douze	twelve
J'ai … ans	I am… years old	Bien/mal	Good/bad	trois	three	treize	thirteen
Mon anniversaire est le	My birthday is	Très bien/mal	Very good/bad	quatre	four	quatorze	fourteen
Comment appelles-tu?	What's your name	Génial	Great	cinq	five	quinze	fifteen
Comment ça va?	How are you?	Affreux	Awful	six	six	seize	sixteen
Oui/non	Yes/no	Quelle âge as-tu?	How old are you?	sept	seven	dix-sept	seventeen
Merci beaucoup	Thanks a lot	Où habites-tu?	Where do you live?	huit	eight	dix-huit	eighteen
Au revoir	Bye	As-tu des animaux?	Do you have any animals?	neuf	nine	dix-neuf	nineteen
Ça va bien/mal	It's going well/bad	Comment ça va?	How are you?	dix	ten	vingt	twenty

Week 4		Week 4				Week 5			
Numbers		Months/ Days of the week				Verb Avoir		Verb Etre	
vingt	20	janvier	January	lundi	Monday	J'ai	I have	Je suis	I am
trente	30	février	February	mardi	Tuesday	Tu as	You have	Tu es	You are
quarante	40	mars	March	mercredi	Wednesday	Il/elle a	He/she has	Il/elle est	He/she is
cinquante	50	avril/mai	April/May	jeudi	Thursday	Nous avons	We have	Nous sommes	We are
soixante	60	juin/juillet	June/July	vendredi	Friday	Vous avez	You have	Vous êtes	You are
soixante-dix	70	août	August	samedi	Saturday	Ils/ elles ont	They have	Ils sont	They are
quatre-vingt	80	septembre	September	dimanche	Dimanche	C'est	It is	C'était	It was
quatre-vingt-dix	90	octobre/ novembre	October/ November	la semaine	The week	Il y a	There is	Il y avait	There was
cent	100	décembre	December	le mois	The months	J'avais	I had	J'étais	I was

Week 6						Week 7			
Pets		Colours		Descriptions		Plural Pets		Plural colours	
un chat	a cat	bleu/bleue	blue	mignon (e)	cute	les oiseaux	birds	bleus/bleues	blue
un chien	a dog	blanc/blanche	white	timide	shy	les chiens	dogs	blancs/blanches	white
un oiseau	a bird	noir/noire	black	rapide	fast	les chats	cats	noirs/noires	black
un cheval	a horse	rouge	red	lent/lente	slow	les chevaux	horses	rouges	red
une tortue	a tortoise	jaune	yellow	vicieux/vicieuse	vicious	les serpents	snakes	jaunes	yellow
un cochon d'inde	a guinea pig	orange/marron	orange/brown	féroce	ferocious	les souris	mice	orange/marron	orange/brown
un poisson	a fish	vert/verte	green	amusant (e)	fun	les araignées	spiders	verts/vertes	green
un lapin	a rabbit	rose	pink	affectueux (euse)	affectionate	les lapins	rabbits	rose	pink
une souris	a mouse	violet/violette	purple	agaçant (e)	annoying	les tortues	tortoises	violets/violettes	purple
une araignée	a spider								

Week 8		Week 9		Week 10 and Week 11		Week 12	
Physical description		Relationships		Personality		Opinions	
les cheveux	hair	mon père	my dad	gentil/gentille	kind	J'aime	I like
les yeux	eyes	ma mère	my mum	méchant/méchante	nasty	Je n'aime pas	I don't like
petit (e)/grand (e)	short / tall	mon frère	my brother	paresseux/paresseuse	lazy	J'adore	I love
de taille moyenne	of average height	ma soeur	my sister	timide/bavard (e)	shy/chatty	Je déteste	I hate
gros/ mince	fat / thin	mon oncle	my uncle	drôle/sympa	funny/kind	C'est	It is
barbe/moustache	beard / moustashe	ma tante	my auntie	actif/active	active	Ce n'est pas	It is not
joli (e)/ laid (e)	pretty / ugly	mon grand-père/ma grand-mère	my grandad	ennuyeux/ennuyeuse	boring	J'aimais	I used to like
belle/beau/moche	pretty / handsome / ugly	mon cousin/ma cousine	my cousin	marrant/marrante	funny	Je détestais	I used to hate
élegant/élégante	elegant	mon ami	my friend	généreux/généreuse	generous	C était	It was
jeune/vieux	young / old			travailleur/travailleuse	hardworking	Je voudrais avoir	I would like

*Week 13 full test: Revise all the previous weeks complete RCWC on week 11

Geography	Geographical skills	CYCLE 1	YEAR 7

Box	Key Knowledge to learn
1 – Key Terms	**Geography** – the study of the Earth and its people **Physical Geography** - the study of **natural features** e.g. mountains, volcanoes, oceans **Human Geography** - the study of human activity e.g. economics, culture **Environmental Geography** - the study of **interactions** between **people** and **nature** e.g. climate change **Social** – The study of people **Economic** – The study of money **Environmental** – The study of physical landscapes around us e.g. animals, plants
2 – Map Skills	**A compass** are important to show us which way we are going. T A good way to remember these points is a saying "Never East Shredded Wheat" There 8 compass points to read from. Reading a compass clockwise **> north > north east > east > south east > south > south west > west > north west > north** **Contour lines >** imaginary **lines** on **maps >** show **how high land is above sea level > lines close together** on **map** means **land is steep** in **real life** **Measuring Distance on a map** > To measure the straight-line distance is easy > You get **a ruler** and **simply measure** the distance between the two points > Then compare it to the **scale** at the bottom of the map page to find out how far it is in real life. **grid references >** used to **find places** on maps *Golden rule for reading a grid reference is > 'Bottom left corner, along the corridor, up the stairs'.* *G*rid reference of **star is > 4733**
3 – Global Geography	**Capital City** - often the largest city and where the government is located **City** - is a large human settlement. It can be defined as a permanent and densely settled place **Country** - a nation with its own government, occupying a territory **Continent** - any of the world's main continuous expanses of land **Continents and Oceans Map** 7 continents: **Europe, Africa, Asia, Oceania, North America, South America, Antarctica** 5 oceans: **Arctic, Atlantic, Indian, Pacific, Southern**

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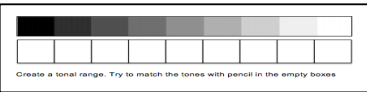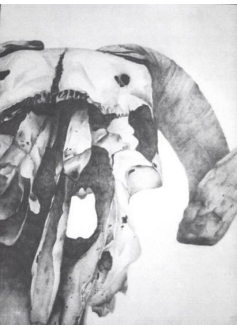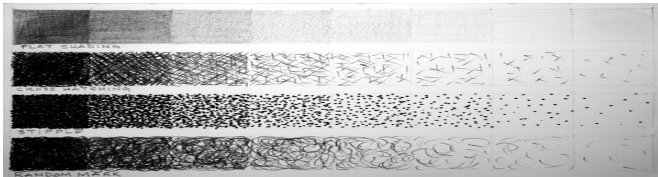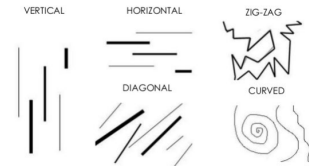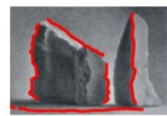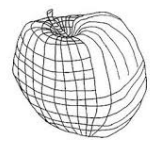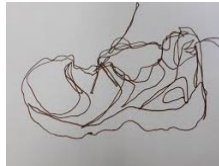
	Geography	Geographical skills	CYCLE 1	YEAR 7

Box	Key Knowledge to learn
4 – UK and Europe	**British Isles** - **5** nations > **Scotland** (capital **Edinburgh**), **England** (capital **London**), **Wales** (capital **Cardiff**), **Northern Ireland** (capital **Belfast**), **Republic of Ireland** (capital **Dublin**) **Great Britain** - **3** nations > **Scotland** (capital Edinburgh), **England** (capital London), **Wales** (capital Cardiff) **United Kingdom** - **4** nations > **Scotland** (capital Edinburgh), **England** (capital London), **Wales** (capital Cardiff), **Northern Ireland** (capital Belfast) **Seas around the British Isles** - **North Sea** (east of England), **English Channel** (south of England), **Irish Sea** (west of England), **Atlantic Ocean** (west of British Isles) Europe - **continent** > **large area** of **land** > **north** of Equator > **bordered** by **Arctic Ocean** and **Atlantic Ocean** > countries such as the **UK**, Norway and Spain are **located** in the **continent** of Europe European Union - a **group** of **27 countries** following **similar laws** à the **UK left** the **EU** on the 31st January **2020** (BREXIT)
5 – Lines of Latitude and Longitude	Latitude - imaginary **horizontal lines** around the Earth à show **how far north** or **south** a **place** is **from Equator** Longitude **-** imaginary **vertical lines** around the Earth > show **how far east** or **west** a **place** is **from Prime Meridian** Equator - line of **latitude** > **separates Northern Hemisphere** from **Southern Hemisphere** > 0° latitude Tropic of Cancer - line of **latitude > north** of **Equator >** 23.5° N Tropic of Capricorn - line of **latitude > south** of **Equator >** 23.5° S Prime Meridian - line of **longitude > separates Eastern Hemisphere** from **Western Hemisphere >** 0° longitude Northern Hemisphere - everything **north** of **Equator** Southern Hemisphere **-** everything **south** of **Equator**
6 – Cycles	**The Rock Cycle** - There are three main types of rock: igneous (for example, basalt and granite), sedimentary (for example, limestone, sandstone and shale) and metamorphic (for example, slate and marble). Rocks are continually changing because of processes such large earth movements and are recycled over millions of years. **The Water Cycle** - The **water cycle**, also known as the **hydrologic cycle** or the **hydrological cycle**, describes the continuous movement of water on, above and below the surface of the Earth **The Nutrient Cycle** - The nutrient cycle is nature's recycling system. Materials such as carbon, nitrogen and water are recycled in the ecosystem. When organisms die, decomposition will recycle minerals and nutrients back to the environment.

History	The Norman Conquest	Cycle 1	Year 7

BOX	Key Knowledge to learn

SECTION A – Key Terms

- Cause - Every historical event occurred because of a series of events that happened beforehand. Things that directly lead to another event are called 'Causes'. Some causes occurred immediately before the event began, while others existed for several years before they caused the event.
- Consequence - a result or effect, typically one that is unwelcome or unpleasant.
- Diversity – different experiences and outcomes depending on a persons social, economic or religious background
- Significance – the quality of being worthy of attention; importance.
- Change - make (someone or something) different; alter or modify.
- Continuity - when something or someone stays the same for a long period of time

- Barons – nobles who fought for William at Hastings and were rewarded with large areas of land to control for him
- Domesday Book – A record of all land and property completed in 1086
- Feudalism – Norman way of organising society so that everyone is loyal to the king
- Knights – Soldiers who were given land in the Feudal system
- Peasants – Ordinary people, who worked on the land had to serve their feudal master often a knight

SECTION B – The Battle of Hastings

Harold Godwinson had defeated Harold Hardrada at the Battle of Stamford Bridge on 25 September 1066. Three days later, William of Normandy invaded England, seeking to claim the throne.

William and Harold fought at the Battle of Hastings on 14 October. William was victorious and was crowned King of England on Christmas Day, 1066.

	Harold's Army	William's Army
Types of soldiers	Harold's army was largely made up of the fyrd and housecarls.	William had a range of soldiers available to him: cavalry, archers and foot soldiers.
Size	It is believed Harold had between 7,000 and 8,000 soldiers at Hastings.	Most historians think William's army was also between 7,000 and 8,000 soldiers.
Energy	Harold's army were tired from just defeating Harald Hardrada at Stamford Bridge.	William's army were well-rested and ready for battle.

What happened during the battle of Hastings?
- The Battle of Hastings began at 9am on 14 October 1066. Harold's army was lined up at the top of Senlac Hill, forming a shield wall facing down against William's army. At the start of the battle, William's archers fired their arrows up towards Harold's army but were struggling to break through the shield wall.
- William's cavalry then tried to charge up the hill, but they also could not break past the defensive line and were beaten back by Harold's men.
- A rumour spread through the Norman army that William had been killed, but he lifted his helmet and rode past his troops to show them he was still alive.
- Harold's position was looking strong, but William ordered his soldiers to advance part way up the hill and then pretend to retreat.
- Harold's remaining soldiers lost motivation when news of his death spread across the battlefield. Some fled, and the ones who stayed to fight were left with little hope.

Section C – The Consequences of the Battle of Hastings

Why did William win?
Tiredness: Harold's army had to march north to fight Harald Hardrada at Stamford Bridge, before turning back to march to the south to face William at Hastings. Many of the English army had been killed and the those who were left would have been extremely tired.
Tactics: William's army pretended to retreat, tempting Harold's army into losing their strong defensive position to run after them. William's army was then able to turn round and attack Harold's weakened position.
Army strength: William had a greater range of soldiers for the battle. As well as foot soldiers, he had a cavalry and more skilled archers. This gave his side a big advantage in the range of tactics and attacks they could carry out.
Leadership: William was on horseback and had an overview of the whole battlefield. When a rumour went round his army that he had been killed, he lifted his helmet to show them he was still alive. In contrast, Harold was on foot and was unable to stop his army losing their discipline and chasing down Senlac Hill after William's retreating soldiers.
What happened after the Battle of Hastings?
Winning the Battle of Hastings was only the beginning of the Norman Conquest. It was a turbulent time for England, with three kings in one year. After William won the Battle of Hastings, his army had to capture and subdue towns across the southeast. The Normans were not welcomed with open arms, suggesting that many English people were not happy about the change in leadership.

SECTION D – William's methods of control

William is remembered as a harsh king. During his reign, William crushed rebellions, overhauled society and built a series of imposing castles across England to establish control.

The Harrying of the North
- Many Anglo-Saxons opposed the Norman Conquest and William faced a series of rebellions. They were posing a real challenge to William's control of the north of England.
- William defeated the rebellion, but he still didn't trust the rebels. He came to an agreement with the Danes, paying them to leave the country if they left without a fight. He was significantly less lenient with the English.
- In the north-east of England, from 1069 to 1070, William ordered villages to be burned to the ground, farm animals to be slaughtered, and crops to be destroyed. This is called the Harrying of the North. Thousands of people were killed and many more died of starvation over the next few years.
- There is some uncertainty over how many people were killed, but the Domesday Book shows the population in the North decreased by 75%. People were either killed, died of starvation or moved away.

The Feudal System - The feudal system shows the hierarchy of different groups of people in medieval society.
- The king was at the top of society, and therefore at the top of the feudal system. To manage this, he gave large areas of land to noblemen, including the clergy, lords and barons, in return for them raising him money and an army. The nobility were below the king in the hierarchy. They would distribute some of their land to knights, who would raise an army to fight for the king when needed.
- Noblemen would also let peasants live and work on the land, in return for taxes and food. The nobility became wealthy from rent raised from peasants they let farm on the land.
- Peasants were the largest and lowest group in medieval society, making up over 90% of the population. Most peasants were villeins and they were at the bottom of the system.

The Domesday Book
- The Domesday Book was a survey of England to establish what every person owned. This helped William establish control over England and raise taxes.

SECTION E – Motte and Bailey Castles

William rewarded his loyal supporters with large areas of land in England, which helped him control the country. The Norman conquerors were unpopular with many people in England, so they quickly built motte-and-bailey castles all over the country to protect themselves and send out a warning to people that they were here to stay and keep control.
- Castles were built in prominent positions, on high ground overlooking villages or towns.
- These imposing structures would have been the largest buildings people in medieval England had ever seen.
- William hoped the building of castles across England would intimidate people into accepting the Norman conquest.

Motte and Bailey Castles

Motte-and-bailey castles were built from wood and the keep was constructed on top of a small hill, called a motte. At the bottom of the motte, was a bailey, which was an enclosed group of houses and farmland for soldiers and workers to live in. These castles were protected by a palisade, which was a tall wooden fence, and they usually had a ditch or moat around them. The Normans built these castles on the tops of hills so that they would look imposing and intimidating.

These castles weren't built to last a long time, but they could be built quickly within a few days. It is estimated over five hundred motte-and-bailey castles were built in the two years after the Norman conquest.

SECTION F – Eleanor of Aquitaine

Who was Eleanor of Aquitaine?
- Eleanor was the elder daughter of William, tenth Duke of Aquitaine.
- She was raised in one of Europe's most cultured courts and given an excellent education.
- She later became an important patron of poets and writers.
- The death of Eleanor's only brother, and of her father in 1137, left her with a vast inheritance.
- At just 15-years-old, she had suddenly become the most eligible heiress in Europe.
- That same year she married Louis, heir to Louis VI of France, who shortly afterwards became king as Louis VII. The couple had two daughters.

Why was she an influential figure?
- In 1147, Eleanor accompanied her husband on the Second Crusade, travelling to Constantinople and Jerusalem.
- The Crusade was a failure and relations between Eleanor and her husband, already poor, deteriorated even further. Louis soldier's respected Eleanor more and saw her as a better leader.
- Eleanor's failure to produce a son contributed considerably to this tension, and in 1152 they were divorced.
- Two months later Eleanor married Henry of Anjou, who in 1154 became king of England. The couple had five sons and three daughters.
- Eleanor played an active part in the running of Henry's empire, travelling backwards and forwards between their territories in England and France.
- In 1173 two of Eleanor's sons involved her in a plot against their father, and as a result Henry imprisoned her. After Henry's death in 1189, his eldest son, Richard I, ordered his mother's release.
- In 1190, she acted as regent in England when Richard went to join the Third Crusade. She even played her part in negotiations for his release after he was taken prisoner in Germany on his way home.

RE	Belief in God	Cycle 1	Year 7

Week	Key Knowledge to learn
1 – Key terms	• **Opinion** – a personal thought/feeling about something • **Fact** – Something that is factually true • **Beliefs** – Beliefs are what we accept as true but without always having proof or evidence. • **Values** - Values are things that we attach importance to and live • **Atheism** – When a person does not believe that God exists • **Agnosticism** – When a person in unsure whether God exists • **Inconsistent Triad** – The idea that as long as evil exists God cannot be both all loving and all powerful • **Benevolent -** God is all loving • **Omnipotent -** God is all powerful
2- Beliefs and values	• Our beliefs are what we accept as true but without always having proof or evidence. Beliefs are assumptions we make about the world. Our values come from these beliefs. • Our personal values are things that we attach importance to and live by e.g. equality, wisdom and compassion. Values define who we are as individuals and can say a lot about a person. 5 British values are: • **Democracy.** A form of government. The word comes from the two Greek words that mean "rule by the people." In a democracy the people choose their government through voting. • **Rule of law**. The laws of a country must be obeyed by everyone including the government and those who make the law. • **Individual liberty m**eans having the freedom to make our own choices and do what we want within the constraints of the law. • **Mutual respect. i**s understanding that we don't share the same beliefs and values but that are prepared to listen and appreciate others views and values • **Tolerance** is the willingness to accept values attitudes and beliefs that are different from your own.
3 – Belief in God	1. Religious believers say they do not need proof that God is real – the whole point is to have faith <u>without</u> scientific evidence. 2. Some religious people think they can prove God is real, using evidence for Holy Books • The Muslim Holy Book is the **Qur'an.** • The Christian Holy Book is the **Bible**. • Hindu Holy Book is called the **Vedas** • Jewish Holy Book is called the **Torah.** • Buddhist Holy Book is the **Tripitaka** or **Pali Canon**. • Sikh Holy Book is called the **Guru Granth Sahib**.

RE	Belief in God	Cycle 1	Year 7

Week	• Key Knowledge to learn
4 – Belief in God and its influence on believers	An influence is when someone's **thoughts and actions** are changed by something they believe. Belief in God influences religious people in many ways: • It influences them to be patient in times of suffering like the prophets • It influences them to be kind to others and follow teachings such as the Golden Rule. "Do to others as you would like them to do to you." • It influences them to get closer to God for all he's done for them and this might be done through regular prayer and worship. • It influences them to show gratitude to God for all that they have been provided with. • It influences them to try to follow religious teachings so that they are rewarded in the next life.
5 – Scientific and religious explanations of how life came to be on Earth. **The Big Bang theory**	An atheist is someone who does not believe in God. A theist is someone who believes in God. An agnostic is someone who is unsure about whether God exists or not. Atheists, agnostics and many theists accept the ideas of science when explaining the origins of the earth and the universe. The main scientific explanation for the creation of the Universe is the **Big Bang Theory.** 14 billion years ago, the matter of the universe became so compressed that it produced a huge explosion. Scientists say that at the moment of the Big Bang, space, energy and all of the building blocks of life came into existence. The Big Bang theory influences some people **to doubt God is exists** as they say that science can explain the existence of the Universe and Earth without God. • Some religious believers do not accept this scientific theory. They argue that their Holy Books are the only source of knowledge that can be used to explain the existence of the Universe. They are sometimes known as creationists or literalists • Other religious believers say that the Big Bang theory and their creation stories agree in many ways. For example the Book of Genesis in the Bible says that light was the first thing to exist/ be created just like the Big Bang Theory explains. • Some religious believers accept the scientific view. They argue that science explains how creation occurred whilst religion says why.
6 – Scientific explanation of how life came to be on Earth **Darwin's theory of evolution**	Charles Darwin was born in England in 1809. He was a scientist who became famous for his scientific theory of evolution. Darwin's most famous book was the Origin of the Species which was published in November 1859. Evolution was Darwin's theory that life develops from simple to more complex forms and **adapts** to the environment in which it lives. Darwin suggested that **Natural Selection** was the process by which life forms adapt successfully to their environment. Those that don't become **extinct.** Darwin's theories are used by many atheists as strong evidence that God does not exist was he was not needed for creation. Many religious believers do not accept the views of Darwin and use their Holy Books as their evidence for how humans were created. Some religious people argue that science might explain how the humans were created but **religions explains why.**

SECTION A: The Formal Elements

Line, Tone, Shape, Form , Texture, Space, Colour.
These are the building blocks of all art work . Artists use them in different ways and with different emphasis to create unique work

SECTION B: Tone

Tone is used in art to show 3d form and to give drama to a picture by creating contrast with shading

Stippling

Scumbling

Shading

Smudging

Crosshatching

Tonal Bar showing a range of tones that have been blended

Shading applied to a drawing in the correct way – shadow will be darker than where the light falls. This will help your drawing look more 3d

Creating tones with pen can be done by place marks closer together for a darker tone

Any mark can be used to show shading.- lines , smudges , dots etc

SECTION C: Line

Line is one of the formal elements in art. It can be used for describing eg outline of shape, creating tone to make the shape appear more 3d, showing texture to describe what the object might feel like to touch. Lines can also show expression of mood in a picture by the direction or shape of the line .
Types of Line- vertical horizontal, zigzag curved, parallel, diagonal

The quality of a line refers to the thickness or thinness of a line.

There are **FIVE** types of line

VERTICAL HORIZONTAL ZIG-ZAG
DIAGONAL CURVED

Lines can be actual drawn lines or they can be Implied lines. These can be visualised if there is a tonal difference. Implied lines can also be shown by the object arrangement
Implied lines are good for making a composition more interesting and give meaning.eg this vertical line gives strength and power to this image.

Drawing techniques- contour lines follow the lines of shape within the object – not just the outline and they maybe different thicknesses. Continuous line drawings require the pencil to not leave the paper!

contour lines

continuous line

KEY TERMS

Formal Elements- the basic ingredients included in art work – these are : LINE, TONE, TEXTURE, SHAPE, FORM, COLOUR
Visual language- how the formal elements are used to show or express meaning, mood, emotion within the artwork
Actual Line – real line drawn
Implied Line- visual suggestion of a line
Composition- the arrangement plan of objects in a picture
Tonal Bar- shows tones from light to dark
Expressive- showing emotion
Contrast- significant difference between things – tonal contrast

Some marks have special names:
- lines
- dashes
- dots for stippling
- smudges
- scumbling
- hatching
- cross hatching
- contour

Line can show mood or express emotion by the- use of different line type – jagged or smooth or the way the line is put on the paper - with excited quick actions or organised control .
An artist can change the look of the work very quickly in this way..

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SECTION D: Shape and 3D Form

For a 3d object to look 3d on a page we need to use marks for shadings that show light and dark tone.
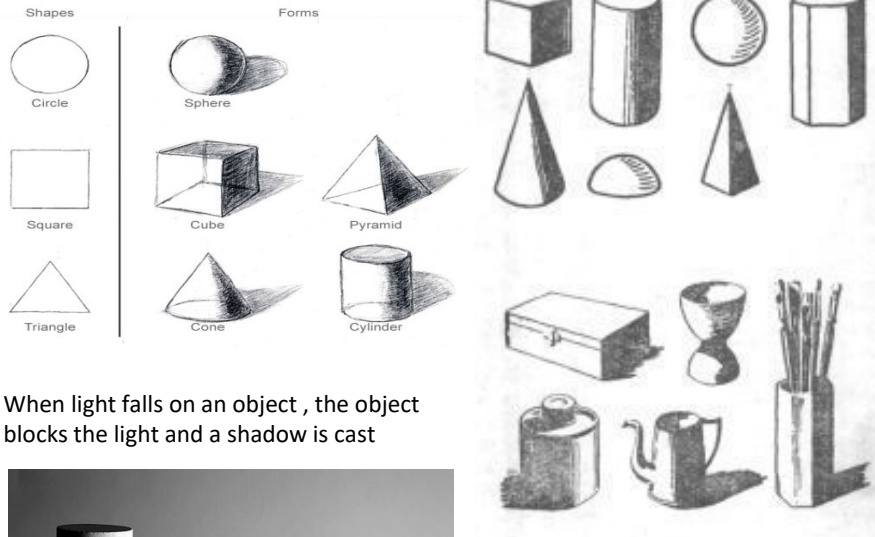
When light falls on an object , the object blocks the light and a shadow is cast
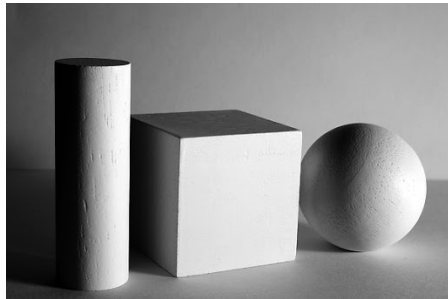
Shading can be smooth blended shading or other techniques like stippling. But whatever type of shading used it must show a range of TONES if the flat shape is to look like a 3d form
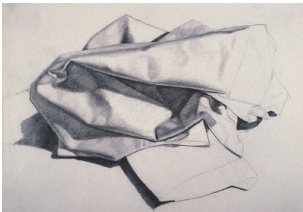
We need to apply this knowledge to irregular shapes too when shading e.g. in this scrunched up paper

SECTION E: Texture

Textures- by building up different marks you can create realistic looking texture (how something looks like it feels) This is also called Implied Texture like these feathers.

Textures can also be drawn that do NOT look like anything real , these are called **Invented Textures** and are like patterns but can look smooth or bumpy

SECTION F: Space – ways to create space in a picture
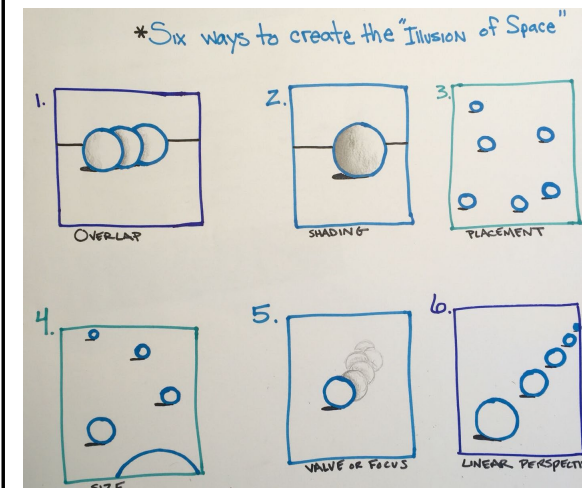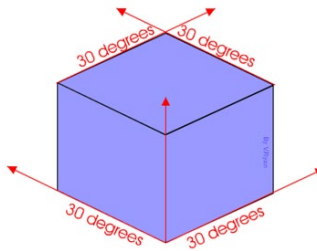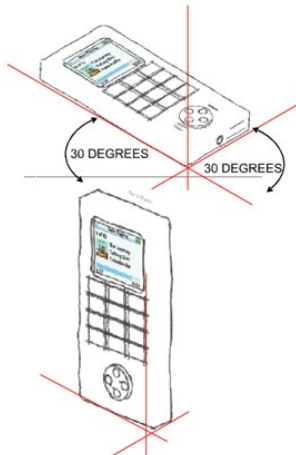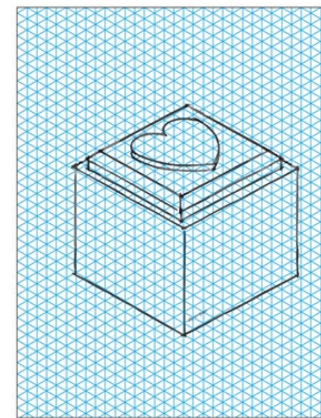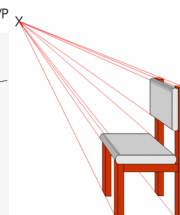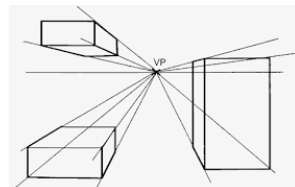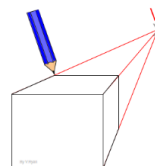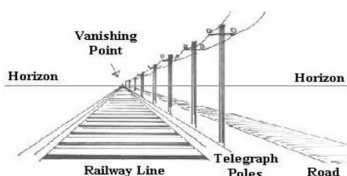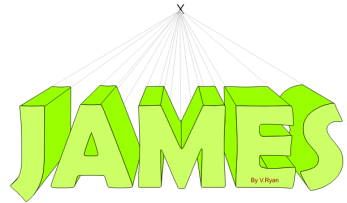
SECTION G: Colour

1. The three primary colours are...red, yellow, blue
2. The three secondary colours are...orange, green, purple
3. Red + blue = purple
4. Red +yellow =orange
5. Yellow + blue =green
6. The cool colours are...colours with blue
7.The warm colours are...colours with red
8. Complementary colours are...opposite pairs
Red and green
Blue and orange
Yellow and purple

Harmonious colours are near to each other like blue and blue green

BOX 1: Colour

When presenting your design ideas your choice of colours is very important. As a designer you need to understand how colours are created and how they work with each other so careful colour choices can be made.

Primary Colours: These are colours that cannot be created through the mixing of other colours. They are colours in their own right. The three primary colours can be seen below.

RED – YELLOW – BLUE

Secondary Colours: The three primary colours can be mixed together to create **SECONDARY** colours. The table below shows the colour combination needed to create the secondary colours.

RED   YELLOW   BLUE

The colour wheel can be seen below. This can be used to help remember the PRIMARY and SECONDARY colours and which colours can be mixed to create TERTIARY colours.

YELLOW	+	BLUE	=	GREEN
BLUE	+	RED	=	PURPLE
RED	+	YELLOW	=	ORANGE

BOX 2: Isometric Drawing

Isometric drawing is way of presenting designs/drawings in three dimensions. In order for a design to appear three dimensional, a 30 degree angle is applied to its sides. The cube opposite, has been drawn in isometric projection.

30 DEGREES   30 DEGREES

- FREE HAND SKETCHING IN ISOMETRIC:
Designs drawn in isometric projection are normally drawn precisely using drawing equipment. However, designers find 'free hand' sketching in isometric projection useful.
- The mobile phone / music player opposite, has been sketched in free hand isometric projection. It allows the designer to draw in 3D quickly and with a reasonable degree of accuracy. The design is still drawn at a 30 degree angle, although this is estimated, rather than drawn with graphics equipment.

- When drawing in isometric there are many different techniques you can use.
- If you feel confident with drawing in isometric use blank paper otherwise use isometric paper (seen opposite).
- This paper has 30 degree lines and vertical lines already printed on it (similar to graph paper). Drawings can drawn directly onto the isometric grid or plain paper can be placed on top of the grid. The grid lines can be seen through the paper and can be used as a guide when constructing drawings.

BOX 3: One Point Perspective

Perspective (from the Latin: *perspicere* "to see through") is an approximate representation, generally on a flat surface (such as paper), of an image as it is seen by the eye. The two most characteristic features of perspective are that objects appear smaller as their distance from the observer increases; and that they are subject to *foreshortening*, meaning that an object's dimensions along the line of sight appear shorter than its dimensions across the line of sight.
Perspective drawing is a good technique to use when drawing in 3D. There are different styles including single point and two point perspective.

One Point Perspective
A drawing has one-point perspective when it contains only one vanishing point on the horizon line. This type of perspective is typically used for images of roads, railway tracks, hallways, or buildings viewed so that the front is directly facing the viewer.

BOX 4: Materials

Hardwoods

Beech

Oak

Ash

Teak

Comes from **deciduous** trees

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

Softwoods

Pine

Spruce

Cedar

Fir

Comes from **coniferous** trees

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

Manufactured Boards

Boards are available in many thicknesses

Boards are inexpensive so are often used instead of real woods

Manufactured boards are often covered with a thin layer of real wood which is called veneer this improves their appearance or properties.

Manufactured boards are timber sheets which are produced by gluing wood layers or wood fibers together

Manufactured boards are often made using waste wood

Manufactured boards have been developed mainly for industrial production as they can be made in very large sheets of consistent quality

Examples of Manufactured Boards

Medium Density Fibre board (MDF)

This board is composed of fine wood dust and resin pressed into a board. This material can be worked, shaped and machined easily.

Plywood

Plywood is a material manufactured from thin layers or "plies" of wood veneer that are glued together with adjacent layers having their wood grain rotated at 90 degrees to one another.

BOX 5: Natural Wood – Raw Materials & Processing to Product

Below is a summary of processing natural wood, from logging / harvesting to manufacturing a product.

STAGE ONE - TREE FELLING   STAGE TWO - STORAGE   STAGE THREE - TRANSPORT TO SAWMILL

STAGE FOUR - BREAKING DOWN / ROUGH SAWING IN THE SAWMILL   STAGE FIVE - SEASONING   STAGE SIX - RESAWING TO ACCURATE SIZES

STAGE SEVEN - MANUFACTURE A PRODUCT
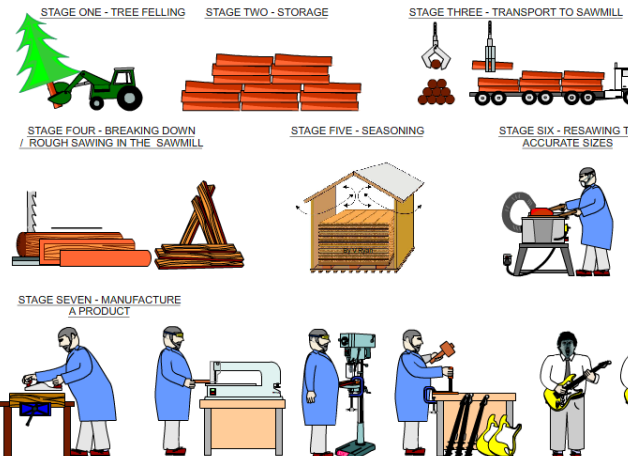
At the sawmill, the logs are cut into 'boards' using equipment such as circular saws and bandsaws. This is called 'conversion'. The first stage of conversion is a process called 'breaking down', which means rough sawing. The second stage is called 'resawing' and refers to more accurate / precise cutting and finishing, such as planing and further machining. Two types of rough sawing for the breaking down process, are shown below.

THROUGH AND THROUGH SAWN   QUARTER SAWN

THE ENDS OF EACH LOG ARE TRIMMED SO THAT THEY ARE STRAIGHT   EACH TRIMMED LOG IS CUT INTO BOARDS.
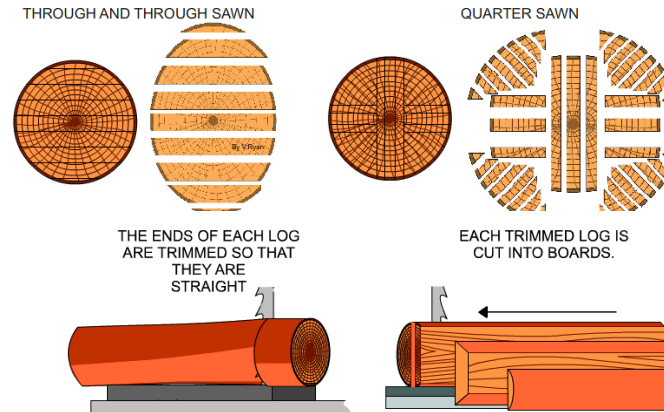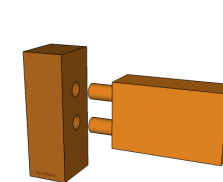
BOX 6: Joining Methods

Wood joints can be either **PERMANENT** or **TEMPORARY** depending on the type and if glue is used.
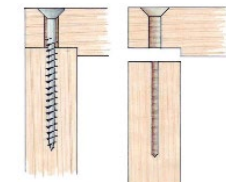
Permanent Joint: When we do not want to take the pieces apart again e.g. Glues, welding, rivets

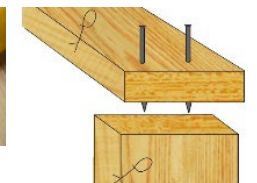**Temporary Joint:** When we will, or might need to take pieces apart again e.g. Screws, bolts, nails

Dowel Joint

Joint with wood screws
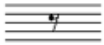
Joint with wood glue or PVA

Nailed Joint

Performing Arts - DRAMA	Basic Skills	CYCLE 1	Year 7

Box A – Techniques	Box B – Techniques	Box C – Techniques
Still Image Visual pictures created by performers to tell part of the story, illustrate narration or emphasise a key moment in a play. Performers use facial expressions, body language and positioning onstage to show characters, relationships and emotions. **Thought Tracking** The thoughts of a character being told to the audience during a still image. This can be in the form of a mini monologue or narration of the story. **Physical Theatre** This is a style of theatre, where the cast make the scenery, set and One minute you could be a character; the next minute you could be a carrot.	**Improvisation** Improvised drama is work that hasn't been scripted, the dialogue, characters and action is made up as you go along. props out of their bodies to help tell the story on stage. Spontaneous improvisation is created in the moment, a rehearsed role-play is planned and prepared. **Narration** A character speaks directly to the audience to describe or narrate parts of his/her own story or a narrator speaks objectively about the events happening onstage.	**Cross Cutting** Creating cross cut scenes onstage, this technique allows you to juxtapose scenes that happen at different times or in different places, using separate areas of the performance space. The technique is used to highlight or contrast a particular theme or aspect of the story, you can represent the scenes in real time or flashback and forward. **Flashback/flash-forward** A drama convention where the performers quickly move from different periods of time in order to give the audience crucial information.

Box D – Interpretive Skills	Box E – Skills Techniques	Box F – Performance Skills
• Projecting • Focus (eyeline) to audience • Facial Expressions • Confidence • Audience awareness • Range of vocals • Clear change in character	**Explorative Strategies** • Still Image • Thought Track • Physical Theatre • Conscience Alley • Cross Cut **Movement Skills** • Body Language • Facial Expression • Gesture • Physicality • Gait	**Vocal Skills** • Accent • Volume • Pitch • Pace **Interaction Skills** • Eye Contact • Proxemics • Levels

BOX A: DR PITTS – THE MUSICAL ELEMENTS

DYNAMICS – The volume of the music

RHYTHM – A pattern of music made up of notes with a different duration

PITCH – How high or low the notes are in a piece of music

INSTRUMENTATION (TIMBRE) – The different types of sound that are in the music

TEMPO – The speed of a piece of music

TEXTURE – How many instruments and lines of music there are. You can have a thin or thick texture

STRUCTURE – How the music is built up and the different sections in the music

BOX C: NOTE VALUES

Looks like	Name	Lasts for	Rests
𝅝	Semibreve	4	▬
𝅗𝅥	Minim	2	▬
𝅘𝅥	Crotchet	1	𝄽
𝅘𝅥𝅮	Quaver	½	𝄾
𝅘𝅥𝅮𝅘𝅥𝅮	2x Quavers	2x ½	

BOX B: VOCAL TECHNIQUES

UNISON - Everyone performs the same part at the same time.

HARMONY - When two or more notes are played at the same time.

ACAPELLA – Making music with just your voice, no instrument accompaniment.

CONFIDENT – When performers know what they are performing and know they will get it right.

LYRICS – The words that are sung by a singer.

ENSEMBLE – A group of musicians performing together.

WARM UP – A simple performance or exercise at the start of rehearsal to prepare for the main piece and develop technique.

MASHUP – Several different songs put together to create one larger song.

BEATBOX – To create drum sounds using your voice.

BOX D: AFRICAN MUSIC KEY WORDS

DJEMBE – African Drum

CALL AND RESPONSE – Performance technique where one performer plays and other performers copy.

POLYRHYTHMS – Different rhythms being played at the same time.

SYNCOPATION – Off-beat rhythms.

ACCURATE – Performing the music correctly.

FLUENT – Being able to perform confidently and independently.

BOX E: DJEMBE DRUM

IT	E-Safety	Cycle 1	Year 7

BOX 1: The internet

Be careful when sharing personal information online. Only use websites you trust.

Personal information includes:

- Full name
- Date of birth
- Address

This information can be used to steal your identity or to find you in the real world.

Identity theft is where someone pretends to be you. They might shop online spending your money, or take out loans in your name.

BOX 2: Status updates, comments and photos

Where possible, limit access to your social media profiles to family and friends. Do not post inappropriate status updates, comments or photos online. You might not want certain people, such as potential employers, to gain access to them.

Social networking sites also frequently change their privacy policies. This means that the way your information is used can change, a danger which often draws criticism.

BOX 3: Know who you're talking to

Email, instant messaging, social networking sites and video chat are great for keeping in touch with family and friends, but make sure you know who you're talking to. People may not be who they claim to be. They might try to get personal information from you or ask you to do something that makes you uncomfortable. Others may try to wind you up or be unnecessarily aggressive. This is called trolling and flaming.

Ignore emails and friend requests from people you don't know and try to avoid meeting people you meet on the internet in real life. If you do decide to, take an adult with you, meet them in a crowded public space and always let a second adult know where you are.

BOX 4: False information and unsuitable content

The internet is a great source of information but some of it is incorrect, out of date or biased. Always check multiple sources, i.e. other websites or written material, to confirm what you've read is correct.

No one is in charge of the internet so anyone can post or publish anything to it. Some content may be unsuitable.

Websites that you can trust include those from:

the Government – if the address has 'gov.uk' in it, it's a UK Government website

the National Health Service (NHS) – if the address has 'nhs.uk' in it, it's an NHS website

the Police – the official website is www.police.uk

the BBC – all of the BBC's websites have 'bbc.co.uk' in their address

BOX 5: Phishing

Trying to trick someone into giving out information over email is called 'phishing'. You might receive an email claiming to be from your bank or from a social networking site. They usually include a link to a fake website that looks identical to the real one. When you log in it sends your username and password to someone who will use it to access your real accounts. They might steal your money or your identity.

Your bank will never send you an email asking for your personal information or your username and password.

BOX 6: Malware and security

Malware is a general term that describes lots of different programs that try to do something unwanted to your computer. Anti-virus software prevents malware from attacking your computer or mobile device. There are free anti-virus applications available:

- AVG
- Avast!
- Microsoft Security Essentials

There are also applications that you have to pay for:

- Norton
- McAfee
- Sophos

There are many types of malware:

A **virus** harms your computer in some way, usually by deleting or altering files and stopping programs from running.

A **Trojan** starts by pretending to be a trusted file, but gives unauthorised access to your computer when you run it.

Worms are difficult to get rid of. They copy themselves over networks to external storage devices

Spyware collects information from your computer and sends it to someone.

Scareware tricks you into thinking it's software that you need to buy.

BOX 7: Firewall

A firewall monitors connections to and from your computer. If it spots something suspicious, it closes the connection or disconnects it. Most operating systems include a firewall and it should be turned on by default.

Hackers, people who try to gain access to your computer without your permission, will have a harder time if your firewall is enabled.

BOX 8: Cyberbullying

Using technology to bully someone is called cyberbullying. Cyberbullying can involve one or more of the following:

sending offensive texts or emails
posting lies or insults on social networking sites
sharing embarrassing videos or photos online
If you're being bullied, tell someone. For more advice visit **Think U Know**.com

BOX 9: Smartphones and mobile devices

These allow for photos, videos and your location to be shared instantly on the internet. Be careful what you get up to in public as anyone might have a smartphone pointed at you. Do not post photos or videos of other people online without their permission.

WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5
1. believe	1. beneath	1. buried	1. business	1. caught
2. disappear	2. disappoint	2. embarrass	2. energy	2. engagement
3. interesting	3. interrupt	3. issue	3. jealous	3. knowledge
4. sieve	4. design	4. simmering	4. dairy	4. vitamins
5. bibliography	5. series	5. book	5. system	5. catalogue
6. commemorate	6. commission	6. committee	6. compatible	6. comparative
7. feasible	7. February	7. foreign	7. humorous	7. irreparable
8. output	8. cursor	8. password	8. delete	8. preview
9. tourist	9. globalisation	9. tourism	9. habitat	9. transport
10. vertical	10. amount	10. minus	10. volume	10. approximately
WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10
1. chocolate	1. climb	1. column	1. concentration	1. material
2. enquire	2. environment	2. evaluation	2. evidence	2. potential
3. listening	3. lonely	3. lovely	3. marriage	3. sincerely
4. diet	4. water	4. evaluation	4. weight	4. fats
5. thesaurus	5. chapter	5. classification	5. content	5. copyright
6. connoisseur	6. corroborate	6. courteous	6. accommodate	6. assassin
7. livelihood	7. maintenance	7. strategy	7. stratagem	7. truly
8. digital	8. processor	8. program	8. documents	8. programming
9. human	9. transportation	9. igneous	9. tsunami	9. industry
10. multiply	10. weight	10. average	10. multiplication	10. axis
WEEK 11	WEEK 12	WEEK 13		
1. honorary	1. humorous	1. hypocrisy		
2. illiterate	2. immigrant	2. incidentally		
3. indispensable	3. irrelevant	3. irreparable		
4. weighing	4. fermentation	4. whisking		
5. dedication	5. dictionary	5. editor		
6. acknowledge	6. accidental	6. knowledge		
7. twelfth	7. withhold	7. valuable		
8. graphic	8. scanner	8. hardware		
9. urban	9. infrastructure	9. volcano		
10. axes	10. negative	10. calculate		

**CYCLE 1
SPELLINGS
YEAR 7**

DIXONS
COTTINGLEY
ACADEMY

WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5
1.	1.	1.	1.	1.
2.	2.	2.	2.	2.
3.	3.	3.	3.	3.
4.	4.	4.	4.	4.
5.	5.	5.	5.	5.
6.	6.	6.	6.	6.
7.	7.	7.	7.	7.
8.	8.	8.	8.	8.
9.	9.	9.	9.	9.
10.	10.	10.	10.	10.
WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10
1.	1.	1.	1.	1.
2.	2.	2.	2.	2.
3.	3.	3.	3.	3.
4.	4.	4.	4.	4.
5.	5.	5.	5.	5.
6.	6.	6.	6.	6.
7.	7.	7.	7.	7.
8.	8.	8.	8.	8.
9.	9.	9.	9.	9.
10.	10.	10.	10.	10.
WEEK 11	WEEK 12	WEEK 13		
1.	1.	1.		
2.	2.	2.		
3.	3.	3.		
4.	4.	4.		
5.	5.	5.		
6.	6.	6.		
7.	7.	7.		
8.	8.	8.		
9.	9.	9.		
10.	10.	10.		

**CYCLE 1
SPELLING TESTS
YEAR 7**

DIXONS
COTTINGLEY
ACADEMY