Knowledge Navigator 2022/2023 Cycle 1

Year 8

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 19 Week 2	12/09/22	French Page 19 Week 3	19/09/22	French Page 19 Week 4	26/09/22	French Page 19 Week 5
Tuesday	30/08/22	Year 7 only	06/09/22	Science Page 11 Box 5/6	13/09/22	Science Page 11 Box 1/2	20/09/22	Science Page 11 Box 3/4	27/09/22	Science Page 10 Box 4/5
Wednesday	31/08/22	All students	07/09/22	History Page 23 Box A Sparx Maths	14/09/22	Geography Page 21 Box 1 Sparx Maths	21/09/22	History Page 23 Box B Sparx Maths	28/09/22	Geography Page 21 Box 2 Sparx Maths
Thursday	01/09/22	All students	08/09/22	English Page 2 Box A	15/09/22	English Page 2 Box B	22/09/22	English Page 2 Box C	29/09/22	English Page 3 Box D
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 19 Week 6	10/10/22	French Page 19 Week 7	17/10/22	French Page 20 Week 8	07/11/22	French Page 20 Week 9	14/11/22	French Page 20 Week 10
Tuesday	04/10/22	Science Page 10 Box 1/2/3	11/10/22	Science Page 11 Box 3/4	18/10/22	Science Page 8 Box 1/3	08/11/22	Science Page 8 Box 2/3	15/11/22	Science Page 8 Box 3/4
Wednesday	05/10/22	History Page 23 Box C Sparx Maths	12/10/22	Geography Page 21 Box 3 Sparx Maths	19/10/22	History Page 24 Box D Sparx Maths	09/11/22	Geography Page 22 Box 4 Sparx Maths	16/11/22	History Page 24 Box E Sparx Maths
Thursday	06/10/22	English Page 3 Box E	13/10/22	English Page 3 Box E	20/10/22	English Page 3 Box F	10/11/22	English Page 3 Box	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 20 Week 11	28/11/22	French Page 20 Week 12	05/12/22	French Page 20 Week 13
Tuesday	22/11/22	Science Page 9 Box 1/2	29/11/22	Science Page 9 Box 3/4	06/12/22	Science Page 9 Box 5/6/7
Wednesday	23/11/22	Geography Page 22 Box 5 Sparx Maths	30/11/22	History Page 24 Box A Sparx Maths	07/12/22	Geography Page 22 Box 6 Sparx Maths
Thursday	24/11/22	English Page 2 Box B	01/12/22	English Page 2 Box C	08/12/22	English Page 3 Box D
Friday	25/11/22	Spellings Week 11	02/12/22	Spellings Week 12	09/12/22	Spellings Week 13

DIXONS COTTINGLEY ACADEMY

YEAR 8

CYCLE 1 HOMEWORK

YEAR 8 KNOWLEDGE NAVIGATOR
CYCLE 1
CONTENTS PAGE

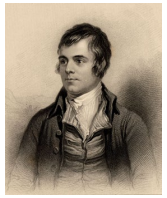
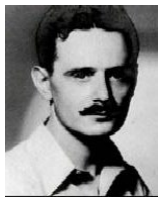
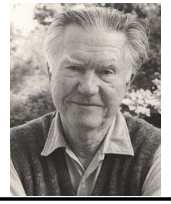
English	INEQUALITY AND PREJUDICE – Of Mice And Men And Poetry	CYCLE 1	Year 8

BOX A: Key Characters	
George	frustrated, devoted, a dreamer
Lennie	childlike, unassuming, physically powerful
Candy	unloved, an outcast, aging
Curley	insecure, unmerciful, jealous
Curley's Wife	a seductive temptress, objectified, lonely, nameless
Crooks	cynical, proud, isolated
Slim	compassionate, wise, respected
Carlson	heartless, insensitive

BOX B: Themes and Context
Steinbeck encourages us to empathise with **the plight of migrant workers** during the **Great Depression**.
The American Dream is shown to be impossible: **reality** defeats **idealism.**
The novella explores the human need for **companionship** and the tragedy of **loneliness.**
Steinbeck reveals the **predatory nature of mankind**: the **powerless** are targeted by the **powerful**.
Steinbeck explores the tension between the **inevitability of fate** and the **fragility of human dreams**.
The **prejudices** of 1930s America are exposed, including **racism**, **sexism** and **ageism**.
The novella is an **indictment** of the way **society** treats the **dispossessed**.

BOX C: Key Quotations	
1	"Guys like us, that work on ranches, are the loneliest guys in the world. They got no family. They don't belong no place…" – **George** "I got you to look after me, and you got me to look after you, and that's why." – **Lennie**
2	"Ain't many guys travel around together,' he mused. 'I don't know why. Maybe ever'body in the whole damn world is scared of each other." – **Slim**
3	"We wouldn't ask nobody if we could. Jus' say, 'We'll go to her,' an' we would. – **George** "I ought to of shot that dog myself, George. I shouldn't of ought to let no stranger shoot my dog" – **Candy**
4	"Books ain't no good, a guy needs somebody" – **Crooks** **"**Ever'body wants a little piece of lan'. I read plenty of books out here. Nobody never gets to heaven, and nobody gets no land." – **Crooks**
5	'And the meanness and the plannings and the discontent and the ache for attention were all gone from her face. She was very pretty and simple, and her face was sweet and young.' – **Narrator about Curley's wife**
6	'A silent head and beak lanced down and plucked it out by the head, and the beak swallowed the little snake while its tail waved frantically.' – **Narrator showing George and Lennie's paradise is lost**

Box D: Tier 2 Vocabulary	
Prejudice	Preconceived opinion that is not based on reason or actual experience.
Derogatory	Showing a critical or disrespectful attitude.
Pugnacious	Eager or quick to argue, quarrel, or fight.
Isolation	The process or fact of isolating or being isolated.
Segregate	Set apart from the rest or from each other; isolate or divide along racial, sexual, or religious lines.
Microcosm	A community, place, or situation regarded as encapsulating in miniature the characteristics of something much larger.
Tension	Mental or emotional strain
Solitude	The state or situation of being alone.
Anguish	Severe mental or physical pain or suffering.
Naive	(Of a person or action) showing a lack of experience, wisdom, or judgement.

Box F: Links to Poetry			
'To a Mouse'	Robert Burns 	1785	After accidentally destroying a mouse nest with his plough, the poem's speaker expresses sorrow for the animal's plight. The mouse's homelessness and hunger prompt the speaker to feel compassion for all vulnerable creatures and also to reflect on the unpredictability and pain of human life. The line ***'The best laid schemes o' Mice an' Men Go often askew,'*** was the inspiration for the title of Steinbeck's novella. ***'Small, crafty, cowering, timorous little beast, Oh, what a panic is in your breast!'***
'Strange Fruit'	Abel Meeropol 	1937	The 'strange fruit' that the poem refers to are metaphors for the victims of lynching. The gruesome image of "black bodies" hanging from "southern trees" serve as a stark reminder of humanity's potential for violence as well as the staggering cost of prejudice and hate. The poem was famously performed as a song by Billie Holliday in the 1950s. ***'Black body swinging in the southern breeze, strange fruit hanging from the poplar trees.'***
'Burning a book'	William Stafford 	1986	In this poem, Stafford explores the idea of burning books to get rid of them, but he also explores the idea of ignorance and the importance of sharing ideas. In the past, many books have been banned or censored. Past campaigns to ban 'Of Mice and Men' have claimed that it is 'vulgar', 'racist', 'violent', 'profane'. ***'ignorance can dance in the absence of fire.'***

Box E: Key Dates	
1600-1800s	People were kidnapped from the continent of Africa, forced into slavery in the American colonies and exploited to work as indentured servants and labourers in the production of crops such as tobacco and cotton (plantations).
1860	Abraham Lincoln Elected
1861	The American Civil War
1865	The War Between the Northern and Southern States, as the Civil War was also known, ended in Confederate surrender in 1865. The conflict was the costliest and deadliest war ever fought on American soil, with some 620,000 of 2.4 million soldiers killed, millions more injured and much of the South left in ruin.
1865	Slavery abolished/Jim Crow Laws/Formation of the Ku Klux Clan secret society
1880s	Big cities in the South were not wholly beholden to Jim Crow laws and Black Americans found more freedom in them.
1902	Steinbeck born in Salinas, California.
1929	The start of the Great Depression. Wall Street Crash – 29 October.
1930s	The Dustbowl which led to migrant workers leaving the southern states of America.
1937	Of Mice and Men – Published

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

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

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

Mili means one thousandth
Centi means one hundred **or** one hundredth
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 100cl in 1l
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

Probability

The probability of an event being certain is 1
The probability of an event being impossible is 0
The probability of an event having an even chance of happening is 0.5

There are 6 sides on a normal dice.

There are 52 cards in a pack: 13 cards are red hearts; 13 cards are red diamonds, 13 cards are black spades, 13 cards are black clubs. Each set has an ace, a king, a queen, a jack, and the numbers 2 to 9

Drawing facts

Diagrams and graphs should always be drawn with a pencil and ruler

NOT TO SCALE means the diagram has not been drawn accurately and so you can't make assumptions about lengths and angles

A protractor is used to measure angles. A compass is used to construct arcs and circles

Data

The range of a set of numbers is the difference between the highest and lowest numbers

The mode of a set of numbers is the number that appears the most

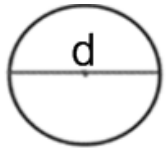
The median of a set of numbers is the middle number when the data is in order

The mean, or common average, of a set of numbers can be found by adding all the numbers together and dividing by how many numbers there are

Correlation describes the relationship between two sets of data

BOX 2: Ratio and scale

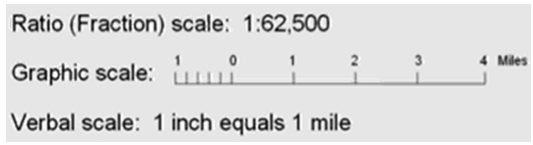
LINKS TO: FRACTIONS, DECIMALS, PERCENTAGES
e.g. the ratio **15**:35 is: $\frac{15}{50}$ in fractional form 0.3 in decimal form 30% in percentage form

RATIO		
Ratio	**Compares** the size of one part to **another part**.	
Ratio Notation	The ratio of A to B is written as **A:B**	
Part (*Share)*	A **proportion** of the original amount.	
Whole	The **total** amount.	
Proportion	Proportion **compares** the size of one part to the size of the **whole**.	
Unit	A **standard** amount used to **measure** something	
Compound Units	A unit made of **two other units**. *e.g. speed is distance per time m/s.*	
Circumference of a circle	Circumference = **pi x diameter** $C = \pi d$ OR $C = 2\pi r$	
Gradient (H)	How **steep** a line is. Can be positive or negative. $\frac{\text{(Change in y)}}{\text{(Change in x)}}$ It gives the **rate of change**.	

BOX 3: Multiplicative change

SCALE	
Scale	The **ratio** of the lengths in a model/map/diagram to the lengths in **real life**
Scale Factor	The **ratio** of **corresponding sides** of two similar shapes.
Similarity	Two shapes are similar when one is an **enlargement** of the other. All **angles** are the same, but the **lengths of sides** are different.

EXAMPLES: MAP SCALES



PROPORTION	
Direct Proportion	If two quantities are in direct proportion, as one increases, the other **increases** at the same rate
Direct proportion graphically (H)	

BOX 4: Multiplying and dividing fractions

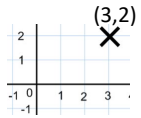
FRACTION NOTATION

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

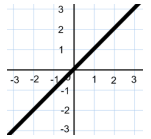
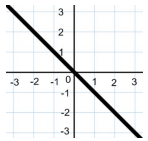
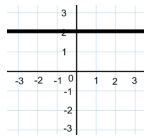
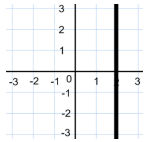
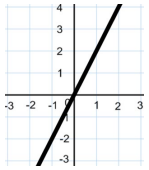
FRACTIONS	
Fraction	Represents the **division** of one integer by another. *E.g.* $\frac{2}{3}$ = ***2 ÷ 3***
Unit Fraction	A fraction where the **numerator is 1**. *E.g.* $\frac{1}{6}$
Improper Fraction	A fraction when the **numerator** is greater than the **denominator**. *E.g.* $\frac{5}{3}$
Reciprocal	The reciprocal of a number is **1 divided by the number**. *E.g. The reciprocal of x is* $\frac{\mathbf{1}}{\boldsymbol{x}}$.
Equivalent Fractions	Fractions which represent the **same value**. *E.g.* $\frac{2}{3}$ *and* $\frac{4}{6}$.
Simplifying fractions	Fractions can be simplified by dividing the numerator and denominator by a **common factor**.

FRACTIONS: OPERATIONS		
Multiply	Multiply the **numerators** Multiply the **denominators**	$\frac{A}{B} \times \frac{C}{D} = \frac{\boldsymbol{AC}}{\boldsymbol{BD}}$
Divide	Keep the **first fraction** Change the **÷ to x** Flip the **second fraction**	$\frac{A}{B} \div \frac{C}{D} = \frac{\boldsymbol{A}}{\boldsymbol{B}} \times \frac{\boldsymbol{D}}{\boldsymbol{C}} = \frac{\boldsymbol{AD}}{\boldsymbol{BC}}$

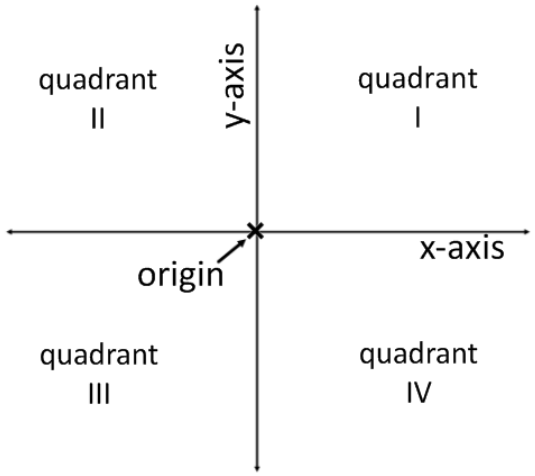
BOX 5: Working in the Cartesian plane

COORDINATES	
Axis (plural: axes)	The **x** axis is horizontal. The **y** axis is vertical.
Quadrant	The **four regions** separated by the axes.
Coordinate	Give a **position** of a **point** on a grid. The first number (**x**) moves **left** (-) or **right** (+). The second number (**y**) moves **up** (+) or **down** (-). (**x**, **y**) *e.g. (3,2) means the **point** that is 3 to the right and 2 up from the origin.* 
Origin	The coordinate **(0, 0)**
Line Segment	A line joining **two points**.
Midpoint	The **middle** of a line segment.

Links to: DIRECT PROPORTION	
Direct Proportion	If two quantities are in direct proportion, as one increases, the other **increases** at the same rate If y is directly proportional to x, this can be written as **$y \propto x$**
y = kx	An equation of the form **y=kx** represents direct proportion, where k is the **constant of proportionality**.

LINEAR GRAPHS		
y = x	Every point on this line, the y coordinate is **equal to** the x coordinate. *e.g. (3,3), (-2,-2), (0,0)*	
y = -x	Every point on this line, the y coordinate is **equal to** the **negative** of the x coordinate *e.g. (3, -3), (-2,2)*	
y = a	These lines are always **horizontal**. *For example y = 2* *Every point on this graph, the y coordinate equals 2* *e.g. (0,**2**), (5,**2**)*	
x = a	These lines are always **vertical**. *For example x = 2* *Every point on this graph, the x coordinate equals 2* *e.g. (**2**,0), (**2**,5)*	
y = kx	These lines always go through the **origin.** *For example y = 2x* *Every point on this graph, the y coordinate is double the x coordinate*	

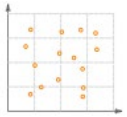
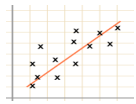
LINEAR GRAPHS	
y = mx + c	The general equation of a linear graph, where **m** is the **gradient** and **c** is the **y-intercept.**
Gradient	How **steep** a line is. Can be positive or negative. $\frac{\text{(Change in y)}}{\text{(Change in x)}}$ It gives the **rate of change**.
y- intercept	Where the line **crosses** the **y-axis**



Links to: SEQUENCES	
Linear Sequence	A sequence where the **difference between terms** is the **same** each time, can be increasing or decreasing. Also known as a **Arithmetic** Sequence. *Algebraically:* $x_n = \boldsymbol{an + b}$

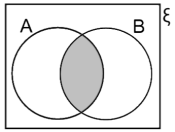
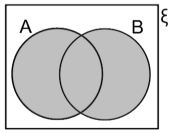
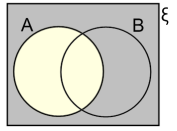
BOX 6: Collecting and representing data

TYPES OF DATA	
Hypothesis	A statement that **might be true**, which can be **tested**
Data	A collection of **information**
Primary	Data collected **yourself** for a specific reason
Secondary	Data you are using that was collected by **someone else** for a different reason
Qualitative	Data that can only be written in **words**, not numbers, e.g. eye colour, favourite animal
Quantitative	**Numerical** data, e.g. shoe size, height of a plant.
Continuous	Numerical data that can be **measured**, e.g. height of a plant. It has an infinite number of possible values within a selected range
Discrete	Data which can only take **certain values**, e.g. eye colour, shoe size
Grouped	Numerical data that has been ordered and **sorted into groups** called classes

DISPLAYING BIVARIATE DATA		
Bivariate data	Data containing **two variables**	
Variable	Something that can **change or vary.**	
Scatter graph	A **graph** to show **bivariate** data	
Correlation	When there is a **relationship** between two sets of data, but we don't know if one caused the other	
Causation	When the independent variable **causes** the dependent variable	
Positive correlation	As one variable increases, the other **increases**	
Negative correlation	As one variable increases, the other **decreases**	
No correlation	There is **no relationship** between the two variables.	
Line of best fit	A line that **best represents** the data on a scatter graph. In maths GCSE it is always straight, but in science it can be curved.	
Outlier	A value that '**lies outside**' most of the other values in a set of data. An outlier is **much smaller** or **much larger** than the other values in a set of data.	
Interpolate	**Estimating** a value **within** the range of data we have	
Extrapolate	**Estimating** a value from **outside** of the data range we have. It is **not reliable.**	

BOX 7: Tables and probability

PROBABILITY NOTATION	
P(A) =	The **probability of an event A** =
P(A') =	The probability that event A **will not occur** = The complement of A.
P(A ∩ B) =	The probability that **both events A and B** will occur = **The intersection**.
P(A ∪ B) =	The probability that **event A or B or both** will occur = **The union**.

VENN DIAGRAMS		
Venn Diagram	A diagram using circles or other shapes, to **show the relationship** between sets	
Set	A **collection of items** with one of each member	
The Intersection	(A ∩ B) **In A and in B**	
The Union	(A ∪ B) **In A or in B or in both**	
The Compliment	A' **Not in A**	

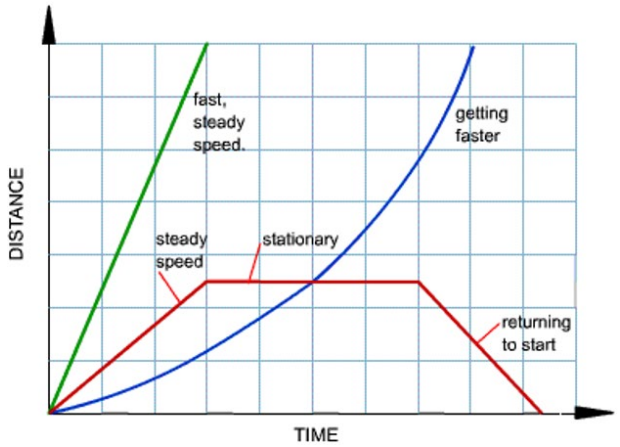
1. Speed

If the overall, resultant force on an object is non-zero, its motion changes and it slows down, speeds up or changes direction.
To calculate speed, distance or time use the formula:

speed (in m/s) = distance (in m) / time (in s)

The higher the speed of an object,
the shorter the time taken for a journey.

On a distance-time graph a straight line shows constant speed, whereas, a curving line shows acceleration.



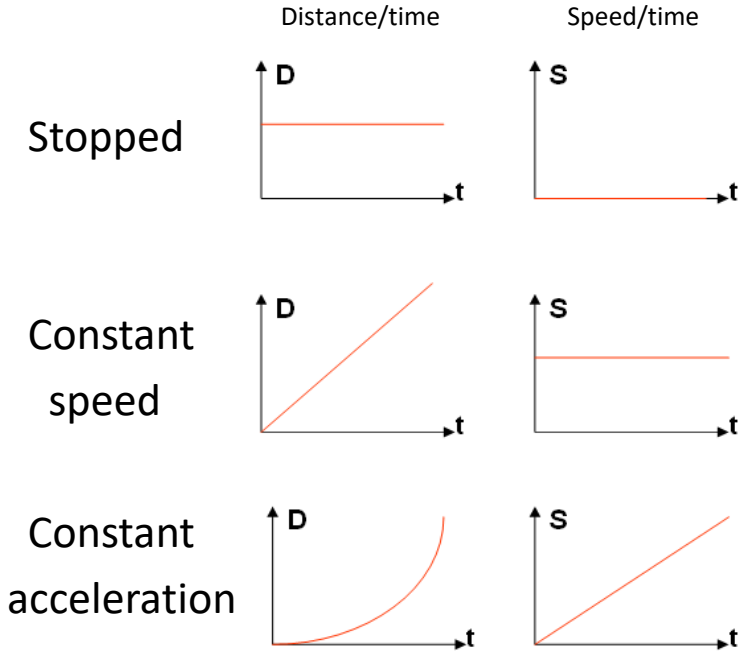
Speed: How much distance is covered in how much time.
Average speed: The overall distance travelled divided by overall time for a journey.
Acceleration: How quickly speed increases or decreases.
Relative motion: Different observers judge speeds differently if they are in motion too, so an object's speed is relative to the observer's speed.

2. Resultant force and motion

Resultant force: Single force which can replace all the forces acting on an object and have the same effect.
When the resultant force on an object is zero, it is in equilibrium and does not move, or remains at constant speed in a straight line.
One effect of a force is to change an object's form, causing it to be stretched or compressed. In some materials, the change is proportional to the force applied.

Deformation: Changing shape due to a force.
Newton: Unit for measuring forces (N).
Friction: Force opposing motion which is caused by the interaction of surfaces moving over one another. It is called 'drag' if one is a fluid.
Tension: Force extending or pulling apart.
Compression: Force squashing or pushing together.

3. Motion graphs



4. Resultant force examples

If there is no resultant force, the object remains stationary or continues at a steady speed.
A resultant force on a stationary object will cause it to start moving in the direction of the force.
A resultant force on a moving object will cause it to speed up (accelerate) or slow down (negatively accelerate).

10N to the left and 30N to the right.
The resultant force is 20N to the right.

0N to the left, 60N and 30N to the right.
The resultant force is 90N to the right.

Science	Health and Disease	CYCLE 1	Year 8

1. Microbes

Microbes	Uses	Dangers
Bacteria	Used in the production of milk and cheese	Food poisoning, common cold, cholera, tuberculosis
Fungus	Yeast used in bread and alcohol production	Athlete's foot
Virus	Currently no positive uses	HIV/AIDS, chicken pox, meningitis, influenza ('flu)

2. Natural defences

Bodies defence	Function
Nose	Nose hair trap microbes
Eyes	Contain a substance which destroy bacteria
Lungs	Mucus - sticks to the microbes cilia sweep them away
Stomach	Contains hydrochloric acid kills microbes found on food
Skin	Barrier to prevent microbes entering the body
Blood	Carry white blood cells which produce antibodies

3. Vaccination

Dead or a weakened version of a disease used to provide immunity to a particular disease.

1. A disease is weakened or killed
2. This is then injected into the patient
3. White blood cells produce different antibodies to attack the disease
4. Eventually the correct shaped antibody is produced
5. The body can now produce the right antibodies to fight the disease
6. Certain white blood cells remain in the blood to produce the correct antibodies quicker if re-infected with the same pathogen.

4. Antibiotics

Antibiotics are used to treat bacterial infection (and only bacterial infections). e.g. Penicillin
Antibiotic resistance occurs when bacteria can resist the damage caused by antibiotics.
This can be caused by oversubscribing by Doctors, subscribing for non-bacterial pathogens, or not completing the course of medication.

5. Smoking

Cigarettes contain several dangerous, three of the most dangerous are:
Nicotine – is the addictive chemical in cigarettes that affects the brain.
Tar – is a carcinogenic (cancer causing) chemical. It can also coat the airways and alveoli, making gaseous exchange difficult.
Carbon monoxide – irreversibly binds to red blood cells, taking the place of oxygen molecules. This means the heart has to work harder to supply the same amount of oxygen & the person is more likely to get out of breath.

6. Alcohol

Short-term effects	Long-term effects
Relaxes the body	Liver cirrhosis (damage)
Slows down reaction times	Brain damage
Slurred speech	Heart attack
Blurred vision	Increased weight
Increased confidence	Kidney damage

7. Drugs

Depressant	Stimulant	Hallucinogen
Slows down the messages to the brain e.g. alcohol, cannabis	Speeds up the messages to the brain e.g. caffeine, cocaine	Distorts a person's perceptions of reality (hallucinations)
Effects of depressants: Slowed thinking/ reactions, slowed muscular activity. Long term damage to liver, brain, kidney	Effects of stimulants: More energetic, difficulty sleeping, memory loss, damage liver and brain	Effects of hallucinogens: hallucinations, can cause increased heart rate, high blood pressure and dilated pupils

Science	Metals and reactivity	CYCLE 1	YEAR 8

1. Metals vs. non-metals

Metals and non-metals react with oxygen to form oxides which are either bases or acids.
Metals: Shiny, good conductors of electricity and heat, sonorous, malleable and ductile, and usually solid at room temperature.
Non-metals: Dull, poor conductors of electricity and heat, brittle and usually solid or gaseous at room temperature.

2. Reactivity series

Metals can be arranged as a reactivity series in order of how readily they react with other substances.
Some metals react with acids to produce salts and hydrogen.

<table>
<tr><td>Metal</td><td colspan="4">Reactivity</td></tr>
<tr><td>Potassium</td><td rowspan="4">React with water</td><td rowspan="9">React with acid</td><td rowspan="12">React with oxygen</td><td rowspan="15">Very reactive</td></tr>
<tr><td>Sodium</td></tr>
<tr><td>Lithium</td></tr>
<tr><td>Calcium</td></tr>
<tr><td></td><td rowspan="12"></td></tr>
<tr><td>Magnesium</td></tr>
<tr><td>Aluminium</td></tr>
<tr><td>Zinc</td></tr>
<tr><td>Iron</td></tr>
<tr><td>Tin</td></tr>
<tr><td>Lead</td></tr>
<tr><td></td><td rowspan="5"></td></tr>
<tr><td>Copper</td></tr>
<tr><td>Silver</td></tr>
<tr><td></td><td></td></tr>
<tr><td>Gold</td><td>Very unreactive</td></tr>
</table>

3. Special properties

Iron, nickel and cobalt are magnetic elements.
Mercury is a metal that is liquid at room temperature.
Bromine is a non-metal that is liquid at room temperature.
Copper is a good conductor of heat and electricity so is used in saucepans and in wiring.
Aluminium is light so is used for bike frames and malleable so is used for kitchen foil.

4. Types of reaction

Reactivity: The tendency of a substance to undergo a chemical reaction.
Oxidation: Reaction in which a substance combines with oxygen.
Combustion: Reaction with oxygen in which energy is transferred to the surroundings as heat and light.
Thermal decomposition: Reaction where a single reactant is broken down into simpler products by heating.
Displacement: Reaction where a more reactive metal takes the place of a less reactive metal in a compound.

e.g. Magnesium sulphate + Calcium → Calcium sulphate + Magnesium
e.g. Aluminium nitrate + Potassium → Potassium nitrate = Aluminium

Chemical reaction: A change in which a new substance is formed.
Physical change: One that changes the physical properties of a substance, but no new substance is formed. Reactants: Substances that react together, shown before the arrow in an equation.
Products: Substances formed in a chemical reaction, shown after the reaction arrow in an equation.
Conserved: When the quantity of something does not change after a process takes place.

5. Reactions of metals

Metal + water → Metal hydroxide + hydrogen

Sodium + water → sodium hydroxide + hydrogen

Magnesium + water → magnesium hydroxide + hydrogen

Metal + acid → Salt + hydrogen

Sodium + hydrochloric acid → sodium chloride + hydrogen

Sodium + sulphuric acid → sodium sulphate + hydrogen

Metal oxide + acid → Salt + water

Sodium oxide + hydrochloric acid → sodium chloride + water

Potassium oxide + sulphuric acid → potassium sulphate + water

Metal carbonate + acid → Salt + water + carbon dioxide

Calcium carbonate + hydrochloric acid → calcium chloride + water + carbon dioxide

Sodium carbonate + hydrochloric acid → sodium chloride + water + carbon dioxide

Science	The Body	CYCLE 1	YEAR 8

1. Movement

The human skeleton works as a system for support, protection, movement & the production of new blood cells.
Joints: Places where bones meet.
Bone marrow: Tissue found inside some bones where new blood cells are made.
Ligaments: Connect bones in joints.
Tendons: Connect muscles to bones.
Cartilage: Smooth tissue found at the end of bones, which reduces friction between them.
Antagonistic muscle pair: Muscles working in unison to create movement. Antagonistic pairs of muscles create movement when one contracts and the other relaxes.

2. Breathing

In gas exchange, oxygen and carbon dioxide move between alveoli and the blood. Oxygen is transported to cells for aerobic respiration and carbon dioxide, a waste product of respiration, is removed from the body.
Breathing occurs through the action of muscles in the ribcage and diaphragm. The amount of oxygen required by body cells determines the rate of breathing.
Breathing: The movement of air in and out of the lungs.
Trachea (windpipe): Carries air from the mouth and nose to the lungs.
Bronchi: Two tubes which carry air to the lungs.
Bronchioles: Small tubes in the lung.
Alveoli: Small air sacs found at the end of each bronchiole.
Ribs: Bones which surround the lungs to form the ribcage.
Diaphragm: A sheet of muscle found underneath the lungs. Lung volume: Measure of the amount of air breathed in or out.

3. Respiration

Respiration is a chemical reactions, in cells, that breaks down glucose to release energy.
Most living things use aerobic respiration but switch to anaerobic respiration, which provides less energy, when oxygen is unavailable.
Aerobic respiration: Breaking down glucose with oxygen to release energy and producing carbon dioxide and water.

Glucose + Oxygen → Carbon dioxide + Water + (Energy)

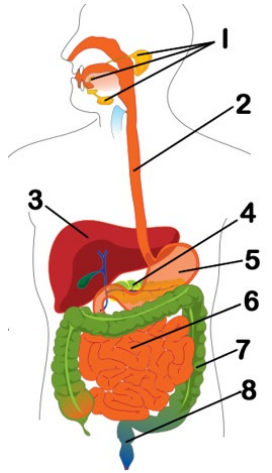
Anaerobic respiration (fermentation): Releasing energy from the breakdown of glucose without oxygen, producing lactic acid (in animals) and ethanol and carbon dioxide (in plants and microorganisms). Yeast fermentation is used in brewing and bread making.

4. Digestion

Organs of the digestive system are adapted to break large food molecules into small ones which can travel in the blood to cells and are used for life processes.
Enzymes: Substances that speed up the chemical reactions of digestion.
Gut bacteria: Microorganisms that naturally live in the intestine and help food break down.
Iron is a mineral important for red blood cells.
Calcium is a mineral needed for strong teeth and bones.

5. Organs of the digestive system

1. Mouth: mechanically breaks down food using the teeth and mixes with saliva to soften and add enzymes.
2. Oesophagus: after swallowing the food is squeezed along this muscular tube to the stomach.
3. Liver: produces bile to neutralise stomach acid and emulsify lipids.
4. Pancreas: produces several enzymes essential for digestion.
5. Stomach: a sac where food is mixed with acidic juices to start the digestion of protein and kill microorganisms.
6. Small intestine: Upper part of the intestine where digestion is completed & nutrients are absorbed by the blood.
7. Large intestine: Lower part of the intestine from which water is absorbed & where faeces are formed.
8. Rectum: faeces (undigested waste) is stored here until it leaves the body through the anus.



6. Nutrients in foods and their function

Nutrient group	Function	Examples of nutrient rich food
Carbohydrate	Used to provide energy	Bread, pasta, rice, potatoes
Protein	Used for growth and repair of cells	Fish, meat, eggs, dairy products
Lipids (fats)	Used to provide energy, store energy and insulate	Butter, oil, nuts
Vitamins	Needed in small amounts to maintain health	Fruit and vegetables, dairy products
Minerals	Needed in small amounts to maintain health	Salt, milk (calcium), liver (iron)
Fibre	Helps to keep food moving through the gut	Vegetables and bran
Water	Needed for cells and body fluids	Water, fruit juice, milk

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

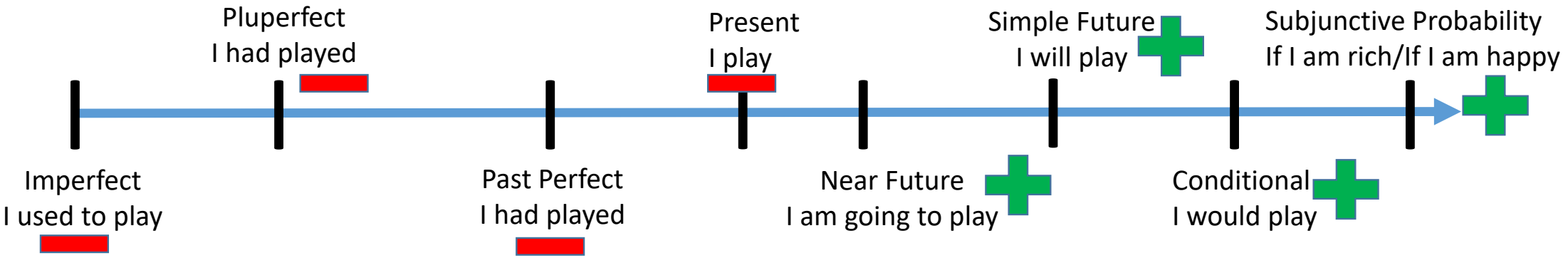
sp	Spelling
art	Article
vb	Verb
T	Tense
Acc	Accent
adj	Adjective incorrect/agreement
C	Capital
ww	Wrong word
?	Re-phrase/no sense
	Word re-order

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	

French	Verb conjugation explanation	CYCLE 1	All Years



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

French	French Literacy Mat	CYCLE 1	All Years

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)*

French	Verbs	CYCLE 1	All Years

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(e/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	Education	CYCLE 1	Year 8

Week 1		Week 2				Week 3	
Verbs Education		**Verbs Education**		**Subjects**		**Facilities**	
étudier	to study	commencer	to start	le commerce	Business	la récréation	playground
réviser	to revise	porter	to wear	le dessin	Art	la cantine	canteen
jouer	to play	expliquer	to explain	la technologie	Design technology	les laboratoires	laboratories
apprécier	to appreciate	participer	to participate	l'informatique	ICT	une salle de classe	classrooms
ecouter	to listen	faire	to do	la chimie	Chemistry	une piscine	swimming pool
respecter	to respect	aller	to go	l'anglais	English	une salle de gymnastique	gym hall
ranger	to tidy up	comprendre	to understand	le français	French	une salle d'informatique	ict suites
manger	to eat	apprendre	to learn	l' éducation physique	PE	une bibliothèque	library
changer	to change	répondre	to respond	l'espagnol	Spanish	un centre de jeunesse	youth centre
aider	to help	finir	to finish	une pause	Break	un bureau	office

Week 4 and Week 5		Week 6		Week 7		Week 7	
Teachers		**Time – L'heure**		**Education – Modal Verbs**		**Education - Uniform**	
strict(e)/ sérieux (se)	strict/serious	douze/treize/quatorze	12 13 14	on doit	you must	une jupe	a skirt
sympa / drôle	kind/funny	quinze/seize	15 16	on ne doit pas	you must not	un pull	a jumper
ennuyeux (euse)	annoying	vingt et un	21	on peut	you can	une chemise	a shirt
gentil/gentille	kind	trente deux	32	on ne peut pas	you cannot	une veste	a blazer
méchant (e)	mean	quarante trois	43	je veux	i want	un manteau	a coat
paresseux/paresseuse	lazy	cinquante sept	57	je voudrais	i would like	des chaussures noires	some black shoes
marrant (e)	funny	midi/minuit	midday midnight	il faut	you must	des baskets	some trainers
compréhensif (ive)	understanding	et demie	half past	il ne faut pas	you must not	un pantalon	trousers
creatif (ive)	creative	et quart	and a quarter	il faut qu'on soit	it is necessary that you are	des chaussettes	some socks
travailleur (euse)	hardworking	moins le quart	minus a quarter				

French	Education	CYCLE 1	Year 8

Week 8		Week 9		Week 10			
Uniform Adjectives		**Education - Rules**		**Present**		**Imperfect**	
vieux	old	étre en retard	to be late	je vais	I go / am going	j'allais	I I used to go
démodé	outdated	manger en classe	to eat in class	j'aime	I like / am liking	j'aimais	I used to like
affreux	awful	porter des bijoux	to wear jewellry	je mange	I eat /am eating	je mangeais	I used to eat
facil	easy	se maquiller	to put make-up on	je porte	I wear /am wearing	je portais	I used to wear
fast	rapide	parler en classe	to speak in class	je fais	I do / I am doing	je faisais	I used to do
cher	expensive	faire des devoirs	to do homework	je joue	I play /am playing	je jouais	I used to play
elégant	elegant	utiliser les portables	to use mobile phones	j'apprends	I learn /am learning	j'apprenais	I used to learn
incomfortable	uncomfortable	fumer	to smoke	je révise	I revise / am revising	je révisais	I used to revise
pratique	practical	respecter les autres	to respect others	c'est/ ce sont	It is / they a re	c'était/étaient	It was / they were

Week 11		Week 12	
Ideal School - Conditional		**Future Plans**	
j'irais	I would go	une année sabbatique	a gap year
je voudrais	I would like	un apprentissage	an apprenticeship
j'aimerais	I would like	l'université	university
je ferais	I would do	un travail	a job
j'apprendrais	I would learn	un emploi à temps partiel	a part time job
je finirais	I would finish	un stage en entreprise	work experience
j'étudierais	I would study	á l'étranger	abroad
je travaillerais	I would work	un boulot	a job
je pourrais	I could	fabriquer une entreprise	make a company

Week 13 revise week 10 vocabulary

Geography	Risky Earth/Dynamic Landscapes	CYCLE 1	YEAR 8

<table>
<tr><th>Box</th><th colspan="2">Key Knowledge to learn</th></tr>
<tr><td>1 – Key Terms</td><td colspan="2">Natural Event: something which happens because of physical geography e.g. A volcano on an uninhabited island would be a natural event as if it erupted no one would be effected
Natural Hazard: an event which can cause damage and death e.g. A volcano surrounded by urban areas would be a natural hazard as if it erupted it would affect people
Hazard Risk: chance that a hazard might take place in an area e.g. Yorkshire has no risk of a Tsunami but a high risk of heavy rainfall and flood event
Hazard Risk Changes - Recorded natural hazards have increased over time > more people are at risk from hazard:
• Population Increase - More people on the planet à living in more areas > experience more hazards
• Urbanisation - More living in urban areas > more affected if a hazard takes place in that area > less people affected in rural areas as spread out
• Wealth - Poorer people live in risker areas as the land is cheaper > more at risk</td></tr>
<tr><td>2 – Location and Causes of Wildfires</td><td><u>Australian Wildfires 2020</u>
Requirements
• Leaf litter / soil on the ground
• Warm and wet climate for vegetation growth then hot and dry
• Source of ignition
Natural Causes (10% of fires)
• Hot and dry spell due to Indian Ocean Dipole dried out forest floor
• Temperatures of 41.9 °C plus
• Strong winds spread fires
Human Causes (90% of fires)
• CO2 increase: climate change
• Camping, cigarettes, arson</td><td>Wildfires are unevenly distributed around the world and occur in clusters. The area that experienced the greatest
distribution of wildfires was in the south of Africa. There is an exception with a wildfire taking place near the north
pole in Greenland compared to the rest of the fires mainly at low latitudes.
  </td></tr>
<tr><td>3 – Effects and Responses and distribution of Wildfires</td><td>Primary Effects
• 6,000 buildings and 3,000 homes destroyed > homelessness
• $:Billions spent on fire and rescue > less money for other services
• Env: Millions of animals killed à loss of biodiversity > ecosystem collapse
Secondary Effects
• Canberra worst air quality in the world > more death: asthma
• $: Damaged infrastructure > loss of tourism > loss of money / jobs Env: 1 billion animals will die after the fires due to a loss of food and habitat Monitoring: look at the climate and weather to detect changes and development of conditions for fires</td><td>Prediction: using monitoring to say when a fire will occur and where which allows evacuation

Planning: People know what to do when a warning is given that a fire may occur. E.g. having fuel in a car to drive away

Preparation: by trying to reduce damage when the hazard does occur. E.g. keeping areas around houses clear of vegetation</td></tr>
</table>

Geography	Risky Earth/Dynamic Landscapes	CYCLE 1	YEAR 8

Box	Key Knowledge to learn		
4 – Key terms and cold places	**Key Terms** **Landscape**: key visual features of an area **Relief**: height and the shape of the land. **Altitude / elevation**: height above sea level **Gradient**: how steep the land is **Contour Lines:** • Thin brown lines on OS maps • Each line represents a height above sea level • Contours close together show a steep gradient • Contours far apart show a gentle gradient	**Polar Environments** • Below freezing all year; low precipitation levels ;High latitudes at the poles **Tundra Environments** • Short seasonal summers; precipitation mainly snow; High latitudes and in linear bands **High Mountain Ice** • High altitude so precipitation as snow; Linear bands following mountain ranges **UK Examples of Past Cold Areas** • Snowdonia, Wales; Lake District, England; Highlands, Scotland	
5 – Processes and features	**Processes** **Removing Material** **Erosion**: wearing away of rock through movement **Abrasion**: rocks at base of glacier scrape along bedrock leaving scratches **Plucking**: rocks become frozen in the bottom of the glacier and are plucked out **Weathering**: wearing away of rock in situ **Freeze-Thaw Weathering**: water enters cracks, freezes and expands putting pressure on the rock, melts and repeats, rock breaks off	**Glacial Features** **Corrie**: armchair shaped hollow > steep back wall created by plucking and deepened base by abrasion > after glaciation hollow filled by a lake called a tarn **Arête**: narrow knife edge ridge where two corries have eroded back to back by freeze-thaw weathering and plucking. **U-Shaped Valley**: steep valley sides and a wide floor formed by erosion of a V Shaped Valley by a glacier.	
6 – Malham – Opportunities and challenges + Sustainable Management	**Malham Location & Formation** **Malham**: Northern England, North Yorkshire, Yorkshire Dales National Park. Situated to the North West of Bradford. Geology (rock type) is limestone: Created under the sea 330 million years ago • Buried animal shells and deposits compact to form sedimentary rock • Land moved from equator northwards • Uplifted from the sea to form land • Malham cove formed by erosion from glaciers including abrasion of floor and plucking of wall Weathering created clints and grykes (gaps)	**Opportunities and Challenges** **3 Pubs and 1 B&B** > tourists stay in the area and spend money > profit for local business > honey pot site à *can cause congestion, litter and pollution which would put people off visiting* **Transportation to Malham** > 90% of people arrive by car > congestion and air pollution on small roads > loss of natural beauty > *locals can earn money by charging cars to park*	**Sustainable Future Management** • Walkers may disrupt sheep, leave gates open and damage dry stone walls > clear signs to indicate paths, improved path routes to stop tourists going into sensitive areas > rely on tourists to be sensible • 90% of visits are by car which causes congestion and not enough car parks > creation of new field car parks operated by local people for summer tourism of which the car park fee goes towards local community projects

History	Industrial Britain	Cycle 1	Year 8

Week	Key Knowledge to learn

Section A

Key Words	
Factory	A building or group of buildings where goods are manufactured
Manufacture	To make something on a large scale using machinery
Revolution	A rapid change over a short period of time
Merchant	Someone who trades goods for profit

Industrial Revolution
1750-1900

- This was a time of big changes in the way that people lived and worked in Britain.
- The changes happened mainly because of one invention: the steam engine.
- This made production of goods much faster.

1760-1820 George III	1820-1830 George IV	1830-1837 William IV	1837-1901 Queen Victoria

Britain's top 5 industries 1750-1900

- Textiles – clothing, bedding, all types of cloth
- Pottery – plates, teapots, cups
- Iron and steel – trains, screws, nails,
- Coal – to power the machines
- Farming – wheat (for bread), vegetables, animals

The Main Changes:	
1750	1900
11 million people in Britain	40 million people in Britain
20% lived in towns	75% lived in towns
Most people were farmers	Most people worked in factories/offices
Goods were made by hand at home	Good were made by steam powered machines in factories

Section B

Section B - The Development of Inventions, Factories & Towns

The Domestic System - Before factories as we would identify them, all manufacture of products like textiles was done at home and on a small scale. Work was confined to a cottage with everybody doing their bit.

Stage One – Merchant buys raw wool from sheep raiser. **Stage Two** – Merchant takes wool to farming families, women and children clean, sort and spin wool into yarn (thread). **Stage Three** – Merchant takes yarn to weaver, with hand loom. **Stage Four** – Merchant takes cloth to be cleaned and shaped. **Stage Five** – Merchant take cloth to be dyed. **Stage Six** – Merchant takes fabric to market

Problems – Slow process, expensive, too many stages in production, shortage of products for growing population

Solution - Invent new machinery to do the work at low cost and more efficiently

Richard Arkwright is the person credited with inventing the prototype of the modern **factory**. After he patented his water frame in 1769. This was an invention for spinning thread or yarn from fibres such as wool or cotton in a mechanized way.

Edmund Cartwright then invented the Power Loom in 1784-1785, a mechanized loom, and was one of the key developments in the industrialization of weaving. Therefore more factories were needed to house and power these machines, built in towns it would eventually lead to overcrowding.

Section C

Conditions at the BEGINNING of the 1800s (19th century)

Factory conditions		Living conditions	
Wages	Low, often reduced by fines. BUT regular compared to domestic system	Houses	Rented by the room, cramped. Badly built. Damp. No kitchens or bathrooms
Hours	Long, typically 14-16 per day. Very few breaks.	Water	From a standpipe in the street. Not always working. Could be contaminated.
Workers	Men, women and children from 4yrs	Toilets	Shared by whole street. Just a seat over a 'pit' to collect waste.
Dangers	Trapped in/under machines as there were no safety guards, cotton in air caused lung diseases	Waste	No rubbish collections. Sewers were open (not underground). Rubbish and waste collected in open gutters
Treatment	Harsh. Workers could be beaten. Rising population meant they were easily replaced and so could not complain.	Animals	Living with animals (e.g. pigs) was common. This spread diseases
		Streets	Narrow, not properly paved. Muddy and dirty. The air was polluted from factory smoke.

History	Industrial Britain	Cycle 1	Year 8

Week	Key Knowledge to learn

Section D

Why were conditions so poor?
Diseases that spread quickly (and could kill) in a typical Industrial Revolution town:

Cholera	Typhoid	Smallpox	Diphtheria
• Both caused by dirty water • Symptoms of Cholera include watery diarrhoea, vomiting, rapid heart rate, dry mouth, low blood pressure. Death usually occurs within two days. • Symptoms of Typhoid include poor appetite, stomach pain, headaches, high fever, internal bleeding. • Difficult to treat both illnesses due to poor hygiene and water supplies contaminated by waste getting into ground water. Diseases only prevented by creation of drainage systems, piped clean water into homes and sewers.		• Both highly infectious caused by bacteria • Symptoms of Smallpox include high fever, skin rash similar to flat spots which blister and leave scars, vomiting, stomach pain, diarrhoea. • Symptoms of Diphtheria include sore throat, swollen glands, fever and chills • Difficult to cure both illnesses and epidemics common due to overcrowding in industrial towns. Also little known about bacterial and viral diseases due to limited medical knowledge in this area until 1900s. Only prevented through better living conditions and treatment with discovery of antibiotics.	

Why were conditions so bad?

1	There were no laws to prevent it. Parents beat their children. Employers could beat their workers. There were no laws that said houses must be a good quality.
2	No-one really knew the link between dirt and disease (until 1861) so they did not fully understand what was needed to improved conditions
3	The government did not see it as their responsibility to help the poor – "laissez faire" attitude
4	Poor working people did not have the right to vote and therefore no way of making a change

Section E

Why was Saltaire different?
Titus Salt built a factory outside Bradford in the 1850s to get away from the terrible conditions in the city centre. His factory had a **different kind of smoke burner** to reduce pollution. He also built a **village** (Saltaire) of 850 houses for his 3,500 workers. The houses were well built, with **water piped into each one** and an **outside toilet**. Streets were **well paved** with gas lighting. The village also had a **hospital, a park,** the **'Victoria Institute'** where adult workers could get an education and '**alms houses'** where Saltaire workers could live when they retired. However strict rules had to be followed such as no drinking of alcohol, no singing, preaching or dancing, playgrounds only to be used on Sundays and you were not allowed to meet with groups of people. Salt died in 1876.

Did factories get any better? Factory laws:

1819	No children under 9 to work Factory owners could be fined	**1844**	All textile machines had to have guards Cleaning of moving machinery was banned
1833	9 hour maximum for children aged 9-13 4 factory inspectors would check	**1847**	10 hour maximum working day for women and young people

1895
Factories had to be clean, well ventilated and not overcrowded. Factory owners had to report accidents

Problems with the laws: many factory owners were taken to court and **FINED** – this shows they **did not always follow** the laws. It took a **LONG TIME** to cover all the problems in factories (e.g. air quality not mentioned until 1890s). Young children (**over 11**) were **still working in factories** even by 1900.

RE	Hinduism	Cycle 1	Year 8

Area	Key Knowledge to learn
1- Key facts	• There is no one founder for Hinduism; it is a collection of beliefs and teachings that came together to make up the Hindu religion. • Hinduism began in the Indus Valley in India. • It is around 5,000 years old. • There are about 1.1 billion Hindus in the world; this is about 15% of the world's population. • 95% of the world's Hindus live in India. • The major books of Hinduism are: the Vedas, Ramayana, Bhagavad Gita, 18 Puranas, and Mahabharata. • The most common language for Hindu scriptures is Sanskrit- the oldest language in the world. • Hindus believe in reincarnation- the soul is immortal, but takes on the form of many bodies until they achieve enlightenment
2 – Trimurti	▪ Hindus believe in one Supreme Being called Brahman. They believe that Brahman is everywhere all of the time, like salt dissolved in water. ▪ The majority of Hindus believe that Hinduism is a monotheistic religion because they all believe in one Supreme Being, Brahman. ▪ In Hinduism there are thousands of gods and goddesses who all part of the one Supreme Being. ▪ The Trimurti refers to three important gods in Hinduism – Brahma, Vishnu and Shiva. ▪ Brahma is the Creator, Vishnu is the Sustainer of life and Shiva is the Destroyer. They represent Brahman's powers to create, sustain and destroy all things. ▪ Although Hindus worship these gods and goddesses, many Hindus argue that it is not a polytheistic religion; these deities just show different roles and aspect of the one Supreme Being, Brahman.
3 – Worship	▪ Puja can take place anywhere – at home, at the mandir (temple) or even at work ▪ Most Hindus worship at least once a day, in the early morning. Here in the UK, puja is often done at home as a family each day, and also at the mandir on a Sunday. ▪ Puja engages all five senses so you go away from it alert and ready for your day. ▪ It takes place before murtis, statues of the deities the worshippers particularly want to worship. ▪ The Puja tray contains water for cleansing the hands, red paste to dot on the heads of the murtis and worshippers, incense, an aarti lamp to awaken the god in the murti, a bell and food offerings for the deities. Music is often played to engage the sense of hearing.

RE	Hinduism	Cycle 1	Year 8

Week	Key Knowledge to learn
4 – Diwali	• Diwali happens each year in autumn to celebrate the victory of light over darkness, and the coming of the Hindu New Year. • Diwali is also known as the Festival of Light. • Diwali is celebrated on the fifteenth day of the Hindu month of Kartika. • During the festival the story of Rama and Sita is remembered. • Hindus celebrate by lighting divas, setting off fireworks, making Rangoli pictures and cleaning their homes and wearing new clothes.
5 – Hindu gods	• Some people believe Hinduism is a polytheistic religion as it has numerous gods, whereas as others believe it's a monotheistic religion as all the Hindu gods are aspects of brahman • Popular Hindu gods of worship are: • Ganesh- God of success and is depicted with the head of an elephant. • Krishna- God compassion and love. He is important as he played a big role in creating the Bhagavad Gita and is considered to be a supreme God. • Hanuman- is the Hindu god of courage and is depicted with a face of a monkey and is popular god as he helped Rama find Sita. • Lakshmi- The God of light and wealth, Lakshmi is popular as she I mainly worshiped during Diwali as she symbolises light.
6 - Life after death	• Nothing: when we die nothing happens, the death of the physical body means the end of life. Many non-religious people (atheists) believe this idea and that we should focus on our actions today rather than thinking about what might happen we die. People believe this view because there is no scientific evidence for life after death. • Resurrection: Some religious people believe in the idea of being raised from the dead, judged by God, and sent to heaven or hell. Christians and Muslims believe that when we die if you have done good things and followed religious teachings you will be rewarded with heaven but if you have not done good things you will be punished with hell. • Reincarnation: the idea that when we die some part of us lives on in another living thing. There are different views on what this means, in Hinduism it is the idea that the soul moves into another physical body. • Everyone's soul (atman) is born into a living body. • Over your life you build up good or bad karma (actions). • When you die your karma (actions) dictate what body your soul will be born back into. If you had good karma, you will be born into a more fortunate person with higher status in society; if you had bad karma you will return to a less fortunate life, or even as an animal or insect. • When your atman is pure when you then will be released from the cycle of samsara and become part of Brahman. This is called achieving moksha.

Art	Mark Making	CYCLE 1	YEAR 8

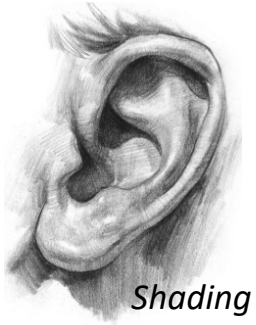
Section A

Mark are used to show different things in drawing and painting

Mood or Emotion

Texture

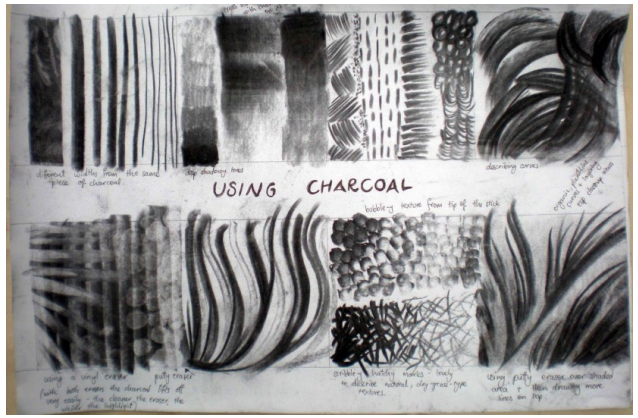
Movement



Shading 3D Form

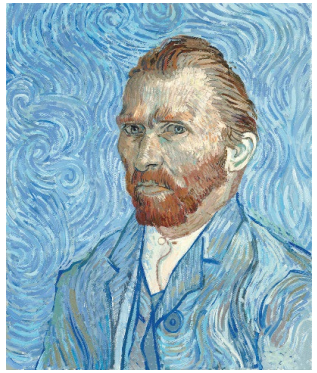
Section B

Experimental mark making- anything can be a mark and you can use different things to make a mark coffee, charcoal , food colouring- try new things out!



Section C Artists

Van Gogh uses lots of different marks in his work for expression and mood or sometimes just to show movement or what the weather is like.



Marks can add interest and excitement to your work.

KEY TERMS AND VOCABULARY

- **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
- E**xpressive**- using the formal element to show a mood or emotion by the way the marks are shown and the action of doing them.
- **Media**- plural term that describes lots of different types of art equipment.
- Medium – the specific type eg. Paint , pastel etc
- **Pen and wash** -draw in pen then apply water to some areas to show the tone
- **Scale**- the size of an object in relation to another
- **Contour lines** are lines that wrap around the surface of your object to show its 3d structure
- **Mark Making-** Mark making describes the different lines, dots, marks, patterns, and textures we create in an artwork

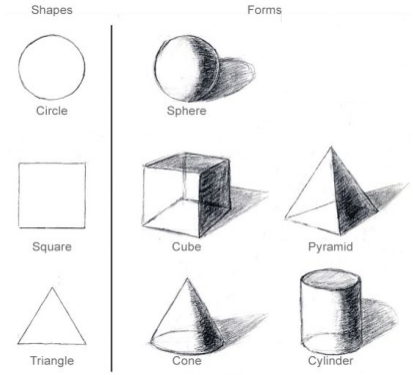
Some marks have special names:

- Dashes
- Dots for stippling
- Smudges
- Scumbling
- Hatching
- Cross hatching
- Contour

Art	Mark Making	CYCLE 1	YEAR 8

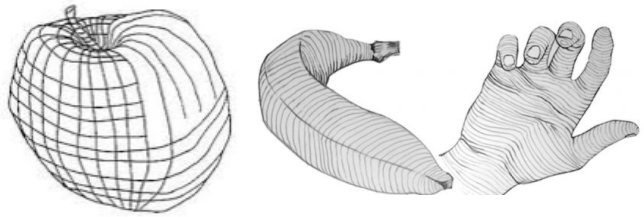
SECTION D: 3d FORM

For a 3d object to look 3d on a page we need to marks that show light and dark tone.



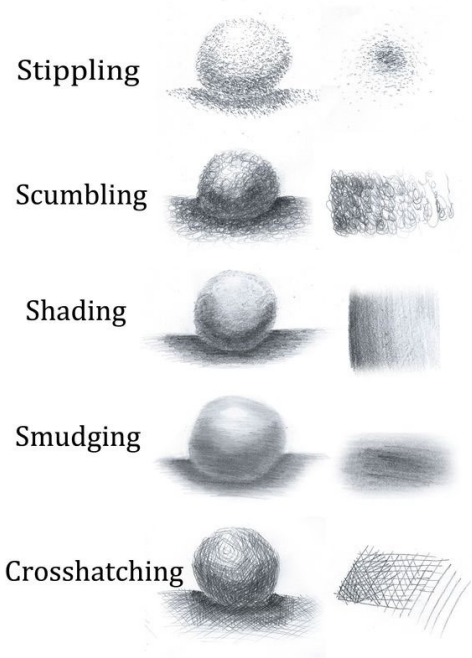
Shading can be smooth blended shading or other techniques like stippling. But which ever type of shading used it must show a range of TONES

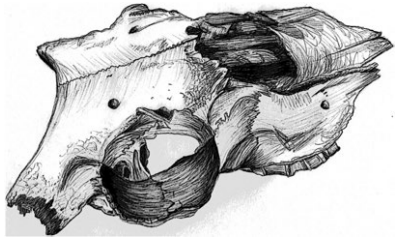
Tonal Bar- showing different tones you can use in your drawing



Contour lines- that follow the shape of an object can help your work look 3d

Types of marks that can be used for tonal shading or building up texture





3d FORM: Shading applied to an object makes it look 3d Dark tones recede, light tones project towards us so make it look 3d

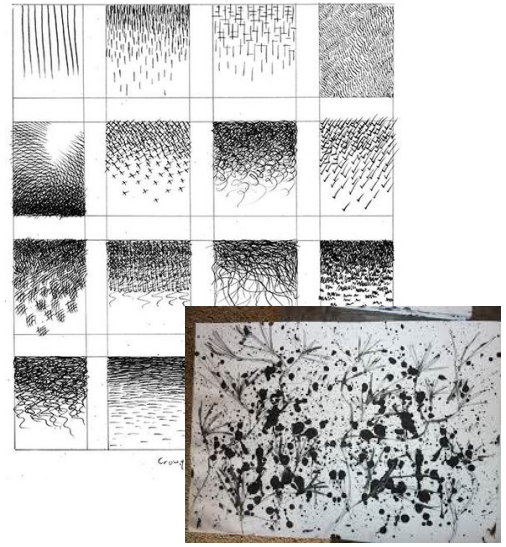
SECTION E

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

Texture can also be drawn that do not look like anything real these are called **Invented Textures**

SECTION F

Expressive marks can be used to show mood or emotion or express something that can not be drawn .
The action of how you make a mark or the type of line you do might change how people view your work.
E.g. paint might be sprayed on creating a disorganised random effect



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.

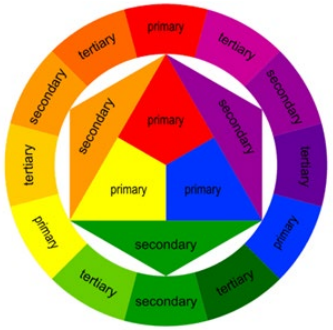
Primary Colours: These are colours that cannot be created through the mixing of other colours. They are colours in their own right. The three primary colours can be seen below.

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.

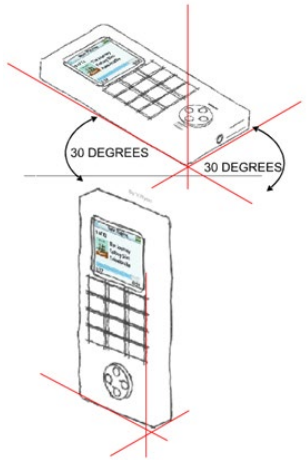
The colour wheel can be seen below. This can be used to help remember the PRIMARY and SECONDARY colours and which colours can be mixed to create TERTIARY colours.

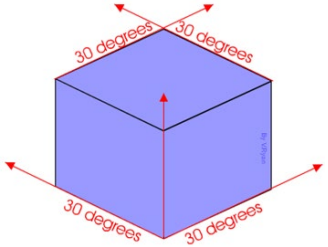
YELLOW	+	BLUE	=	GREEN
BLUE	+	RED	=	PURPLE
RED	+	YELLOW	=	ORANGE



BOX 2: Isometric Drawing

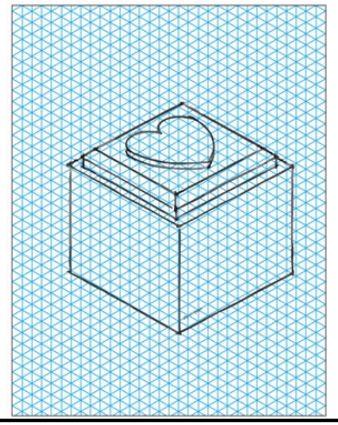
Isometric drawing is way of presenting designs/drawings in three dimensions. In order for a design to appear three dimensional, a 30 degree angle is applied to its sides. The cube opposite, has been drawn in isometric projection.





- 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.

- 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.

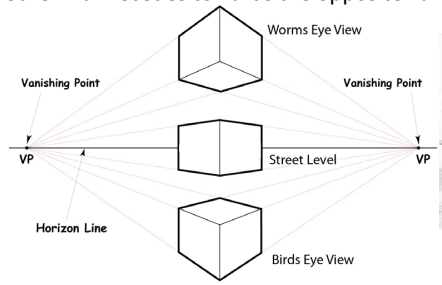


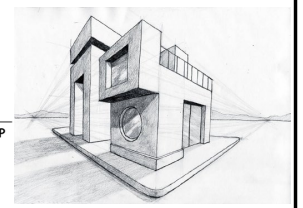
BOX 3: One Point Perspective

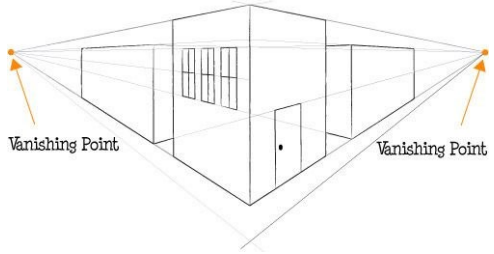
Perspective (from the Latin: *perspicere* "to see through") is an approximate representation, generally on a flat surface (such as paper), of an image as it is seen by the eye. The two most characteristic features of perspective are that objects appear smaller as their distance from the observer increases; 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.

Two Point Perspective

A drawing has two-point perspective when it contains two vanishing points on the horizon line. In an illustration, these vanishing points can be placed randomly along the horizon. Two-point perspective can be used to draw the same objects as one-point perspective, rotated: looking at the corner of a house, or at two forked roads shrinking into the distance, for example. One point represents one set of parallel lines, the other point represents the other. Seen from the corner, one wall of a house would recede towards one vanishing point while the other wall recedes towards the opposite vanishing point.







BOX 4: Adhesives

Adhesives, also known as glue, cement or paste, are any non-metallic substances applied to one or both surfaces of two separate items or materials that binds them together and resists their separation.

Adhesives may be found naturally or produced synthetically. The earliest human use of adhesive-like substances was approximately 200,000 years ago, when Neanderthals produced tar from the dry distillation of birch bark for use in binding stone tools to wooden handles.

Super glue (Cyanoacrylate)is another adhesive that join a wide range of materials together including plastics, very quickly. Great care must be taken when using this type of glue as it will just as easily glue fingers together.

Hot glue can be used to join a variety of materials. This glue usually gives a semi-permanent joint as surfaces glued together can sometimes come apart. The glue is a type of plastic that melts when hot and solidifies when it cools. Be careful to select that right type of glue stick - this depends on the material to be glued. General purpose glue sticks are usually used in schools.

P.V.A. or Wood Glue (Polyvinyl Acetate) Glues are very popular as they do not need preparation. These glues are supplied in a plastic container and can be used straight away. A good example of this is 'Evo-stik Woodworkers Adhesive'.

BOX 5: Surface Finishes

The main **surface finishes for Wood and Plastic** that are available include paints, wax and polishing. This can protect the wood and also add decoration.

Surface finishes for wood

Sanding Sealer
Used to SEAL the wood surface before applying a surface finish. Applied with brush and needs to be lightly sanded before applying final surface finish

Paint
Available in a wide range of colours. Applied with brush or spray can.

Wax
Applied with cloth and polished to a sheen. Wax Polish dries very quickly.

Finish for Plastic

Polishing
Once scratches have been removed from the edges of acrylic then a buffing wheel can be used to put the shine back onto the cut surfaces.

BOX 6: Materials

Hardwoods

Comes from **deciduous** trees

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

- Beech
- Oak
- Ash
- Teak

Softwoods

Comes from **coniferous** trees

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

- Pine
- Spruce
- Cedar
- Fir

Manufactured Boards

Boards are available in many thicknesses

Boards are inexpensive so are often used instead of real woods

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

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

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.

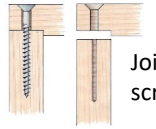
Plywood
Plywood is a material manufactured from t hin layers or "plies" of wood veneer that are glued together with adjacent layers having their wood grain rotated at 90 degrees to one another.

BOX 7: Joining methods

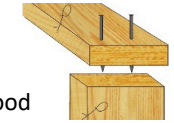
Joints can either be **Temporary** or **Permanent** depending on the type of joint and if glue is used.

Permanent:	*Temporary:*
When we do not want to take the pieces apart again for example glues, welding & rivets.	When we will, or might need to take pieces apart again for example Screws, nuts/bolts & nails.

Temporary fixings

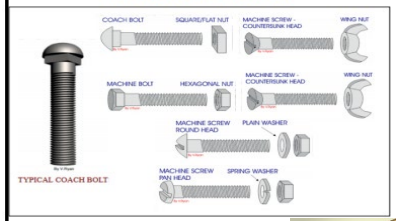


Joint with wood screws

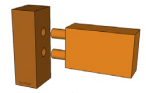


Nailed Joint

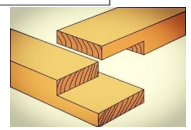
NUTS AND BOLTS



Permanent fixings



Dowel Joint



Corner Halving Joint

Joint with wood glue or PVA

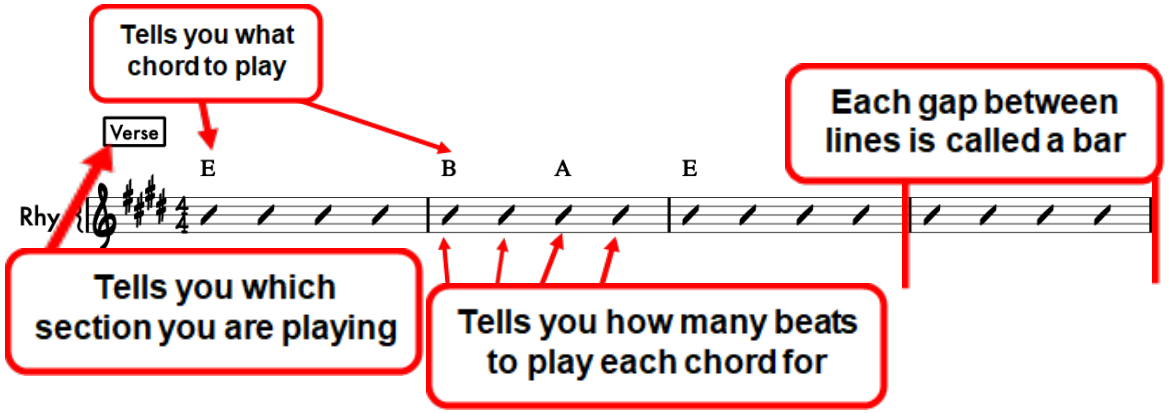
Performing Arts - DRAMA	Essentials	CYCLE 1	Year 8

Box A – Drama Skills	Box B – Tier Three Words	Box C – Vocal skills
Body Language – Using your body to communicate your character. E.g. an old man would have hunched body language. **Facial Expressions** – Using your face to communicate your characters emotions. **Voice** – altering the tone, pitch, and pace of your voice to fit your character. **Levels** – How high or low your character is to the ground. Can be used to communicate status, class or power. **Proxemics** – How close or far away you stand to other characters on stage based on your relationship. **Posture** – How you stand during your performance to represent your character **Gestures** – using body parts to communicate non-verbally. E.g waving, thumbs up, shaking head.	**Stimulus** a starting point **Actor** a person who takes on a character or role **Director** leads the theatre makers in achieving the artistic vision **Devising** creating a performance from a stimulus **Artistic Vision** how a performance is visualised. It can be described as the 'image' of the performance.	• PITCH • PACE • PAUSE • ACCENT/ DIALECT • TONE • VOLUME

Box D – Rehearsal Techniques	Box E – Devising and Stimulus	Box F - Characterisation
Conscience Alleyway The group takes on 2 contrasting viewpoints to provide a tunnel or circle of thoughts to explore a dilemma or circumstance. **Improvisation** An actor invents and creates content on the spot based on a given stimulus. **Thought Track** A character tracks their thoughts, verbalising them in soliloquy form to the audience. **Cross Cutting/ Split Scene** Two scenes are performed with a specific link such as same time but different location.	**What is Devising?** Have you carried out sufficient research? Is your devised piece predictable? What genre is your piece of theatre? What are your intentions for your audience? What are your intentions for your character? Devising means to create. **Stimulus** A text, object, image, poem, song or newspaper article to inspire a piece of drama.	There are several rehearsal techniques to explore and cement a character. **Hot Seating**– asking specific questions to a person who is in role and sustains their character whilst answering. **Role on The Wall** – Creating a detail role on the wall for your character allows you to create a background story for your character giving you a greater understanding. **Uta Hagan's Given Circumstances** – Detailed responses to questions regarding several aspects of your character. For example: WHAT SURROUNDS ME? (Animate and inanimate objects-complete details of environment) WHAT ARE THE GIVEN CIRCUMSTANCES? (Past, present, future and all of the events).

Performing Arts	Pop Music	CYCLE 1	YEAR 8

BOX A: HOW TO READ CHORD CHARTS

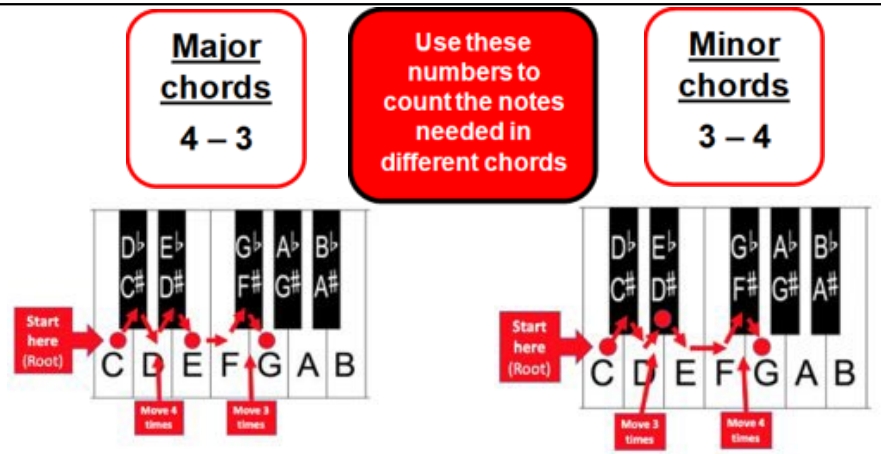


BOX B: POP SONG STRUCTURE

INTRODUCTION – At the start, a short section to introduce the piece.
VERSE – A section that usually tells the story of the song, the harmony is repeated but the lyrics are different.
CHORUS – A section which is repeated several times with the same lyrics and harmony.
BRIDGE – A section that is different to the other sections, usually comes before the final chorus.
OUTRO – The final section of the song.

INTRO	VERSE	CHORUS	VERSE	CHORUS	BRIDGE	CHORUS	OUTRO

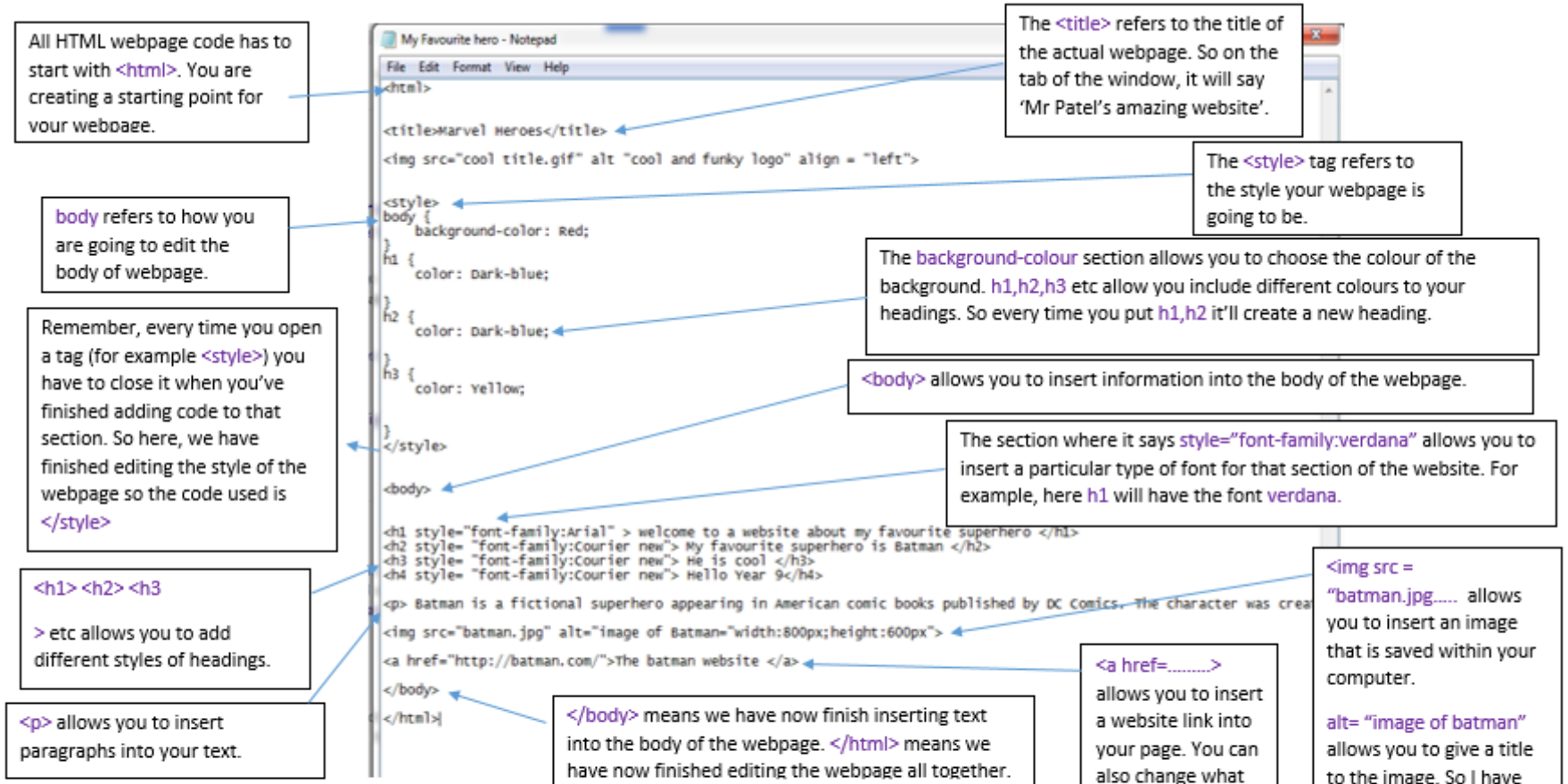
BOX C: HOW TO CONSTRUCT A CHORD



BOX D: KEY WORDS

RIFF – A repeated rhythm or melody that hooks the listener into the song.
TEXTURE – How the instruments are layered.
TONALITY – The character of the piece, related to the key.
HARMONY – When two or more notes are played at the same time, forming chords in a piece of music.
ACCURATE – Performing the music correctly.
FLUENT – Being able to perform confidently and independently.
CONFIDENT - When performers know what they are performing and know they will get it right.
LYRICS – The words to a song.

BOX 1: Understanding how code works



Knowledge Navigator - Make sure you understand how the code works.

BOX 2:
Practice task

Practice your revision below. Make sure you learn the meaning of all the key tags below.

Remember that HTML stands for HyperText Markup Language and it is mainly used for making websites.

<html>

<style>

<h1> <h2> <h3

<p>

<title>

background-colour

<a href=.....>

<img src = "batman.jpg

alt= "image of batman"

Width:800px; height:600px>

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 8

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 8

DIXONS COTTINGLEY ACADEMY