

The Trafalgar School at Downton

Knowledge Organiser

Year 8: Terms 1 and 2 2025/2026

Name.....Tutor



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Formal Salutation: Sir/Madam/Mr Roderick/Mrs Roderick

I am writing because you chair a committee in charge of the compulsory wearing of school uniforms. I am a student at Brinsley High School, a friendly and successful, sool where uniforms are not worn.

Of course, fluently sequenced paragraphs ere is another side to this case: uniforms breed uniformity. We are a culturally diverse nation are conditionable and individuality, yet this seems to be in contradiction of the message enforced uniform sends to us.

Furthermore,

Yours faithfully
Boris Johnson

formal sign off: Yours faithfully (Sir/Madam = Faithfully) (Mr/Mrs = Sincerely)

Dystopian Narrative: The Machine Stops by E.M. Forster

Above her, beneath her, and around her, the Machine hummed eternally; she did not notice the noise, for she had been born with it in her ears. The earth, carrying her, hummed as it sped through silence, turning her now to the invisible sun, now to the invisible stars. She awoke and made the room light.

"Kuno!"

"I will not talk to you," he answered, "until you visit me."

"Have you been on the surface of the earth since we spoke last?"

His image faded.

Again she consulted the book. She became very nervous and lay back in her chair palpitating. She directed the chair to the wall, and pressed an unfamiliar button. The wall swung apart slowly. Through the opening she saw a tunnel that curved slightly, so that its goal was not visible. Should she go to see her son, this would be the beginning of the journey.

Of course she knew all about the communication-system. There was nothing mysterious in it. She would summon a car and it would fly with her down the tunnel until it reached the lift that communicated with the air-ship station: the system had been in use for many, many years, long before the universal establishment of the Machine. Those funny old days, when men went for change of air instead of changing the air in their rooms! And yet — she was frightened of the tunnel: she had not seen it since her last child was born.

Journey Description

Sitting in my seat – aisle, two rows from the front – I look out. Illuminating a town engulfed in darkness, lights flash past me: shop lights, street lights, car lights, and as the clouds part just enough for the moon to penetrate through the smog, moonlight!

Inside it's silent. No one speaks. The bus windows shut, lulled by the rocking motion, side-to-side, back-and-forth, up-and-down, my eyes feel heavy. Outside, I'm mesmerised by the noise I can only see, only imagine: mouths asking, replying, laughing, traffic screeching, angry drivers honking, shop doors opening and closing.

Once more the bus door opens and, as if I've lifted my head out from underwater, I can hear the street bustle, smell the takeaways, taste the diesel fumes.

Climax (turning point, height of action/problem at its worst):

- · use exciting adverbs and verbs;
- accelerate pace and heighten tension using lots of shorter sentences.

Rising Action (build towards conflict):

- build on character, setting, plot;
- introduce a complication/problem;
- build tension/ excitement;
- use interesting adjectives, sensory description, figurative language etc.

Freytag's Pyramid/ the Story Mountain is the best for planning

narratives (stories).

Falling action (turning point, height of action/problem at its worst):

 what events happen to solve the problem?

Exposition (Introduction):

- use an opening hook to grab attention e.g. mysterious atmosphere, in medias res, etc.
- use descriptive vocabulary to set the scene and describe the main character/setting;
- foreshadow what is to come.

Dénouement/Resolution (ending):

- link back to the start (circular);
- what has the character learned?
- how are things different now?
- is there an exciting twist or cliffhanger ending?

Conclusion: To conclude, repeat RQ, Quite simply, yes!

Yours Sincerely

Counter reason:
old-fashioned
tradition, so easier to
continue
Argument reason:

other traditions burnt witches, slept
on straw, walked
barefoot – now
discontinued so ...
Supporting
example: anecdote,
use experts

P3

Intro: My address right hand side, +
date, school address left,
Dear Mr Cole
Should we consider discontinuing
wearing a school uniform, you've
asked? Quite simply, yes! Within this
letter, you will find several arguments
setting out precisely why we should
make this change.

Form: Letter
Audience: Headmaster
Purpose: Argue change
uniform
P2

Counter reason: all look same so no prejudice/bullying over clothes,

Argument reason: no individualism, learning who we are

Supporting example:

RQ +triple
Isn't part of our
learning at school
about learning how to
dress appropriately,
learning who we are,
learning how to judge
people on what is
inside, not what wear?

Counter reason: cost cheaper as not designer or from shops making huge profit

Argument reason: cost of blazers, trousers and skirts from school uni shop expensive as no competition, own clothes mix 'n' match so fewer outfits needed, wear weekends so more use,

Supporting example: emotive language: force poorer families to go without, statistics

Mind maps/spider diagrams, allow you to jot down content ideas in no particular order and then decide on the best order to write them up in – so they're ideal for non-fiction writing. Each leg = a paragraph

Full Stop

Full stops are used to:

- 1) mark the end of a sentence.

 Carefully, he kicked the ball into the goal.
- 2) show when a word has been abbreviated.

Saint Peter's Road is on the High Street.

→ St. Peter's Road is on the High Street.

COMMAS

Commas are used to separate:

1) items in a list.

Bert, Ernie and Elmo are my three pet rats.

2) <u>dependent clauses and phrases</u>.

While I was in the bath, the cat scratched at the door. That meant, because I was on my own in the house, I had to get out to let him in. Thankfully, I had a towel handy!

Quotation Marks

Quotation marks show exact words that are spoken or written by someone.

'Don't be late!' shouted Mrs Smith.

'I will be,' Molly said, and added, 'so **d**on't expect me before 11.'

Overtion Monk

Question marks are used at the end of direct questions instead of a full stop.

What is your favourite food?

How do you feel today?

An indirect question ends with a full store rather than a question mark:

I'd like to know what you've been doing all this time. I wonder what happened.

Exclamation Mark

Exclamation marks express strong emotions: forcefulness, commands, anger, excitement, surprise etc.

Don't buy that car! Stop telling me what to do! I'm free! You're late! She actually won! They're also used for most <u>interjections</u>:

'Hi! What's new?' 'Ouch! That hurt.'
'Oh! When are you going?'

he'd ever been.

Semi-colon

Semi-colons are used to separate two sentences that are closely related:

It was winter; the snow was falling heavily. They can also be used to separate items in a list made of longer phrases. I have been to Newcastle, Carlisle, and York in the North; Bristol, Exeter, and Portsmouth in the South; and Cromer, Norwich, and Lincoln in the East.

Colon

Colons are used to:

1) begin a list.

I have three pet rats: Bert, Ernie and Elmo.

2) indicate that what follows it is an explanation or elaboration of what precedes it.

Unfortunately, the weather forecast was wrong: it rained all day!

Apostrophe

An apostrophe is used to show:

1) omission - where a letter or letters has been missed out.

does not → doesn't | am → l'm

2) possession – when some thing/one
owns something. Thankfully, they played

Susan's game. Interestingly, David's house has no garden, but Susan's house does.

Dash

Dashes are used for parenthesis: a word or phrase inserted as an explanation or afterthought into a passage which is grammatically complete without it. E.g. Last year, they roasted the winning brisket — the size of a pillow — in a mighty clay oven. Paul felt hungry — more hungry than

Brackets

Brackets are used in pairs for parenthesis:
a word or phrase inserted as an
explanation or afterthought into a passage
which is grammatically complete without
it. E.g.

Andrew Jacklin (last year's losing finalist) is expected to win this heat.

Tigers are carnivores (meat eaters)!

Ellipsis

Ellipsis is used to:

1) show a pause or hesitation in someone's speech or thought.

I don't know ... I'm not sure.

2) build tension or show that something is unfinished.

Looking up, Paul couldn't believe what he saw ...



Use fronted adverbials: Rather slowly, (manner)	Use a range of sentence structures: The spotted green frog jumped	Use a tricolon (tripartite list): 'I stand here today humbled by the	Use different sentence types:
During the night, (time/temporal) Every minute or two, (frequency) At the end of the corridor, (spatial)	into the pond. (simple) The spotted green frog jumped into the	task before us, grateful for the trust you have bestowed, mindful of the sacrifices borne by our ancestors.'	The wind is blowing. (declarative) Put your pen down. (imperative)
Just beyond the stairwell on his left, he opened the door.	pond and he splashed water on me. (compound – coordinating	Snap! Crackle! Pop! (Rice Krispies slogan)	Who do you trust most in the world? (interrogative)
Use a two and then three word sentence:	conjunction: for, and, nor, but, or, yet, so) The spotted green frog jumped into the	Use a conditional sentence: When people smoke cigarettes, their	Pollution is killing us! (exclamation)
It hurt. I was dying!	pond when the hawk flew overhead. (complex – subordinating conjunction:	health suffers. If I had cleaned the house, I could	Use discourse markers to begin paragraphs and start/link some
Snow fell. Flakes floated precariously.	if, although, as, before, because, when, after, since, until, so that, while etc.)	have gone to the cinema.	First of all, To begin with, Firstly,
Use anaphora:	When the hawk flew overhead, the spotted green frog jumped	Use paired adjectives to describe a noun:	Therefore, Consequently, Hence, As a result,
Now is the time for action. Now is the time to take up arms. Now is the time to fight for your country.	into the pond. (subordinate/dependent clause start)	Take a look at this <u>bright red</u> spider.	Furthermore, In addition, Additionally, Moreover,
	The frog, which had been lurking underwater, jumped on the lily pad. (embedded clause)	Luckily, it isn't a <u>wild, dangerous</u> one.	Meanwhile, Later that day, Seconds later, Subsequently, That afternoon,
Use epiphora (epistrophe)	Use a past participle - 'ed' start: Glazed_with barbecue sauce, the rack	Use anadiplosis (yoked sentence):	On the whole, Interestingly, Basically, In short, Broadly speaking,
I can't believe I was robbed. Everything is gone . My television and electronics are gone . The money I left	of ribs lay nestled next to a pile of sweet coleslaw.	Building the new motorway would be disastrous, disastrous because many houses would need to be destroyed.	Alternatively, Conversely, Similarly, On the other hand, Despite this, Likewise, However,
on my nightstand is gone .	Use a present participle - 'ing' start: Whistling to himself, he walked down the road.	'Fear leads to anger . Anger leads to hate . Hate leads to suffering.' Yoda, <i>Star Wars</i> .	To conclude, Finally, In conclusion, Eventually, In the end,

YEAR 8 ENGLISH READING TERMS 1 & 2 'ROMEO & JULIET'



ACT ONE ACT TWO ACT THREE ACT FOUR ACT FIVE

There is a fight in the streets of Verona between the servants of the Capulets and Montagues. Prince Escalus says that any more violence will result in death. Romeo is in love with Rosaline. Paris asks Capulet to marry Juliet. Romeo and the others in disguise attend a Capulet party. Romeo, Benvolio, and Mercutio arrive at the banquet. Romeo asserts that he will not dance, due to his melancholy, and he is teased by Mercutio, who humorously enlarges on his probable enchantment by Queen Mab. The group proceeds to the party, although Romeo expresses darkly ominous feelings. Romeo and Juliet meet and fall in love. Romeo discovers that Juliet is a Capulet.

Romeo separates himself from his friends as they leave the party. Juliet appears at a high window and Romeo admires her beauty. Believing herself to be alone, she soliloquizes about her love for Romeo, regretting that he is a Montague. He reveals himself, and they speak of their love and exchange vows. Juliet is called away by the Nurse, but she returns to say that she will send a messenger to Romeo the next day, to whom he can convey a plan for them to marry. Romeo arrives and tells Friar Laurence of his new love and asks his help in marrying her. The Friar agrees, hoping that their alliance will end their families' feuding.

Mercutio begins to pick a fight with Tybalt. Romeo appears and is insulted by Tybalt, who challenges him to a duel. Romeo excuses himself, citing mysterious reasons why he and Tybalt should be friends, but Mercutio cannot tolerate this and draws his sword on Tybalt. Romeo attempts to separate them, and Mercutio is mortally wounded by Tybalt. Mercutio, curses both Montagues and Capulets for their feuding and dies. Tybalt returns, and Romeo fights and kills him. Romeo flees. The Prince appears and interrogates Benvolio. Judging Tybalt to be guiltier than Romeo, he spares the latter the death sentence but banishes him from Verona. The Nurse brings her word of Tybalt's death and Romeo's banishment. Juliet speaks of suicide and the Nurse volunteers to bring Romeo to her.

Paris speaks to Friar Laurence. Juliet arrives and coolly deflects Paris' courtesies. Once alone with the Friar, she desperately craves assistance. Her talk of suicide suggests a plan to him: he will provide her with a potion that will make her seem to be dead. She will be placed in the family crypt, where Romeo will meet her so that they can flee together. Juliet, alone in her bedroom, is afraid that the Friar's potion may actually kill her. But she steels herself and drinks the potion. The Nurse, unable to rouse Juliet, raises the alarm that she is dead.

the news that Juliet has died. Romeo immediately plans to return to Verona and join his beloved in death; he buys a fastacting poison from an Apothecary. Paris visits Juliet's tomb at night. Romeo appears. Romeo and Paris fight. Romeo kills Paris. Romeo drinks the poison and dies. Friar Laurence arrives and views the carnage just as Juliet awakens. Juliet kisses her dead lover and stabs herself with his dagger. The Prince arrives, followed by Juliet's parents and Romeo's father, all of them drawn by the news of the tragedy. The Friar gives an account of Juliet's feigned death and Romeo's misinformation. The Prince points out that the feud between the two families has led to this moment, and Montague and Capulet forswear their hostility and vow to erect golden statues of the two lovers.

Balthasar arrives in Mantua with

à	Themes				
Love	Parents/children	Violence			
Conflict	Hatred	Responsibility			
Family	Fate	Revenge			
Relationships	Gender	Death			

The play was There was a strong published in 1597 (it is social system. The thought to have been nobles and the poor written in 1595) are separated so the divide between them is very clear.

CONTEXT

The groundlings were the poor members of the audience. They loved the violence and action. They were often drunk and unruly.

Love and relationships were very organized. **Arranged marriages** were popular amongst the wealthy.

Very religious times. Catholicism plays a large part in this play.

Women lacked power. Noble families were It was a patriarchal very concerned with society. Women were loyalty. dominated and oppressed.

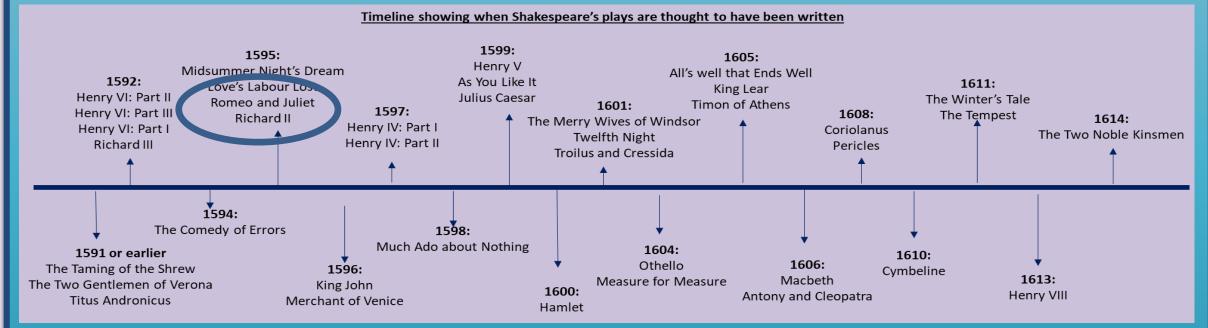
Noble families were very concerned with power and wealth.

These were, occasionally, very violent and bloody times.

Lack of science meant that people of this time focused heavily on fate and religion. There are lots of references to stars and 'star-crossed'

Why do we study Shakespeare?

Shakespeare has had a huge influence over literature, the English language, and Western Culture so it is important to have an awareness and an understanding of his work. His writing is very skillful and covers a large number of genres (e.g. poems, plays, comedies, histories, and tragedies). In addition to this, his writing covers themes that are still relevant today such as jealousy, revenge, the pursuit of power, and many different kinds of love. In other words Shakespeare wrote about what it means to be human.



MAIN CHARACTERS					
ROMEO	The son and heir of Lord and Lady Montague. Romeo is handsome and intelligent, yet he is also impulsive and sensitive. Romeo is a peaceful character, and is not interested in the violence that goes on around him, choosing instead to focus his energies on love. Although Romeo seems easily swayed in his love life, he is definitely committed at the end.	MONTAGUE AND CAPULET	The patriarchs of the Montague and Capulet families, who have held a long running feud (argument) - this has been going on before the play begins. Both seem to deeply love their own children yet they are not always aware of their child's state of well being.		
JULIET	The daughter of Capulet and Lady Capulet. Juliet is a beautiful young girl (13 years old). Juliet is caring, compassionate and, at times, shows immense courage and personality (defying her parents, arguing with her father and drinking a potion without knowing the effects). At times, she shows great intelligence and wit, particularly in conversations with her mother.	MERCUTIO	A kinsman to the prince and one of Romeo's closest friends. Mercutio is an extraordinary character in that he has a sparkling wit and a good imagination. Much of Mercutio's speech deals with puns and word play. His hot-headed personality eventually leads to his downfall.		
PRINCE ESCALUS	The most powerful character in the play, with the authority to govern the other characters and deliver punishments. He is also kinsman to Mercutio and Paris. As the Prince of Verona, his main concern throughout most of his appearances on stage are in relation to ensuring that the peace is kept. He is merciful in banishing Romeo for the death of Tybalt rather	FRIAR LAURENCE AND THE NURSE	Both Friar Laurence and the Nurse act as guidance for Romeo and Juliet. They appear to be the two people that Romeo and Juliet trust more than anyone else as they are people the youngsters confide in. Friar Laurence is kind and believes that marriage may heal the feud. The Nurse is sentimental and kind (she is also quite rude which provides humour for the audience). She is more of a mother to Juliet than		

than sentencing him to death.

Features of a Tragedy in Romeo and Juliet

Tragic Hero - A main character cursed by fate and possessed of a tragic flow (Romeo, and to an extent Juliet).



Hamartia - The fatal character flaw of the tragic hero (his passion and impulsiveness).

Catharsis - The release of the audience's emotions through empathy with the characters.



Internal Conflict - The struggle the hero engages in with his/her fatal flow.



CHARACTERS

Lady Capulet has ever been.



Dramatic Devices in Romeo and Juliet

Dramatic Irony	Mercutio and Benvolio think Romeo is still pining over Rosaline, but the audience knows he has moved on to Juliet. A2 S1
Soliloquy	Juliet's opening speech in A3 52 in which she pours her heart out over her love for Romeo.
Aside	Juliet secretly hopes for the 'villain' Romeo: Villain and he be many miles asunder God pardon him! A3 S5.
Foreshadowing	Friar Laurence: These violent delights have violent ends, And in their triumph die, like fire and powder. A2 56

<u>Ratio</u> – is used to <u>compare</u> two or more amounts.

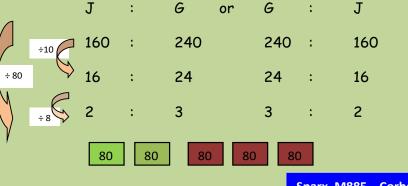
Jack has £160 and Gill has £240

These amounts can be written as a ratio,

J : G or G :

160 : 240 240 : 160

<u>Simplifying a Ratio</u> – you can simplify a ratio by eventually dividing the numbers by the HCF



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Sharing an Amount in a Ratio

Sparx M525 Corbett video 270

Jack and Gill had £400 in total which they shared in the ratio 2:3

There are five parts (2+3 = 5)

To split this money evenly $400 \div 5 = 80$

Jack receives 2 x 80 = £160

Gill receives 3 x 80 = £240

£160 + £240 = £400

Best Buys - using (the unit) ratio

Which is the best deal;

 $(\div 5)$

Five packets of sweets costing £2.45,

Six packets of sweets costing £3.00

or Seven packets of sweets costing £3.57?

Packets: Cost

49p a box

: 2.45

1 : 0.49

Packets : Cost

6 : 3.00

(÷ 5) 1 : 0.50

50p a box

Packets : Cost

Hint - Find the cost of one packet

7 : 3.57

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(÷ 5) 1 : 0.49

51p a box

The five packets option is the better deal at 49p per packet

Writing in the ratio 1:n or n:1

1 : 1.5

Gill gets £1.50 for every £1 that Jack gets Jack gets ≈ 67p for every £1 that Gill gets

2/3

Sparx M543

Keywords

Proportion: a statement that links two ratios

Variable: a part that the value can be changed

Axes: horizontal and vertical lines that a graph

is plotted around

Approximation: an estimate for a value

Scale Factor: the multiple that increases/

decreases a shape in size

Currency: the system of money used in a

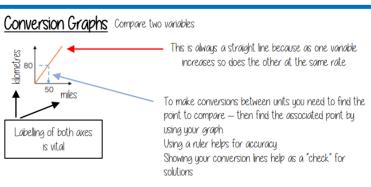
particular country

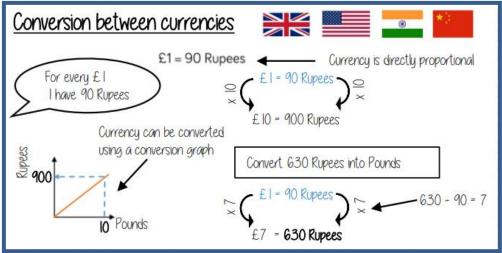
Conversion: the process of changing one

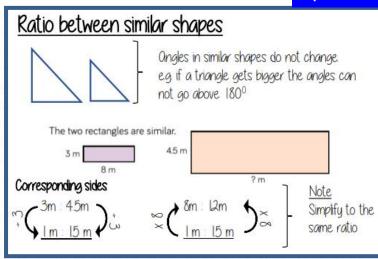
variable to another

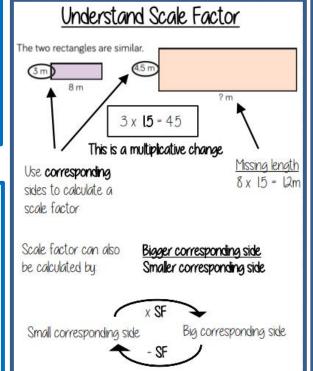
Scale: the comparison of something drawn to

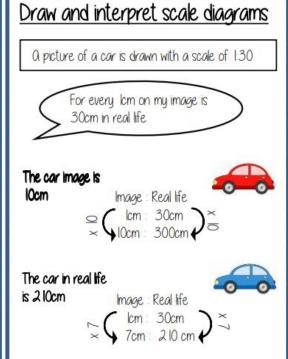
its actual size.

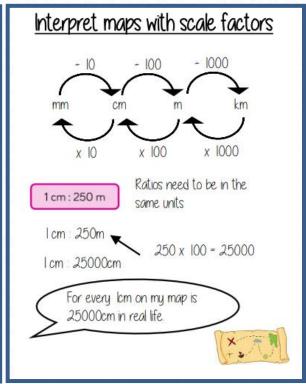








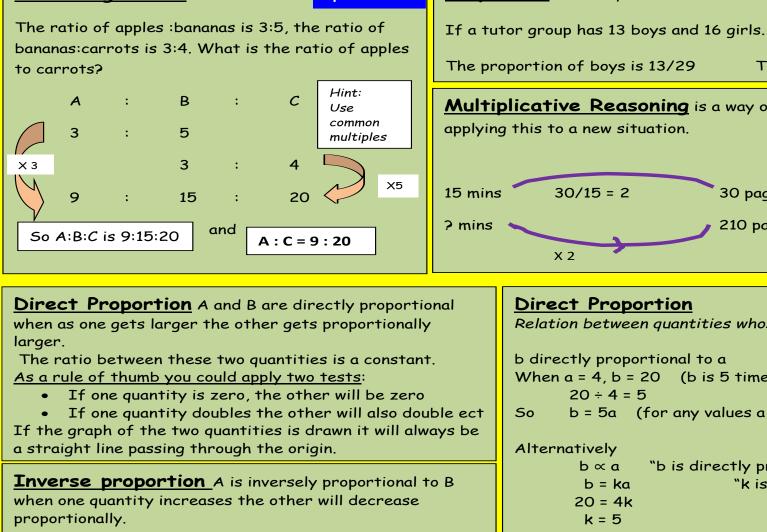




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Sparx M885

Combining Ratios



The inverse of A will be 1/A because x by $A = \div 1/A$

is to say "A is directly proportional to 1/B"

The proportion of boys is 13/29 The proportion of girls will 16/29 Multiplicative Reasoning is a way of comparing two things and applying this to a new situation. Find a Multiplicative link and use it to find missing quantities. 15 mins 30/15 = 230 pages 210 pages ? mins How many pages can this person read in 1 hour? X 2 **Direct Proportion Inverse Proportion** Relation between quantities whose ratio is constant Relation between quantities such that as one increases in proportion the b directly proportional to a other decreases When a = 4, b = 20 (b is 5 times a) a and b are inversely proportional $20 \div 4 = 5$ When a = 4, b = 5b = 5a (for any values a and b) $4 \times 5 = 20$ So a = 20/b or b = 20/aSparx M472 Alternatively "b is directly proportional to a" "a is inversely proportional to b" b ∝ a b = ka"k is a constant" 20 = 4kk = 5b = 5aIn Maths "inverse" means the opposite of an operation. The inverse operation of multiply is divide, and vice/versa Find a when b = 150Find b when a = 0.5b = 5a150 = 5ab = 5aAnother way of describing "A is inversely proportional to B" $b = 5 \times 0.5$ 150/5 = a

a = 30

b = 2.5

Proportion can compare the size of one part to the size of the whole.

The symbol ∞ means

"is proportional to"

0

Ρ

0

T

I

0

N

Sparx M665

Sparx M267

 $a \propto 1/b$

a = k/b

4 = k/520 = k

a = 20/b

Find a when b = 0.1

a = 20/b

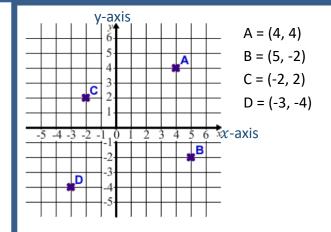
a = 200

a = 20/0.1

Year 8 Maths Term 2 Straight Lines and Cartesian Plane

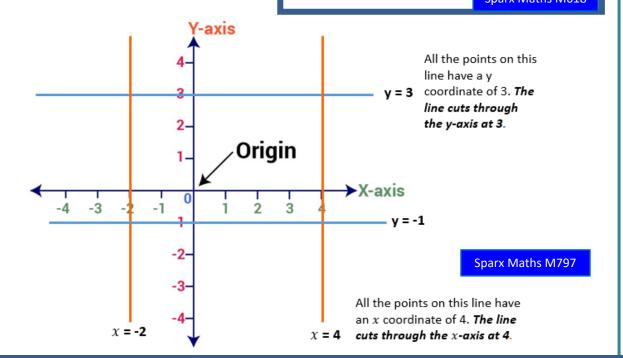
What do I need to be able to do?

- Plot and read Cartesian Coordinates
- Identify and plot lines parallel to the axes
- Recognise the line y = x
- Understand what a gradient and y-intercept is
- Recognise a positive and negative gradient
- Give an equation of a line that is parallel to a given line
- Plot lines in the form y=mx + c
- Find the equation of a line



Coordinates are used to show a position on a graph. They are written with the notation (x, y). The first coordinate is the horizontal position (x-axis), the second is the vertical position (y-axis).

Sparx Maths M618



Plotting a Straight Line Graph

Every straight line has an equation in the form of:

the steepness of the line

where the line cuts the y axis

The **GRADIENT**

The y-INTERCEPT

Suppose we want to plot the graph

$$y = 2x + 1$$

We complete a table of values by substituting (replacing) the x values from the table into the equation.

E.g. When
$$x = 0$$

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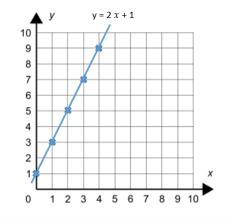
$$y = 2 \times 0 + 1 = 1$$

So the coordinate in the form (x, y) would be (0, 1)

	x	0	1	2	3	4	5	6
	y = x + 3	1	3	5	7	9	11	13
•		(0, 1)	(1, 3)	(2,5)	(3,7)	(4, 9)	(5, 11)	(6, 13)

We then plot these coordinates on the graph, join them with a straight line using a ruler and label the line with the equation.

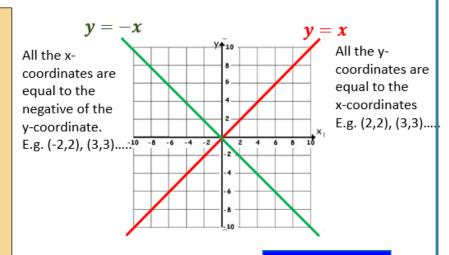
Notice the link between sequences: in this case you are finding the first 6 terms of the sequence 2n + 1



The gradient of the line y=-x is -1. When the gradient is **negative**, the line slopes **down**.

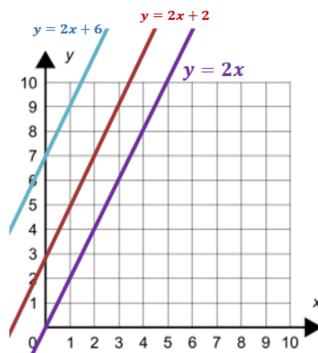
The gradient of y=x is 1. When the gradient is **positive**, the line slopes **up**.

A line that goes straight across horizontally, has a gradient of 0.



Sparx Maths M544

Sparx Maths U898



All these straight lines have the same gradient of 2.

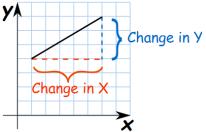
This means that for every unit the line goes across, it goes 2 units up.

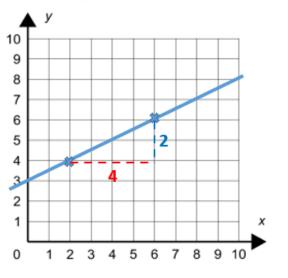
So if two lines have the <u>same</u> gradient, they are parallel.

A line parallel to the line y = -5x + 7could be y = -5x + 2

Finding the equation of a line in the form y=mx + c

$$Gradient = \frac{Change in Y}{Change in X}$$





To find the m (the gradient), pick 2 coordinates and draw a triangle. Divide the change in y by the change in x.

Gradient =
$$\frac{2}{4} = \frac{1}{2}$$

This means that for every unit the line goes across, it goes $\frac{1}{2}$ a unit up.

Sparx Maths M544

The c, is where the line crosses the y-axis which is 3.

So the equation of this line is $y = \frac{1}{2}x + 3$

When plotting graphs remember to:

Always label your axes 'x' and 'y'
Make sure your scale is even on your axes
Use a pencil and a ruler
Label your straight line graph

Key words

Axis/Axes (plural)

Origin – The point (0, 0)

Coordinates

Y-intercept

Gradient

Parallel

Plot

Analysing Data

Median – The "middle" of a sorted list of numbers.

Step 1 - Put the numbers in **ascending** order (smallest to biggest)

Step 2 – Find the **middle** number. **count how many numbers, add 1 then divide by 2.**

 $\frac{n+1}{2}$ n = how many numbers in the data set

Example 1: Calculate the median of 3, 13, 7, 5, 21, 23, 39, 23, 40, 23, 14, 12, 56, 23, 29

Step 1 – Order the numbers 3, 5, 7, 12, 13, 14, 21, 23, 23, 23, 23, 29, 39, 40, 56,

Step 2 – There are 15 numbers

n = 15 $\frac{n+1}{2}$ $\frac{15+1}{2} = 8^{1}$

The middle number is the 8th number:

3, 5, 7, 12, 13, 14, 21, 23 23, 23, 23, 29, 39, 40, 56,

The Median is 23

If the data set has an even amount of numbers then the median is mid-point between the 2 middle numbers.

Example: Calculate the median of 5, 7, 3, 9,

Step 1: Order numbers

3, 5, 7, 9,

Step 2: *n* =4

 $\frac{4+1}{2}$ = 2.5th

The median is half way between the 2nd and 3rd number. The median is 6.

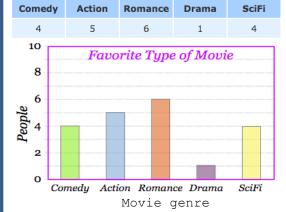
Presenting Data

The data has been collected, it has been sorted and now it can be presented.

Table: Favorite Type of Movie

Sparx Maths M460

Bar Chart:

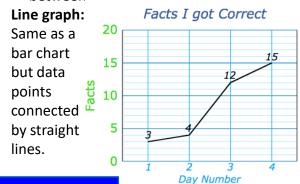


The perfect Bar chart must:

- Be drawn with a pencil and ruler
- Have a title

Sparx Maths M140

- Have spaces between the bars
- The axes must be labelled
- Have bars of equal width and equal sized spaces between the bars
- Have and even scale equal sized space between the numbers



Pictogram/pictograph – showing data using images. Each image represents a specific value.

Example: Apples Sold

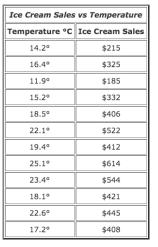
Sparx Maths M644

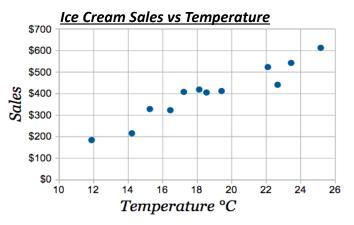
The perfect **Pictogram** must:

- Have a title
- Have a key showing the value of the image
- Have images of an equal size and shape with equal distance between each image

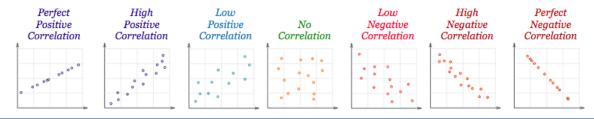
Scatter Graph – shows the relationship between two quantitative data sets.







This type of graph allows us to draw a conclusion about the relationship between two things, in this example we can say as the temperature increases, so does the number of ice creams sold. We call this a positive correlation as both values are increasing together. There are others types of correlation/relationships:



Year 8 Maths Term 2 Probability

<u>Probability</u> uses numbers to calculate or predict the chance of something happening in the future.

<u>Vocabulary</u>: Probability, Probability Scale, Relative frequency, Theoretical Probability, Dependent Events, Independent Events, Sample Space, Venn diagrams,

Sparx Maths M655

Sparx Maths M332

A <u>Probability Scale</u> is used to describe all probabilities, or how likely they are to happen

If an event is <u>Certain</u> its probability is 1 Boxing Day will follow Christmas Day in December

If an event is <u>Impossible</u> its probability is 0 You will grow to be 5m tall

An event has a probability $\underline{\text{Evens}}$ if the two outcomes are equally likely Flipping a coin and getting heads. The probability of getting a head is ½ or 50%

<u>Likely</u> describes the probability of an event which is more than evens chance but not certain.

You roll a die and get a number greater than 2

<u>Unlikely</u> describes the probability of an event which is less than evens chance but not impossible.

I choose a letter from the word RAIN and pick the A

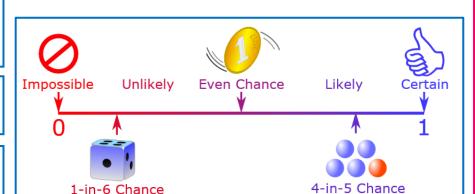
Relative Frequency (Experimental Probability)

This is the estimated probability based on the results of an experiment.

I surveyed 50 birds landing on my bird table. 18 of them were bullfinches.

The experimental probability of the next bird landing on my bird table being a bullfinch is 18/50 or 36%

The more trials that are performed, the more reliable the results will be.



Skills you will need: Addition, Subtraction, Multiplication of Fractions

Addition and Subtraction:

- Find the LCM of the denominators
- Convert them to their equivalent fractions where the denominators are the same
- 3. Once the fractions have the same denominator you can add or subtract the numerators. The denominator stay the same.
- 4. Simplify if you can

Multiplication:

- Cancel any of the numerators with any of the denominators by finding common factors.
- 2. Multiply the numerators together and the denominators together.

The probability of an event happening is always greater than or equal to 0 (Impossible) but less than or equal to 1 (Certain)

0 ≤ probability ≤ 1

$$\frac{2}{9} + \frac{1}{5}$$
LCM of 9 & 5 is 45

$$\frac{2}{9} - \frac{1}{5} = \frac{1}{45}$$

Check why

Year 8 Maths Probability

A Sample is a selection of items from a population.

Your sample could be a selection of 20 pupils from your year group.

The larger the sample size or the more times you repeated a trial the closer your probability will be to the true probability.

A Sample Space is way of recording the outcomes of two events

Sparx Maths M718

This sample space records all the possible outcomes of a game of rock, paper scissors

	ROCK	PAPER	SCISSORS
ROCK	RR	RP	R5
PAPER	PR	PP	PS

Theoretical Probability is a number between 0 and 1 representing the probability of something happening.

Number of favourable outcomes

Total number of outcomes

Sparx Maths M941

To find the **Expected outcomes** multiply the probability by the number of trials.

The probability of a team winning is 0.3. How many games can they expect to win in a season of 24 games?

$$0.3 \times 24 = 8$$
 8 games

Sparx Maths M206

More Vocabulary:

Sample, Sample size, Probability notation, Expected outcomes, Mutually Exclusive Events, Exhaustive Events, Tree Diagrams

Probability Notation

P(X) refers to the probability of X occurring P(Red, two) refers to a red two picked from a pack of cards

Events are Mutually Exclusive if they cannot happen at the same time Getting Heads or Tails on a coin Turning Left or Right

Sparx Maths U683

Events are Exhaustive if they cover the entire range of possible outcomes

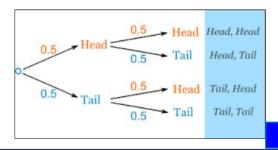
When you flip a coin the outcomes Heads and Tails are exhaustive because they cover all the possible outcomes The probabilities of an exhaustive set of outcomes total 1.

> Therefore if: The P(Success) = 0.9 then **The P(Failure) = 1 - 0.9 = 0.1**

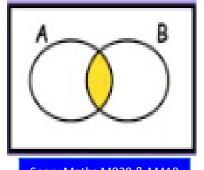
An Independent Event is when the probability of one event does not depend on the outcome of another event. If I flip a coin the probability of getting a Head is 0.5. The probability will not change for any subsequent flipping of the coin.

Dependent Events. This is when the probability of one event depends on the outcome of another. If I wake up late the probability of being late for school increases.

Tree Diagrams can show all the possible outcomes of multiple events and can be used to calculate their probabilities.



Sparx Maths M829 & M419 Sparx Maths M299



the relationship between multiple groups of things and how they overlap. These diagrams can be used to calculate

probabilities

Venn Diagrams

can be used to show

KS3 Science: Nutrition and digestion

Food group	Found in	Function
Carbohydrate	Potatoes, pasta, rice, bread	Source of energy
Protein	Meat, fish, eggs, dairy, seeds, nuts	Builds and repairs tissues
Fats (lipids)	Cheese, nuts, oily fish, chips, cakes	Stores energy, insulate us, protects organs
Fibre	Fruit, veg, wholegrain cereals	Prevents constipation, improves health
Minerals	Dairy, veg, fish, meat, nuts	Enables body to work & stay healthy
Vitamins	Fruit, veg, milk, eggs	Same as minerals
Water	Cucumber, drinks	Needed in cells, tissues & organs

Keyword	Meaning
Nutrient	A substance that that is essential for the maintenance of life and for growth.
Carbohydrates	Group of molecules including sugars and starch.
Protein	Building block of cells, made of a long chain of amino acids.
Lipids	Another name for fats.
Enzyme	Biological catalysts, which means that they speed up chemical reactions.

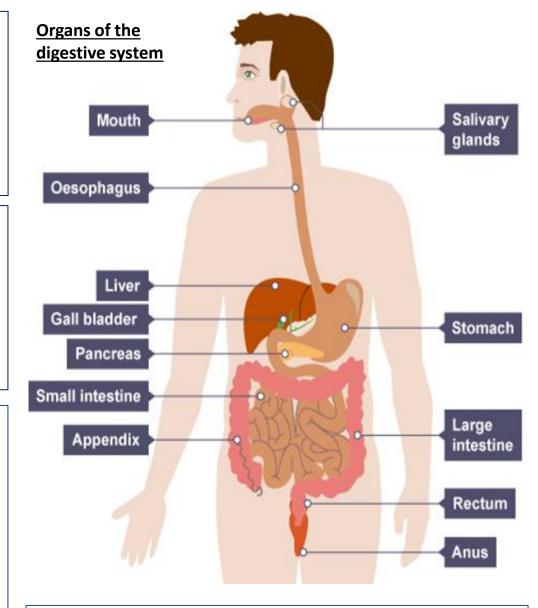
Digestion is the break down of large insoluble molecules into small soluble molecules, so that they can be absorbed by the body.

If the body does not get what it needs it suffers with deficiencies such as:

- Scurvy
- Obesity
- Rickets

Plants make carbohydrates in their leaves by photosynthesis and absorb mineral nutrients and water from the soil via their roots.

This is why they are called **producers.**

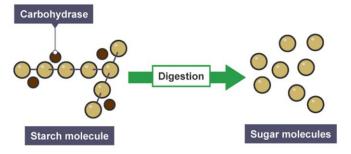


Bacteria play an important role in the human digestive system.

Imbalances in humans diet can lead to **obesity, starvation** and other **dietary deficiencies**

Enzymes are at work in the digestive system:

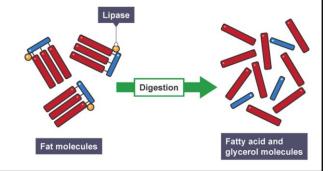
- Carbohydrase enzyme breaks down Carbohydrates into sugars.
- <u>Amylase</u> is an example of a carbohydrase enzyme, it breaks down **Starch**, a complex carbohydrate into glucose.



- Protease enzyme breaks down Proteins into amino acids
- Protein molecule

 Digestion

 Amino acid molecules
- Lipase enzyme breaks down Lipids into fatty acids and glycerol.



BIOCHEMICAL (FOOD) TESTS

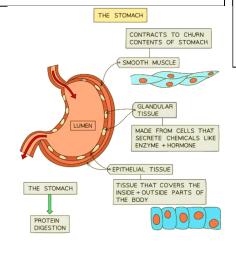
CHEMICAL	TESTS FOR?	HOW TO CARRY OUT THE TEST	RESULT	CHEMICAL	TESTS FOR?	HOW TO CARRY OUT THE TEST	RESULT
IODINE SOLUTION	Starch	1.) Add the iodine solution directly to the substance to be tested (in solid or liquid form) and look for a colour change.	Turns blue black with starch	BIURETS SOLUTION X	Protein	1.) Add Biuret's to the solution/ suspension to be tested and look for a colour change.	Turns purple with protein
BENEDICT'S SOLUTION	Reducing Sugar	1.) Add Benedict's to the solution/ suspension to be tested. 2.) Heat for 2 mins in a water bath at boiling point and look for a colour change.	Turns brick red with reducing sugars (green/ yellow/ orange if less sugar present)	ETHANOL	Lipid (known as the Emulsion test)	1.) Add ethanol to the solution/ suspension to be tested and shake thoroughly. 2.) Then add water and look for a colour change.	Turns cloudy/ milky with lipid

<u>Adaptations to the stomach</u>: The stomach has several adaptations to help digestion, it.....

- Has a muscular wall to churn food and break it down into small pieces
- Is moist so food doesn't get sticky inside it
- Produces saliva to break down proteins
- Contains stomach acid and enzymes to break down food
- Has a lining which contains mucus so it doesn't get affected by the acid or enzymes itself.

Adaptations to the mouth are:

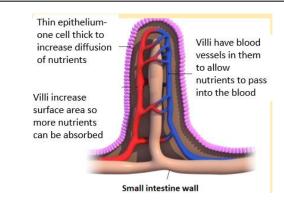
- L. Teeth
- 2. Salivary gland



Adaptations to the small intestine

Your **small intestine** absorbs all of the required nutrients from your food. The inside of the small intestines is folded into **villi.**

- 1. These **increase** the **surface area** enabling more nutrients to be absorbed.
- 2. There is a **good blood supply** so that there is a **constant concentration gradient**.
- 3. The cell walls are **one cell thick**, so there is a **short diffusion distance**.

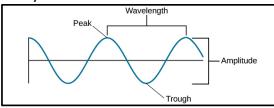


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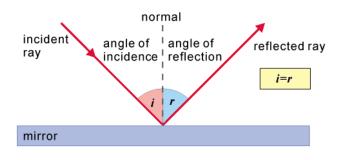
KS3 Physics – Waves Light and Sound

Keyword	Definition
Transparent	Material which light can travel through
Translucent	Material through which a glow of light can be seen
Opaque	Material which does not let light through
Normal	A line at right angles to a mirror
Transverse	A wave in which the medium vibrates at right angles to the direction of its travel
Longitudinal	A wave vibrating in the direction of travel
Amplitude	Half the height of a wave (in m)
Wavelength	The distance between the tops of two waves (in m)
Frequency	The number of waves that pass a point each second (in Hertz, Hz)
Pitch	The height of a wave (in m)
Oscilloscope	An instrument which shows a diagram of a wave on a screen
Reflection	Light bouncing off a surface
Refraction	Change in direction when light goes from one transparent material to another

- Sound and light are similar in that both are forms of energy that travel in waves. They both have a wavelength, frequency and amplitude.
- Sound: High pitched sounds have a short wavelength and a high frequency.

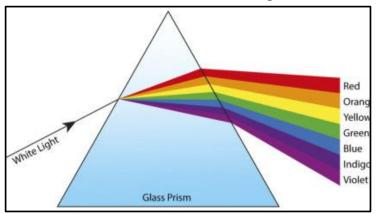


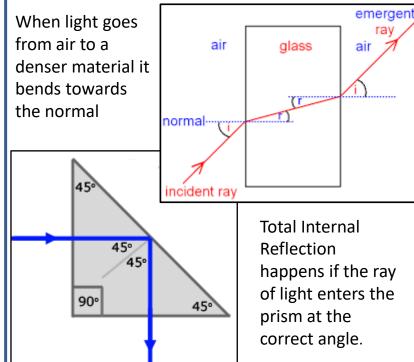
- Light can travel through a vacuum
- Light travels at 300,000,000 m/s
- Luminous objects (e.g. the sun, fire) emit or give out light.
- Non-Luminous objects (e.g the Moon) can only be seen because they reflect light.
- Smooth surfaces reflect light evenly.
- Light is reflected at the same angle it arrives at. The angle of incidence equals the angle of reflection



Refraction

- Light changes direction at the interface of two different substances.
- White light is dispersed into a spectrum with a prism.
 The 7 colours can be remembered using ROY G BIV

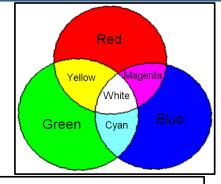




When red, green and blue light (the primary colours) are mixed they make secondary colours.

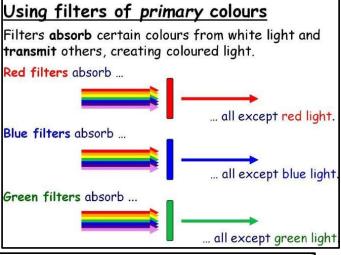
The secondary colours are yellow, cyan and magenta

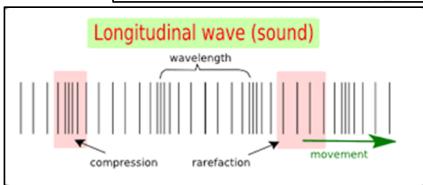
Coloured light can be made using filters.



A red filter only allows red light to be transmitted through the filter; all the other colours are

absorbed.

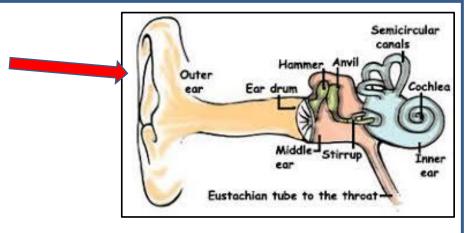


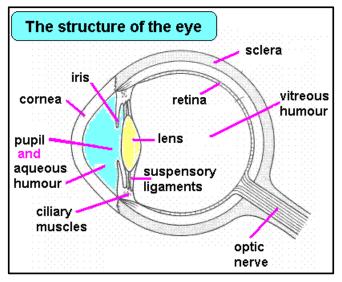


- · Sound travels as a longitudinal wave
- Sound travels through air at 330 m/s
- Sound travels though other media at different speeds.
- Sound travels fastest through solids.
- Sound CANNOT travel through a vacuum

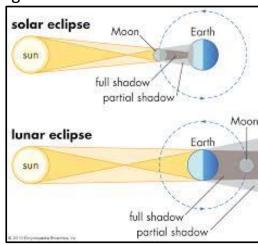
The ear

Sound passes through the ear by vibrations. When the vibrations reach the hairs on the cochlea they are changed into electrical signals called impulses which travel down a nerve to the brain.





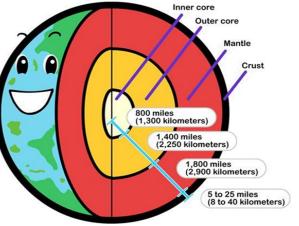
Sound is measured in Decibels (dB). Loud sounds can damage the ear



- Light travels in straight lines.
- A solar eclipse happens when the Moon is between the earth and the sun.
- A lunar eclipse occurs when the Earth blocks light from the sun from landing on the Moon, so we can't see the Moon.

KS3 Chemistry: The Earth and atmosphere

Core	Inner most layer of the Earth – made up of nickel
Mantle	The largest part of the Earth's layers – heat convects through this to contribute to tectonic plate movement
Crust	The outer most layer of the Earth. Tectonic plates are found here
Atmosphere	A mixture of gases that surround the planet and support life
Magma	Molten rock underground
Lava	Molten rock at the surface of the Earth
Igneous	Rocks that have been formed from the cooling of molten rock e.g. basalt, granite
Sedimentary	Rocks formed by small rock pieces being transported by rivers and laid down in layers e.g. limestone, sandstone
Metamorphic	Rock that is formed from another rock that is under high pressure and high temperature e.g. marble, slate
Renewable	A resource that can be replaced quickly e.g. wind
Finite	A resource that will eventually run out e.g. coal
Carbon Cycle	A series of processes where carbon is recycled around the environment
i	



There are 4 main parts to the Earth's structure

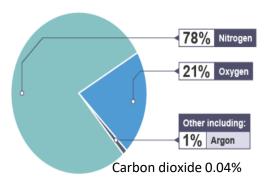
- The inner core
- The outer core
 - The mantle
 - The crust

Tectonic Plates:

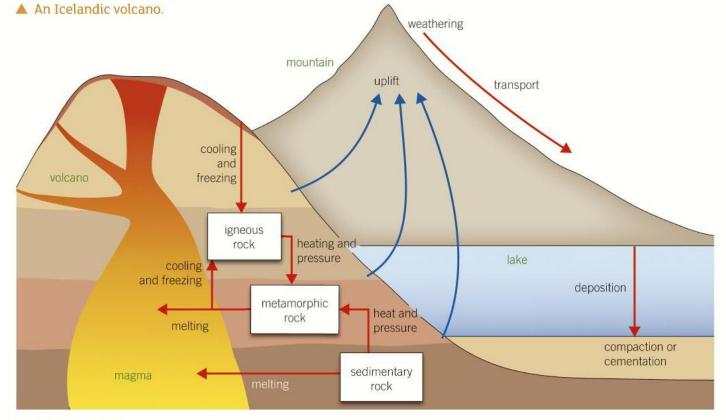
Mechanism called Slab Pull.
Older, denser tectonic plates sink into the mantle.
As they sink, newer and less

As they sink, newer and less dense sections are pulled along behind.

The Earth's atmosphere is the relatively thin layer of gases that surround the planet. It provides us with the oxygen we need to stay alive.

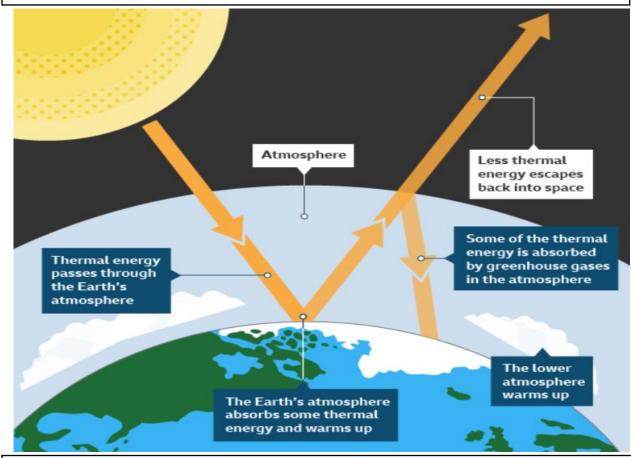


This pie chart shows the percentages of the main gases in dry air



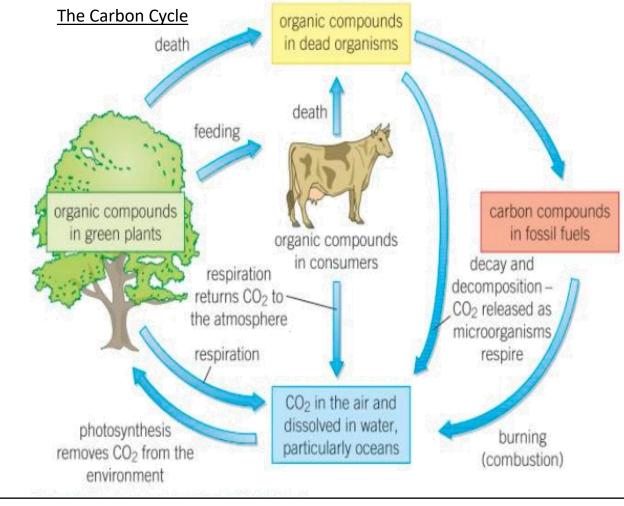
▲ The rock cycle.

Since the industrial revolution the levels of greenhouse gases in the atmosphere have increased. This has led to the long wavelength radiation(such as infrared) being unable to escape. This heat has contributed to a global increase in temperature called global warming



Global warming has led to changes in the Earth's climate. Consequences of climate change due to global warming are:

- Ice caps melting and sea levels rising, causing flooding in coastal areas and loss of habitats
- Changes in weather patterns (increased droughts in some areas with increased rain in others) this affects wildlife and farming
- Increase in number and strength of storms



Ecosystems need materials to maintain its organisms. One of these materials is carbon. Plants take in CO_2 via photosynthesis. It is stored as glucose which is then transferred to animals that feed on the plants.

This is then stored in the animal's tissues or is exhaled as CO_2 from respiration. Once these organisms die the carbon in their remains (over thousands of years) is stored as fossil fuel which can be used for combustion.

Burning of these fossil fuels releases the carbon as CO₂ which is taken in by plants as the cycle repeats itself

1. NETWORKS

THE INTERNET The diagram below shows the basic principles behind packet switching and how a file will move across the Internet from one computer to another. Scheme Second level domain Sub-directory https://www.ocr.org.uk/qualifications/gcse/computer-science/

Top level domain

The Cloud

The Internet as a

worldwide collec-

tion of computer

networks

The Cloud is a reference to the computing services that are offered across the Internet.







URL

I.P. address

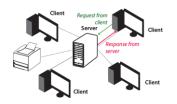
Computation Software as a Service Services

1010 0111 0011 1001

Sub domain

Hosting is where a business porovides space on their web servers for websites to be accessed from.

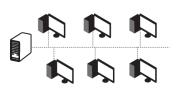
STAR NETWORK TOPOLOGY/ **CLIENT-SERVER NETWORKS**



RING NETWORK **TOPOLOGY**



BUS NETWORK TOPOLOGY



Network types (peer-topeer/client-server) is about the relationship that computers have with one another, topology refers to how the computers have been connected to one another.

Packet Switching

PEER-TO-PEER **NETWORKS**



Encryption **Plaintext** Cipher Encryption Ciphertext Algorithm Key 101010 101010 Decryption 1010 1010 Ciphertext -Cipher **Plaintext** Decryption Algorithm

COMPRESSION PRINCIPLES

Compression reduces the size of a file, which can help network performance as files take less time to upload/ download. It can also save storage space on a device. Very simply, data goes in to a compression algorithm and a key is generated. The output is the cyphertext this will not be something you can make sense of without the key.

METHODS OF COMMUNICATIONS





NETWORKING HARDWARE









Year 8 Computer Science – Autumn Term

Local Area Networks (LANS) occupy a smaller geographical space and tend to use their own networking hardware/methods of communication. Wide Area Networks (WAN) are the opposite to this. They would use 3rd party infrastructure and communicate over large distances.

FACTORS AFFECTING NETWORK PERFORMANCE

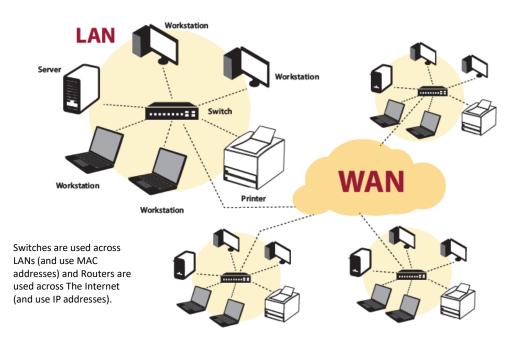
Bit rate the measure of the amount of data (in bits) that is transferred per second. Measured in bits per second (bps) Bandwidth the theoretical maximum amount of data that a communications channel can carry at one time Network range the distance over which data can be reliably transmitted. The most important component in determining range is the transmission media.

Number of devices All devices share bandwidth and in most LANs, only one device can commnicate at a time. Strictly speaking it is not amount, but what

each device is doing that will have the impact.

is the delay between the time a signal is transmitted and Latency

the time a signal is received.



BRUTE FORCE ATTACKS

Key Size (bits)	Number of Alternative Keys	Time required at 10 ⁶ decryptions/microsecond
32	$2^{32} = 4.3 \times 10^9$	2.15 milliseconds
56	$2^{56} = 7.2 \times 10^{16}$	10.01 hours
128	$2^{128} = 3.4 \times 10^{38}$	5.4×10^{18} years

Using increasing computing power, Brute Force Attacks are becoming more sophisticated and more possible. **Developments in Quantum Computing will** make many of our current compression algorithms obsolete.

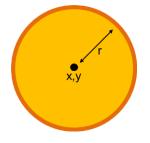
2. GRAPHICS

Year 8 Computer Science – Autumn Term

PROPERTIES OF A VECTOR GRAPHIC

The properties of each shape are recorded:

- Shape type (e.g. Circle)
- Radius
- Centre point (x,y)
- · Fill Colour
- Line Colour



Vectors are used in...

- Computer Aided Design
- Architectural Plans
- 3D Modelling
- Maps
- Text

FEATURES OF A VECTOR GRAPHIC

Vector graphics consist of shapes called objects. You can edit each object separately to change the shape, colour, size and position. Recording the properties of vector shapes doesn't take up much memory. This usually makes the file size of a vector graphic very small. Vector graphics are scalable – you can change their size without any loss of quality.

WHAT ARE BITMAP GRAPHICS?

A Bitmap graphic is also known as a Raster graphic. A bitmap graphic is composed of tiny squares, called pixels. It is possible to edit each individual pixel. The computer stores information about the colour value of every pixel in the image. This can mean a large file size. Resizing a Bitmap graphic causes it to pixelate and lose quality. They are used for: Digital Camera Images, Scanned Images, Magazine Covers, and Photographs.

CREATING A BITMAP GRAPHIC

- Each pixel is given a binary value
- Each value represents a different colour
- Using one bit per pixel allows only 2 values, 0 and 1
- 1 = White, 0 = Black
- More bits per pixel = more colour combinations
 - 1 bit = 2 Colours
 - 2 bits = 4 Colours
 - 3 bits = 8 Colours
 - 4 bits = 16 Colours

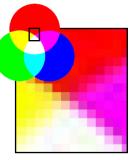
1	1	1	1	1	1	1	1	1	1
1	1	1	1	0	0	1	1	1	1
1	1	1	0	0	0	0	1	1	1
1	1	0	0	1	1	0	0	1	1
1	1	0	0	1	1	0	0	1	1
1	1	0	0	0	0	0	0	1	1
1	1	0	0	0	0	0	0	1	1
1	1	0	0	1	1	0	0	1	1
1	1	0	0	1	1	0	0	1	1
1	1	1	1	1	1	1	1	1	1

11	11	11	11	11	11	11	11	11	
11	11	11	00	00	11	11	11	11	
11	11	11	11	00	10	11	11		
11	11	01	01	01	10	10			
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11	01								
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)1					10			
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	Bitmap graphics	vector graphics
Made up of	Coloured pixels	Objects
File size	Large	Small
Resizing	Lose quality	No loss of quality
Appearance	Real	Cartoon-like
File formats	.bmp .jpg .gif	.svg .wmf

HOW A CAMERA SEES AN IMAGE

Each tiny square on the sensor captures the average light value of the colours it 'sees' This is interpreted as a colour and becomes a pixel of solid colour.



CONVEYING MEANING

Different aspects of a graphic can convey a different meaning. You have to think of the audience and the purpose of the document you are creating, before you settle on how you are going to use each component. Techniques for doing this include use of: →

RESOLUTION (DPI-DOTS PER INCH)

Not the size of the image...

But the number of pixels in the image

- Monitors display images at 72dpi
- Printers print images at over 300dpi
- Glossy magazine covers can print at 1200dpi

COMMON BITMAP EDITING TECHNIQUES





Layer





• Font Style

10dpi

- Font SIZE
- Number of different FONTS
- Image Objects 🐠 🧆 <















Border











Year 8 History, Term 1:

Religious Rollercoaster – How did religion change during the Tudor period?



German Monk Martin Luther began the reformation by criticising the Catholic church as corrupt. His followers formed a branch of Christianity, Protestantism. This led to conflict in Europe between the two branches of Christianity, who both believed their way was correct. Catholics were loyal to the pope, conducted services in Latin and worshipped saints. Protestants translated the bible and believed removed 'corrupt' practices.

	believed removed 'corrupt' practices.	
	Key Words	
Catholic	A type of Christian led by the pope. Services were in Latin. Churches had lots of decorations and gold.	
Protestant	New branch of Christianity developed in the reformation, protesting corruption of the Catholic Church	
Reformation	16 th century movement to improve the church and replace corrupt Catholic practices with the new protestant church	
Corruption	Dishonest or fraudulent conduct from those in power	
Indulgence	Payment that could be made to supposedly remove sins to get straight into heaven.	
Pope	Leader of the Catholic church, lived in Rome.	
Martin Luther	German monk who led the reformation by listing 95 complaints about the church	
Act of Supremacy	1534 Act which made the Monarch (Henry VIII) the supreme head of the Church	
Annulment	Declaring a marriage to be invalid, avoiding the need for divorce	
Illegitimate	A Child born out of marriage who therefore cannot inherit from their parents	
Church of England	Protestant religious in England with the monarch as the head of the church	
Monastery	Religious place where monks and nuns live, worship and serve the community	
Dissolution	Formally ending, removing or destroying something	
Heresy	Crimes against the country's state religion	
Treason	Crimes against the monarch or government	
Heir	Next person in line who will inherit titles or property	
Puritan	An extreme form of Protestantism who wanted strict church reforms.	



Henry VIII, 1509-1547

In 1534 Henry VIII created the Church of England, turning England protestant and making himself head of the church. Henry was motivated to do for: power, money and a divorce.

In 1536 Henry introduced the Dissolution of the Monasteries Act.

Many people protested this change in the 1536 Pilgrimage of Grace.

However, Henry himself remained a catholic and therefore did not reform or enforce changes to everyday worship.



Edward VI, 1547-1553

Edward VI became king at age 9. He was supported by two 'protectors' – Seymour and Dudley. These men were 'Puritans' meaning they had extreme protestant ideas. They heavily influenced the young king to introduce a serious of protestant reforms, such as the new English Prayer book, imprisoning Catholic priests and removing all statues, painting and relics. Edward tried to change his heir to a protestant, Lady Jane Grey.



Mary I, 1553-1558

Mary I was Catholic and married to the Catholic king of Spain. The English people supported her as Queen over Lady Jane Grey. Mary tried to restore the Catholic Church in England. She ordered 284 Protestants to be burnt at the stake as 'heretics' for protesting against her changes to the church. She has been given the nickname 'bloody Mary' for her executions.



Elizabeth I, 1558-1603

Elizabeth was a protestant and returned to the Church of England with her Act of Supremacy in 1559. She tried to create a 'middle way' with her religious settlement which appealed to most people. She punished both extreme Catholics and extreme protestants. She allowed Catholic worship in private as long as they didn't openly rebel. The Elizabethan religious settlement formed the basis of the Church of England today.

Year 8 History, Term 2:

How Far was Elizabeth I's Reign a 'Golden Age'?



Elizabeth I's Reign (1558-1603) is often referred to as a 'Golden Age' in England. After years of religious turmoil in England Elizabeth's long reign brought a period of political and religious stability. Her defeat of the Spanish Armada showed England as a strong independent nation. Her reign witnessed the rise of arts and literature (Shakespeare) and exploration an the beginning of the British Empire. However, Elizabeth still faced some problems such as economic hardship, pressure to marry and religious disagreements.

	Key Words
Middle Way	Elizabeth's Religious settlement that tried to find a balance between Protestantism and Catholicism
Excommunicate	To be removed and excluded from the Catholic Church
Golden Age	A period of peace and prosperity with success in areas like science, politics, art, culture, economics.
Renaissance	A period that sees renewed interest in ideas of Ancient Greece and Rome – 'Rebirth'
Inflation	Prices of goods increase and the value of money decreases,
Puritan	A Protestant with extreme beliefs on how to worship and a strict moral code.
Spanish Armada	Large fleet of ships sent to invade England by Philip II of Spain
Fire ships	A fleet of 130 Spanish galleons (ships) that sailed to invade England in 1588 led by the Duke of Medina Sidonia
Culture	Literature, Music, Architecture also called 'The Arts'
Economy	The process or system by which goods and services are produced, sold, and bought in a country
Political Stability	A period that sees stable politics in a country, free of disruption, conflict, changes to government
Privateer	An armed ship owned and crewed by private individuals given a permit to carry out military action against enemy nations
Gloriana	Nickname given to Elizabeth I, suggesting she was immortal

Mary Queen of Scots	Previous Queen of Scotland but was deposed, she came to England but was executed for plotting to kill her cousin Elizabeth I
Sir Walter Raleigh	A famous English explorer who set up the first English colony in North America at Roanoke and is rumored to have introduced the potato to England. Raleigh
William Shakespeare	England's most famous author, who staged his first play in 1590 and wrote over 38 plays including Romeo and Juliet.
Francis Drake	A seaman originally famous for being the first to circumnavigate the globe, he also was a privateer and enemy of the Spanish. Drake led the navy to defeat of the Spanish Armada in 1588
Pope Pious V	Catholic pope who excommunicated Elizabeth in 1570 for continuing the break with Rome and keeping England Protestant.
Phillip II of Spain	King of Spain, led the powerful Spanish Empire and a devoted Catholic. Wanted to invade England in revenge for the execution of Mary Queen of Scots and as England was a rival empire
Duke of Medina Sidonia	Spanish noble man who was given command of the Spanish Armada by Phillip II, despite having no naval experience.

1588	Elizabeth is crowned Queen of England, after the death of her sister Mary I
1539	Elizabeth introduces her Religious Settlement to end conflict between the Protestants and Catholics. England stays Protestant but Catholic traditions were allowed. This still angers Catholics and the Pope
1568	Mary Queen of Scots flees to England from Scotland
1570	Pope Pious V issues a Papal Bull excommunicating (throwing out) Elizabeth from the Catholic Church as she continues to keep England Protestant.
1577 - 1580	Francis Drake completes the first circumnavigation (sailing around) of the world by ship, he is then knighted by Elizabeth on his ship the Golden Hind
1585	The war between England Spain begins
1585	The first English colony in North America is set up by Sir Walter Raleigh, called Roanoke. It eventually fails with all people disappearing
1586	The Babington Plot. A plot by Anthony Babington, Catholics and Mary I to kill and replace Elizabeth is uncovered
1587	Mary Queen of Scots is executed after her role in the Babington Plot
1587	Sir Francis Drake launches an attack on the Spanish port of Cadiz
1588	Phillip II of Spain launches the Spanish Armada who are defeated by the English at the Battle of Gravelines
1599	Shakespeare builds the famous Globe theatre in London
1603	Elizabeth I dies



Overview of Armada's defeat:

Philip's plan was to:

SCAN ME

- 1.Gather a huge **Armada** of 130 ships in Spain, under the Duke of Medina Sidonia.
- 2.Sail to the Netherlands to pick up the Spanish army, led by the Duke of Parma.
- 3.Invade England.

However:

- •In 1587, a year earlier, Drake attacked Cadiz and destroyed over 100 of Philip's fleet in the harbour.
- •Philip assembled another fleet in 1588, but it was hastily provisioned and badly equipped.



The failure

The Armada set sail in May 1588:

- It was spotted almost immediately, and England was warned.
- From 20 to 27 July, the English fleet attacked the Armada as it sailed up the English Channel. The Armada sailed in a crescent formation, however, making it difficult to attack, and the English fleet did little damage.
- On 27 July, the Armada anchored in open seas off Calais. The English sent in fireships, so the Armada cut their anchors to escape.
- On 28 July, the English attacked the Spanish fleet at the Battle of Gravelines. The English ships were easier to manoeuvre in the heavy waters of the North Sea. This decisive battle prevented the Spanish from landing in England.
- Philip's 'invincible' Spanish fleet fled north, chased by the English fleet. It had to return home by sailing round the north of Scotland and the west coast of Ireland, where many ships were sunk by storms.
- On 8 August, after the main danger was over, Elizabeth went to speak to the English troops at Tilbury. She said, "I have but the body of a weak and feeble woman, but I have the heart and stomach of a king... and think foul scorn that any Prince in Europe should dare to invade the borders of my realm."

Tourism

Key idea	Key knowledge	international tourist arrivals (millions)	Key terms
What is a tourist?	A tourist is a person who travels to a place that is not their normal place from 1 day up to a year. Most tourists are people on holiday but those that travel for business, leisure or other reasons are still tourists.	700- 600- 500- 400-	Honeypot Site
What is the tourist industry?	The tourist industry means all the activities that tourists take part in and the services that support them. Tourists, hotels, airports, taxi drivers and ice cream sellers are all part of the tourism industry.	300-200-100-0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Attractions Facilities for
How much has tourism grown?	Before 1950, tourist levels were relatively low. However, in the 1950s, it suddenly started to increase. If you look at the graph to the left which shows the number of international tourists every year, you can see that there are less than 100	Source: World Tourism Organisation (WTO)	Tourism Overcrowding
	million tourists in 1950, but by 2005, this number was almost at 700 million. As of 2015, more than 1 billion tourists travel every single year.	LAS VEGAS	Peak Times Infrastructure
Where do people visit?	Europe is by far the most popular place to visit (with 50% of all visits) compared to Africa and the Middle East (both with only 4% of visitors). Europe receives the most tourists because it is very easy for people to travel between European countries. Also many European countries are		Mass Tourism
	considered HICs (high income countries) and are considered to be safer to travel. In contrast, many countries within some other regions have a smaller tourism industry, so it is		Biodiversity Ecotourism
	harder for tourists to visit.		Ecotourisiii
Tourism Environments	People may decide to visit a place based on 2 main features: Human (man-made) characteristics- people have built particular services to encourage visitors such as water parks.		Multiplier Effect
	Physical (natural) characteristics- naturally occurring such as beaches.		Indigenous Populations

Definitions rms ot Site A popular place that attracts lots of tourists, often leading to overcrowding (like a honey pot attracts bees). The characteristics of a honeypot site are: attractions, facilities and overcrowding at peak times. Places or things that make tourists want to ions visit (like a theme park, museum, or scenery. es for Buildings and services made especially for tourists, like hotels, cafes, and gift shops. owding When too many people are in one place at the same time, making it feel packed and uncomfortable. The busiest times of year for tourists (like mes summer holidays). The basic things a place needs to work well, ucture like roads, airports, water, and electricity.

facilities.

arrived.

living in one place.

Large numbers of people visiting the same

The variety of different plants and animals

How money from tourism keeps being spent

in the local area, creating jobs and income.

People who have lived in an area for a very

long time, often before modern tourists

place, often with big hotels and lots of

Tourism that focuses on protecting the environment and supporting local people.

Tourism

Seychelles is a tropical island located to the east of Africa. It is north east of Madagascar and lies in the Indian Ocean. It is home to some of the most beautiful beaches, tropical rainforests and rare animals. Until recently, the people lived a subsistence lifestyle growing food for their families. However, as tourists started to arrive, their whole lifestyle and environment began to change. Holiday companies arrange charter flights to transport tourists. Many holidays include everything you will need from flights to food. These are called all-inclusive package holidays. These have huge impacts on the lifestyle of people in the Seychelles.

	, , , , ,
Positives of mass tourism	Negatives of mass tourism
Locals are able to use the profits of tourism to build better infrastructure such as a hospital.	Those people who have become much richer because of the tourism are now building the first super-hotel which can be seen for miles and required the deforestation of 3 hectares
The islanders now have enough money to buy some of their food rather than growing it themselves	With the recession, less people from Europe are travelling abroad
The scope for economic diversification and growth is limited on small islands: tourism could help reduce the countries debts.	Pleasure boats mean not all the tourists are on the islands at once but they pollute the water and their anchors damage coral.
As the locals now receive more money, they can spend it on improving their own quality of life.	Tourism has become the main source of income in the region with many traditional skills and ways of life disappearing
Positives of ecotourism	Negatives of ecotourism
Environmental Conservation Supports protection of rainforests, volcanoes, and wildlife areas. Teaches visitors and locals about sustainability and conservation.	Tourism can still cause erosion, pollution, and disturb wildlife.
§ Economic Benefits Creates local jobs in guiding, hospitality, and crafts.	① Overdependence on Tourism Local economies may become vulnerable to tourism downturns. Profits may go to outside companies, not local communities.
Cultural Preservation Promotes pride in local traditions and sustainable living.	Geography of anywhere Traditions may be altered or staged to attract tourists.

Why has tourism grown?

Tourism has grown so rapidly for variety of different reasons:

- 1. People have more time.
 - In many countries, people have paid annual holiday (normally around 4 weeks) where they are allowed to go on holiday and are paid for it.
 - b. As people are now living longer, we they have more time when they retire to explore.
- 2. People have more money.
 - a. Many people in the UK have well paid jobs and therefore have more money. They now have a higher disposable income (money left over) to spend on going on holiday.
- Better Transport.
 - Nowadays, with improved air travel and road networks it doesn't take too long to travel to different countries with desired environments.
 - b. Many people have cars and can just travel whenever they want with very little planning
- Better technology.
 - People can now use the internet to search for and book holidays which saves time.

 Whereas, in the past people would have to go to a travel agents and they would have to organise it all for them.
- Better tourism products.
 - People want to visit places where all their needs can be met. The introduction of allinclusive holidays allowed for dream holidays to become reality.

Crin
Key ide
Where crime o
Who is affected
Rural au Urban pattern
Geogra and the of GIS
Ways to

me e does occur? S ed? and ns aphy ne use to

crime?

and

Education

community

support

living

an area

Improving

standards in

Key knowledge

Similar crimes often happen in very similar areas.

where no one is around to see.

situation and demographics) that actually influences crime.

As well as the demographics of an area, crime can also be influenced by certain locations.

When people think of criminals and victims, they tend to think of certain stereotypes. Crime

isn't based on looks, instead there are many different geographical reasons (such as location,

In many urban areas, you might be likely to find more fraud and assault. Where as, in a rural

Systems and is a way of showing virtually any data- as a form of map with layers. This means

we can look at overall patterns and connections between data—e.g. Police analysing crime.

Protection methods such as building massive walls and installing alarm systems help reduce

methods can have more positive results in reducing crime/ maintain a positive community.

increasing community support by encouraging neighbourhoods to look out for one another

through neighbourhood watch schemes. Encouraging the interactions between community

Two of the biggest causes of crime are poverty (linked to unemployment) and boredom (lack

If people do not have jobs, they cannot afford to live a decent standard of life and therefore

If an area does not have access to many facilities, people will get bored. If they are bored,

crimes such as shop lifting and vandalism will increase. By improving access to green spaces (parks, forests, open areas) and facilities, people's quality of life can be improved meaning

liaison officers and the public means crime can be reported faster and people feel safer.

of activities). By reducing these issues we can prevent crimes from ever taking place.

crimes such as robbery, mugging and drug abuse increase. One strategy might involve

reducing unemployment so that people can afford essentials.

they might not even think of committing crimes in the first place.

crime, but they can cost a lot of money and can often make the area look worse. Other

Education of the public will them understand what to do if there is a crime as well as

area, you might be more likely to find environmental crimes happening such as fly tipping

We use GIS to plot and analyse crime trends. GIS stands for Geographical Information

Crime	An action or omission which constitutes an offence and is punishable by law.		
Criminal	A person who has committed a crime.		
Victim	A person harmed, injured, or killed as a result of a crime, accident, or other event or action.		
Rural	Characteristics of the countryside rather than the town.		
Urban	Characteristics of a town or city.		
Demographics	Statistical data relating to the population and particular groups within it.		
Vulnerable	Exposed to the possibility of being attacked or harmed, either physically or emotionally.		
GIS	Geographic Information System.		
Prevention	The action of stopping something from happening or arising.		
Protection	The action of protecting, or the state of being protected.		
Unemployment	The state of being without a job.		
Green spaces	An area of grass, trees, or other vegetation set apart for recreational or aesthetic purposes in an urban area.		
Quality of life	The standard of health, comfort, and happiness experienced by an individual or group.		
Standard of living	The degree of wealth and material comfort available to a person or community.		
Natural	The act of incidentally using your eye balls (not CCTV) to		

deter many crimes as it is more unpredictable.

Key terms

Surveillance

Definitions

Our World

CREATION: Beliefs

(Humanist)

Literalist Christian	 God created the world in 6 days and rested on the 7th. World is 6,000 years old. 	 Christian To protect God's creation of earth – the environment and animals in it. Campaign and take action to help environment and animals 	Climate Change	The changes in climate and natural disasters due to Global Warming; due as temperature rising. This causes - sea level rising, flooding, drought, tropical storms.	
Literalist stag Christian • Bib 'you sho • Goo	 God created our world but over 6 stages, longer periods of time. Bible original word for day was 'yom', meaning period of time, 		 Against animal testing that is cruel and inhumane; causes suffering of animals However, may justify animals testing to benefit of humans for medical research / drugs, because God 	COP Conferences	Global meetings with leaders of countries to discuss and set targets to help our environment.
	 showing Gods creation took longer. God could have created the Big Bang Follow Theory of Intelligent Design. 	Muslim	gave man dominion . • To protect God's creation of earth – the environment	Dominion	Religious belief that God gave mankind dominance over land and animals.
Humanist G B a h d Ti d	 Scientific explanation, NO belief in God Big Bang: explosion creating gases, atoms, elements like hydrogen / helium. 14 billion years ago. Life developed only 3 billion years ago. Trust in evidence from science. They do not follow holy books to explain creation, but use reason and research. 	IVIUSIIII	 and animals in it. To work as a community to protect the environment; act selflessly for future generations 	Global Warming	The earths rising temperatures due to a build up of greenhouse gases, causes by pollution of CO2 from burning fossil fuels.
		Humanist	Humanists believe we should care for animals because they can feel pain and suffer, just like	Literalist	A religious person that believes religious scripture/Holy Books 'word for word'.
		 humans. Humanists don't believe animals were made for humans to use (like Christians) they believe all life has value. Humanists believe we have a responsibility to look after nature, as we are the only species that can make big changes to the world. 	Non Literalist	Religious person that take the ideas of scripture to understand God /live their lives.	
			Stewardship	Religious belief God gave humans the responsibility to care for our planet	
	© AIG 2004		Theory of Evolution	Darwin's theory that animals have evolved and adapted. Includes Natural Selection -	
DAYS OF CREATION Key Quotes IN GENESIS ONE					how nature is accountable for some species adapting or dying out.
EARTH, SPACE, TIME & LIGHT	• "In the bearth • God create • "The world • The world • Qur'an				Science and religious idea: God created the initial species over billions of years with the ability (intelligence) to evolve and adapt themselves.
	• "We need	to use our science and knowledge to protect the future" Richard Dawkins			

Key terms

Definition

LIVING WORLD: Beliefs

Marriage

Christian

MARRIAGE: Beliefs and Practices

• Marriage is a **sacrament** and a **bond** between the couple and God

Christian	 Marriage and having a family is a gift from God; Procreation is important. 		Addition	when you are married
	 Believe in Chastity. <u>Weddings</u>: Exchange rings, vows, homily read. <u>Adultery</u> is wrong – sinful against the 10 Commandments. Breaks love and trust. <u>Divorce</u>: Catholics not allow; can get an Annulment. 		Annulment	This is given in the Catholic Church, which cancels the marriage, as divorce is not allowed.
Muslim	 Arranged marriage (NOT forced). Marriage to create family unit and provide support for each other. Procreation is important in marriage and Muslims believe in Chastity. 		Arranged Marriage	A marriage arranged by parents WITH the consent of the children/husband and wife to be
	 Wedding: Nikkah contract is signed. Dowry is given to the bride. Part of wedding – the signing of the Nikkah, usually happens at home but some 		Chastity	Not having sex before marriage
	of the Wedding can happen at the mosque too. Wedding can last up to 5 days. • Adultery is sinful according to the Qur'an and Shari'ah Law.		Dowry	Gift given by a Muslim husband to his wife in celebration of their marriage
	 <u>Divorce</u> is acceptable as a last resort. 3 months of counselling given to try to resolve the problems first. 		Forced Marriage	A marriage forced upon children by their parents. This is NOT a religious practice
Judaism	Chupa: Canopy stood under by the couple at the wedding representing new		0-	
	 home. Ketubah: Marriage contract signed Bedecken: Unveiling of the bride. 		Homily	The Speech given by the preacher at the Christians wedding in the church.
	 Hora: Dance at the wedding. Rabbi performs the wedding. 		Honour abuse	Crime or incident committed to protect or defend the 'honour' of a family or community.
Key Quotes			Nikkah	Marriage contract for Muslims
"Man shall leave his mother and father and will join with his wife and become one flesh" Bible				The purpose of having sex to produce children
	ul and multiply" Bible erefore God has joined together, let not man separate." Bible	Div orce	Sacrament	Special events in Christians lives, where Christians receive the Grace (love) of God
	d do not divorce" Hadith		Shari'ah Law	Law based on the Qur'an. Used in some Islamic countries such as Iran / Saudi Arabia
• "Thou sha	Il not commit adultery" 10 Commandments		-	

Key terms

Adultery

Definition

Having sexual relations with another person

Passé composé

To make a past tense in **English**, you can start by saying 'I have, you have, he has, we have' etc and then add a past tense word (called a past participle)

Eg – I have cooked, we have eaten, she has played, they have listened.

Notice in English, that last word often, but not always, ends in -ed.

In French, it is very similar – but a little more tricky!

There are 3 bits – the first 2 bits are...

Most of the time you are going to start with the verb 'to have' ('avoir'). These are the first 2 bits you need.

j'ai = I have
tu as = you have
il, elle, on a = he / she / one has

nous avons = we have
vous avez = you (plural) have
ils, elles ont = they have

Key grammar

The Perfect Tense

The third bit

This is the **past participle**. It will very often end in **é**, but not always! **écouté** (listened), **joué** (played), **parlé** (spoken), **dansé** (danced), **acheté** (bought), **regardé** (watched), **visité** (visited), **mangé** (eaten)

The third bit

Sometimes, past participles end in different letters:

bu (drunk), lu (read), connu (known),
attendu (waited), fini (finished), choisi
(chosen), fait (done





Saying that you went somewhere / went back / returned / arrived / left ...

For a **small number** of verbs – usually expressing movement - , we are going to use the verb 'être' (=to be) to help make the past tense.

je suis= I am
tu as = you are
il, elle, on est = he / she / one is

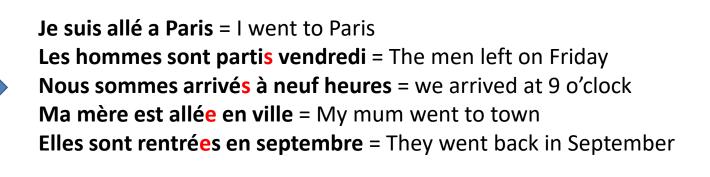
nous sommes = we are
vous êtes = you (plural) are
ils, elles sont = they are

Key grammar

The Perfect Tense

The third bit

This is the **past participle**. It will very often end in **é**, but not always! **allé** (went), **arrivé** (arrived), **rentré** (returned), **parti** (left) ...



Why the extra 'e'...? Why the extra 's'? Think about who 'did' the verb...

Talking about future plans

Just like in English, to say what you are going to do, simply use the verb 'aller' with an infinitive verb.

Reminder – infinitive verbs end in either –er, -ir or –re.

Examples:

Demain, <u>je vais visiter</u> la plage (Tomorrow, I am going to visit the beach) Mardi, <u>je vais aller</u> en Allemagne et nous allons faire du camping

(On Tuesday, I am going to go to Germany and we are going to go camping)

La semaine prochaine, <u>je vais jouer</u> au rugby!

(Next week I am going to play rugby!)

Bienvenue chez Vacances West Jet. S'envoler. S'héberger. **S'amuser** faire mes devoirs = do my homework

aller au cinéma = go to the cinema

regarder un film = watch a film

manger au restaurant = eat in a restaurant

aller au bowling = go to the bowling alley



Other ways to express future plans... je voudrais = I would like je veux = I want j'espère = I hope



Asking questions

1. Inversion (Subject-Verb Inversion):

- •This is a more formal way to ask questions, especially in written French.
- •You put the verb before the subject, often with a hyphen in between.
- •Examples:
 - Où habites-tu? Where do you live?
 - •Vas-tu à Paris? Are you going to Paris?
 - •Connaissez-vous ce restaurant? Do you know this restaurant

2. "Est-ce que" (Is it that...?)

- "Est-ce que" is a neutral way to ask questions, suitable for both formal and informal contexts.
- •You place "est-ce que" at the beginning of the sentence, and then follow with the normal sentence structure.
- •Examples:
 - •Est-ce que tu habites à Paris? Do you live in Paris?
 - •Est-ce que vous connaissez ce restaurant? Do you know this restaurant?
 - •Est-ce que tu vas à Paris? Are you going to Paris?

3. Question Words:

- •Question words (e.g., qui, que, où, quand, comment, pourquoi, combien, quel) are used to ask for specific information.
- •You place the question word at the beginning of the sentence, and then use either inversion or "est-ce que".
- •Examples:
 - •Où habites-tu? (informal) / Où est-ce que tu habites? Where do you live?
 - •Qui est-ce qui parle anglais? Who speaks English?
 - •Pourquoi vas-tu à Paris? (formal) / Pourquoi est-ce que tu vas à Paris? Why are you going to Paris?

- •Qui? Who?
- •Que? What?
- •Où? Where?
- •Quand? When?
- •Comment? How?
- •Pourquoi? Why?
- •Combien? How much? How many?
- •Quel/Quelle/Quels/Quelles? Which? What?



Preterite (the past tense)

To make a past tense in **English**, we usually put **–ed** on the end of a verb. Look:

I play / I played; I watch / I watched; I work / I worked

Sometimes, we change the spelling a bit more! :

l eat / l ate; l go / l went; l have / l had



I spoke? = hablé
He ate? = comió
We lived? = vivimos

Subject	-AR ending	Example: hablar (to speak)	-ER ending	Example: comer (to eat)	-IR ending	Example: vivir (to live)
yo	-é	hablé	-í	comí	-í	viví
tú	-aste	hablaste	-iste	comiste	-iste	viviste
él / ella / usted	-ó	habló	-ió	comió	-ió	vivió
nosotros	-amos	hablamos	-imos	comimos	-imos	vivimos
vosotros	-asteis	hablasteis	-isteis	comisteis	-isteis	vivisteis
ellos / ellas / ustedes	-aron	hablaron	-ieron	comieron	-ieron	vivieron

Some important IRREGULAR verbs

Verb	yo	tú	él / ella / usted	nosotros	vosotros	ellos / ellas / ustedes
<pre>ser / ir (to be / to go)</pre>	fui	fuiste	fue	fuimos	fuisteis	fueron
tener (to have)	tuve	tuviste	tuvo	tuvimos	tuvisteis	tuvieron
estar (to be)	estuve	estuviste	estuvo	estuvimos	estuvisteis	estuvieron
hacer (to do/make)	hice	hiciste	hizo	hicimos	hicisteis	hicieron
ver (to see)	vi	viste	vio	vimos	visteis	vieron
dar (to give)	di	diste	dio	dimos	disteis	dieron

I was? = fui
They had? = tuvieron
She saw? = vio

Talking about future plans

Just like in English, to say what you are going to do, simply use the verb 'ir' with an infinitive verb.

Reminder – infinitive verbs end in either –ar, -ir or –er.

Examples:

Mañana <u>voy a visitar</u> la playa *(Tomorrow, I am going to visit the beach)*Martes <u>voy a ir</u> a Alemania y <u>vamos a</u>
acampar

(On Tuesday, I am going to go to Germany and we are going to go camping)
La semana proxima voy a jugar al rugby
(Next week I am going to play rugby!)

Do you know the verb 'to go'? **Learn it!**

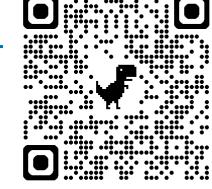
Hacer mis deberes = do my homework

Ir al cine= go to the cinema

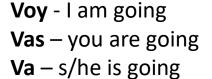
Ver una película = watch a film

Comer en un restaurante = eat in a restaurant

Ir a la bolera = go to the bowling alley



Other ways to express future plans... me gustaria = I would like quiero = I want



espero = I hope

Vamos - you are going
Vais - you (plural) are going
Van - they are going



Asking questions

Use Question Words

Spanish	English
¿Qué?	What?
¿Quién?	Who?
¿Dónde?	Where?
¿Cuándo?	When?
¿Por qué?	Why?
¿Cómo?	How?
¿Cuánto/a/os/as?	How much / How many?





⚠ Don't forget the upside-down question mark at the beginning: ¿

2. Use a Rising Tone (for yes/no questions)

In Spanish, you can often ask a yes/no question by just changing your tone or flipping word order:

Statement	Question
Tú tienes un perro.	¿Tienes un perro?
Ella va al cine.	¿Va ella al cine?
Nosotros comemos pizza.	¿Comemos pizza?







Spanish	English	
¿Cómo te llamas?	What's your name?	
¿Dónde vives?	Where do you live?	
¿Qué te gusta hacer?	What do you like to do?	
¿Tienes hermanos?	Do you have siblings?	
¿Qué día es hoy?	What day is it today?	
¿Cuántos años tienes?	How old are you?	



PERSPECTIVE AND ARCHITECTURE

KEY FORMAL ELEMENTS LINKED TO ARCHITECTURE



A LINE is the path left by a moving point, eg. A pencil or a brush dipped in paint. A LINE can take many forms, eg. Horizontal, diagonal or curved. A LINE can be used to show contours, movements, feelings and expressions.

A **SHAPE** is an area enclosed by a **LINE**. It could be just an outline or it could be shaded in.

FORM is a three dimensional shape such as a sphere, cube or a cone.

Sculpture and 3D design are about creating **FORMS**



MARK MAKING

AND ARCHITCETURE

PERSPECTIVE
TWO POINT
PERSPECTIVE
ONE POINT
PERSPECTIVE
PARALLEL
HORIZONTAL
VANISHING POINT
DISTANCE
SPACE
DIRECTION
MOVEMENT
LINEAR
OVERLA[[ING

LAYERING

COLOUR BRIGHT BOLD VIBRANT PRIMARY SECONDARY TERTIARY RADIANT VIVID DULL CONTRASTING COMPLIMENTARY HARMONIOUS MONOCHROME

NATUARI

SATURATED

PASTEL

COOL

WARM

LINE FLUENT CONTINUOUS CONTROLLED LOOSE POWERFUL STRONG ANGULAR FLOWING LIGHT DELICATE SIMPLE THICK

THIN

BROKEN

OVERLAPPING

LAYERED

MARK MAKING

SHAPE/FORM/SPACE CLOSED OPEN DISTORTED FLAT ORGANIC POSITIVE NEGATIVE FOREGROUND BACKGROUND

COMPOSITION
ELONGATED
LARGE
SMALL
2D
3D
TWISTED
JAGGED

PATTERN AND TONE **BRIGHT** TEXTURE REPEATED DARK **FADED** UNIFORM **GEOMETRIC SMOOTH RANDOM** HARSH SYMMETRICAL CONTRASTING **SOFT INTENSE IRREGULAR SOMBRE** UNEVEN **STRONG** ROUGH **POWERFUL BROKEN**

GRID

FLAT

WOVEN

ORGANIC

SMOOTH

ABSTRACTED







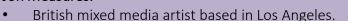


ONE POINT PERSPECTIVE:

A drawing that uses **one point perspective** contains only one **vanishing point** on the **horizon line**. Using this type of **perspective** you could create a drawing of a road, railway, hallways, or building.



Jon Measures:



 Measures is a graphic designer, illustrator and teacher.

- Measure's work often combines lots of view points of cities and urban landscapes.
- He creates mixed media work, using; paint, photography, digital editing, spray paint and collage.
- His work layers images together which in turn is a metaphor for the many layers and elements of city living.
- Measures includes buildings, roads, signs, lights, all manner of objects found in cities within his work.
- A lot of Measure's work focuses on the themes of; belonging, home, community.

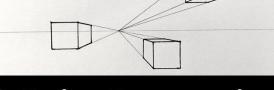
eye level horizon line lines receding to the vanishing point vertical lines

1-Point Perspective

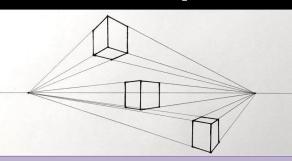
DEPTH

DEVELOPED

SOFT



2-Point Perspective



TWO POINT PERSPECTIVE:

ground line

Two point perspective allows you to view the object or images so that you are looking at one corner with two sets of **parallel lines** moving away from you. Every set of **parallel line** has it's own **vanishing point**, hence **two point perspective**.



Artists you could research:

- Jon Measures
- Ptolemy Dean
- Zaha Hadid
- Denise Scott Brown
- John Piper



Dynamics

The volume of the Music

Rhythm

The order of the notation duration

Pitch

The highness or lowness of a note in sound frequency

Structure and Form

How the composition is built

Instrumentation

The instruments used by the composer

Tempo The Speed of the Music

Harmony All the musical parts that support the Melody

Exploring Repeated Musical Patterns





DR P SMITH is an acronym that we use to remember the essential elements of music at Trafalgar. These are the key ingredients that combine to produce all sound and all music.

Use your smartphone to scan the QR codes to find out more...

Language for Learning/Music Theory



Italian terms relating to Tempo:

Allegro-fast, Vivace-lively, Presto-very fast, Andante-walking pace, Adagioslow, Largo-very slow,



Accelerando (accel.)-to get faster, Ritardando (rit.) and Rallentando (rall.)to get slower



Italian terms and musical symbols relating to Dynamics:

Fortissimo (ff)-very loud, Forte (f)-loud, Mezzo Forte (mf)-medium loud, Mezzo Piano (mp)-medium soft, Piano (p)-soft, Pianissimo (pp)-very soft,

Crescendo (cresc.)-to get louder, Diminuendo (dim.)-to get quiter



Italian terms and musical symbols relating to Articulation:

Legato – smooth; Staccato – short and detached





Hooks and Riffs

A. Key Words

HOOK – A 'musical hook' is usually the 'catchy bit' of the song that you will remember. It is often short and used and repeated in different places throughout the piece. HOOKS can either be a:

MELODIC HOOK – a HOOK based on the instruments and the singers

RHYTHMIC HOOK – a HOOK based on the patterns in the drums and bass parts or a

VERBAL/LYRICAL HOOK – a HOOK based on the rhyming and/or repeated words of the chorus.

RIFF – A repeated musical pattern often used in the introduction and instrumental breaks in a song or piece of music. RIFFS can be rhythmic, melodic or lyrical, short and repeated.

OSTINATO – A repeated musical pattern. The same meaning as the word RIFF but used when describing repeated musical patterns in "classical" and some "World" music.

BASS LINE – The lowest pitched part of the music often played on bass instruments such as the bass guitar or double bass. RIFFS are often used in BASS LINES.

MELODY – The main "tune" of a song or piece of music, played higher in pitch that the BASS LINE and it may also contain RIFFS or HOOKS. In "Classical Music", the melody line is often performed "with" an OSTINATO pattern below.

B. Famous Hooks, Riffs and Ostinatos

Bass Line Riff from "Sweet Dreams" – The Eurythmics

Exploring Repeated Musical Patterns



Riff from "Word Up" - Cameo



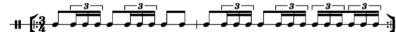
Rhythmic Riff from "We Will Rock You" - Queen



Vocal and Melodic Hook from "We Will Rock You" - Queen



Rhythmic Ostinato from "Bolero" - Ravel



Bass Line Ostinato from "Habanera" from 'Carmen' - Bizet



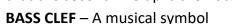
Ostinato from 2nd Movement of Symphony No.101 (The Clock) - Haydn



C. Music Theory

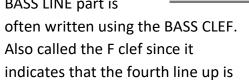
REPEAT SYMBOL – A musical symbol used in staff notation consisting of two vertical dots followed by double bar lines showing the performer should go back to either the start of the piece or to the corresponding sign facing the other way and repeat that section of music.

TREBLE CLEF – A musical symbol showing that notes are to be performed at a higher pitch. Also called the G clef since it indicates that the second line up is the note G.



showing that notes are to be performed at a lower pitch. The BASS LINE part is

the note F.









Offbeat!

Dynamics

The volume of the Music



The order of the notation duration



The highness or lowness of a note in sound frequency



Structure and Form

How the composition is built



Instrumentation

The instruments used by the composer



The Speed of the Music



All the musical parts that support the Melody

















Exploring Reggae and Syncopation

Language for Learning/Music Theory

BAR – A division of music.

BASS LINE – The lowest texture in reggae

CALYPSO – A style of Afro-Caribbean music

CHORD – Group of two or more pitched notes.

OFF BEATS – A term applied to rhythms that emphasise the weak beats of a bar.

REGGAE – National music of Jamaica

RESTS – A space of silence played between notes

SYNCOPATION – A way of changing a rhythm

TEXTURE- Layers of sound combined to make music.

Offbeat

A. How did Reggae develop?

REGGAE is one of the traditional musical styles from JAMAICA. It developed from :



MENTO

A form of Jamaican FOLK MUSIC like CALYPSO popular in the 1950's.

SKA

Fast dance music that emerged in the 1950's fusing American RSB with MENTO rhythms and featuring **ELECTRIC GUITARS, JAZZY HORN SECTIONS and** characteristic OFFBEAT RHYTHMS.

ROCK STEADY

A more vocal style of dance music which used RIFFS, SIMPLE HARMONIES, OFFBEAT RHYTHMS and a strong BASS LINE.

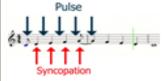
Reggae was first heard in the UK in the 1950's when immigrants began to settle. During the 1960's, people began importing singles from Jamaica to sell in UK shops. Now, Reggae is known as the national music of Jamaica.

D. Offbeat Rhythms & Syncopation

OFFBEAT RHYTHMS - Rhythms that emphasise or stress the WEAK BEATS OF A BAR. In music that is in 4/4 time, the first beat of the bar is the strongest, the third the next strongest and the second and fourth are weaker. Emphasising the second and fourth beats of the bar gives a "missing beat feel" to the rhythm and makes the music sound OFFBEAT, often emphasised by the BASS DRUM or a RIM SHOT (hitting the edge of a SNARE DRUM) in much Reggae music.

Best		e		9		e		٠,
(orrung coythee coythee	J	ţ	ı	ţ	J	ŧ	ı	\$
	0	FFBE	AΤ	RHY	THM	GRI	D	
Pulse! Best	1	5	3	4	1	5	3	4
"Offices" rhythma (weath	ł	J	3	J	3	J	3	ı

SYNCOPATION - A way of changing a rhythm by making



some notes a bit early, often so they cross over the main beat of the music giving the music a further OFFBEAT

feel – another common feature of Reggae music.

E. Musical Features of Reggae

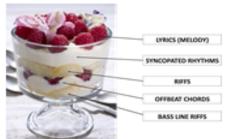
OFFBEAT RHYTHMS AND CHORDS (see D) SYNCOPATED RHYTHMS AND MELODIES (see D) SUNG LYRICS (see C)

LEAD SINGER often with BACKING SINGERS sometimes singing in CALL AND RESPONSE (see F3) accompanied by a Reggae band which often features: BRASS INSTRUMENTS and SAXOPHONES, ELECTRIC GUITARS, BASS GUITAR, KEYBOARDS, DRUMS AND PERCUSSION INSTRUMENTS. VOCAL AND INSTRUMENTAL IMPROVISATIONS (see F2) MELODIC RIFFS (see F5)

SLOW, RELAXED ('chilled!') TEMPO 4/4 METRE/TIME SIGNATURE

Most Reggae songs are structured in VERSE AND CHORUS/POPULAR SONG FORM.

SIMPLE HARMONIES (see F4)



THICK TEXTURAL LAYERS (see F9) "The Reggae Trifle" is an example of how many Reggae songs are 'layered'.

B. Where is Jamaica?



F. Reggae Key Words

- MELODY The main 'tune' of a piece of music, often sung by the LEAD SINGER.
- 2. IMPROVISATION Previously unprepared performance.
- CALL AND RESPONSE Similar to a "Question. and Answer" often the call sung by the lead singer and answered by the backing singers or instruments (the response) - musical dialogue.
- 4. SIMPLE HARMONIES using a limited number of CHORDS, mainly PRIMARY TRIADS such as the TONIC, DOMINANT and SUBDOMINANT chords.



- RIFF A repeated musical pattern. Often the BASS GUITAR plays repeated MELODIC BASS RIFFS in Reggae songs.
- 6. BASS/BASS LINE The lowest pitched part of a piece of music often played by the BASS GUITAR in Reggae which plays an important role.
- 7. CHORD 2 or more notes played together in HARMONY.
- RHYTHM A series of long and short sounds.
- 9. TEXTURE Layers of sound combined to make music.

C. What are Reggae Songs About?

Reggae is closely associated with RASTAFARIANISM (a religious movement worshipping Haile Selassie as the Messiah and that black people are the chosen people and will eventually return to their African homeland). The LYRICS of Reggae songs are strongly influenced by Rastafarianism and are often political including themes such as LOVE, BROTHERHOOD, PEACE, POVERTY, ANTI-RACISM, OPTIMISM and FREEDOM.

G. Who was Bob Marley?

BOB MARLEY was a famous reggae singer, SONGWRITER, and musician who first became famous in



his band The Wailers, and later as a SOLO ARTIST. He was born Nesta Robert Marley on February 6th, 1945 in Nine Mile, Saint Ann, Jamaica. Although he grew up in poverty, he surrounded himself with music and met some of the future members of The Wailers. Bob Marley became involved in the Rastafarian movement and this influenced his music style greatly. Bob Marley and The Wailers worked with several famous musicians before



becoming famous on their own. His career flourished and he became a cultural icon. He was the first international superstar to have been born in poverty in a Third-World country.



Offbeat!

xploring Reggae and Syncopation

There are 3 study areas in these first two terms- there are many learning opportunities.

- 1) The Walking on Ice Exercise where we learn the 2 Truths and the idea of Internal & External Character.
- 2) An Adventure Underground we learn how to analyse a play and interpret the characters. We rehearse key scenes in the Traverse.
 - 3) Storytelling Part 1- We practise writing and acting a monologue in the Storytelling Genre and all the techniques that it involves.

1: The Walking on Ice Exercise

This task builds on your learning of mime technique <u>Task</u> in Y 7. You will work in pairs and take it in turns to act out a scene and to give meaningful feedback as an **informed** audience member.

The Walking on Ice exercise can also teach me... a very important thing and that is that acting is essentially about ...

Belief & Communication -

Actors need to <u>believe</u> in the situation that their character is in – we call this, the Character's **Given Circumstances**. Working out your character's **Given Circumstances** is an important **rehearsal technique**. In this exercise the **Given Circumstances** are that the character is on their way home, it is dusk, the only way home is across a frozen lake, there is no way round, in some places the ice will not bear your weight, however you make it across, safely. You need to be able to believe in this situation and make a picture of your surroundings in your mind's eye

Belief & Communication

Belief

Visualising your setting and situation- the frozen lake, the sun going down. Feeling the cold air on your arms and face. Hearing the ice creak as you place your weight on it

Communication

The way that you **show** things to the audience through your body, actions and voice- how you **walk slowly** and **carefully** to show that the ice is fragile- how you **tense** and **focus** your facial expressions to show the danger – how you hold yourself close to show the cold or how you hold your arms out to balance

The Walking on Ice exercise can teach me.. That for artists, including theatre artists there are two truthsfirstly the truth of our Everyday Reality where a chair is a chair and a person is a person and a floor is a floor. Secondly, for artists, there is another truth to consider and that is the Truth of our Imagination where the floor can be a frozen lake and the actor can be any character they choose to be.

Internal and **External** acting technique

Your believing and communicating are part of your internal and external acting skills. Have you noticed how lots of our ideas in drama are in two parts – the way we learn about mime, for example. Be sure to look at the charts on the walls in the drama studio

The Two Truths

The Truth of Everyday Reality

The Truth of the *Imagination*

The Completing the Communication Exercise

Students or groups work in pairs taking turns to perform and to watch and give feedback. The ones receiving feedback always repeats back to the observer what they understand SO THAT the observer can check that they have properly understood and the communication is complete

An Adventure Underground .. An Adventure Underground .. An Adventure Underground .. An Adventure Underground

Analysing

Analysing a play means breaking it down into the things that it is made from. A play is made from its ingredients [character, plot genre etc.] so, let's analyse how the playwright has applied the ingredients of a play in this play- *An Adventure underground*

Interpreting

<u>Interpreting</u> is the ways that we **work out** what a character is like. We **interpret** is like by <u>what say</u> and the way that they say it (the dialogue), and on <u>what they do</u> and <u>the way that they do it</u> (stage directions).

Themes - 'what the play is about'

If you think, you will remember that, THEME is one of the Ingredients of a Play. You may recall that the theme of a play is <u>what the play is about</u> its meaning, message, the issues that it explores. Well, **An Adventure Underground**, explores a great many issues that concern us today.

Goodworm speaks in detail about the ways in which the **Topplings** (that's us, people, homo sapiens) are ruining the Earth. He laments the way that we are taking so much from the planet and giving almost nothing useful back in return.

The play also explores the idea of <u>change</u>. What we might want to change in ourselves and indeed whether it is possible to change. The five children all discover ways to add to their character so that they become more complete, fully rounded and happy young people.

The Characters

'The people in the play'

5 Children:

Ellie

Bella

Scarlet

Simon

Charlie

The Sweet Shop Keeper
Goodworm
Spell Beetle

Applying the Ingredients of a Play to textual analysis

The Setting

'Where & when the scene is set'

It is not made clear which part of the country the play is set in. The year is hard to work out too. In some ways it is slightly old fashioned — in others it is very modern. We could say that it is, 'timeless' in this sense. The majority of the action takes place far underground in a vast and strange subterranean kingdom partly dug out by the Sweet Shop Keeper.

Genre- 'the style'

Adventure and magical. Almost fairy-tale

Speech - 'the words

the characters say'

The play has two writing styles; dialogue and narration. Some of the language in the narrative passages is rich and theatrical.

Plot - 'the storyline'

A wicked Sweet Shopkeeper emerges from an old well and steals Charlie's Teddy Bear, Edward. The children decide that they must go after her to retrieve Edward. At the ootom of the well they discover a secret underground kingdom. In their pursuit they discover just how powerful and wicked the sweet shopkeeper has become. Fortunately they meet some kind and wonderful creatures who do their best to

help the children in their quest.

Rehearsal techniques and ways of staging a play: Two new ideas to consider

Rehearsal techniques

Preparing the play for performance

The creative team — actors, directors, designers work out their plan for a play in the **rehearsal process.** It is where they make the play ready for performance. It involves working out the moves, ways to say lines and character relationships. Directors use a variety of rehearsal techniques to assist their actors. **Blocking** is a typical rehearsal technique. We will learn and practise others in future topics. There are also technical rehearsals where the focus is on getting the lighting changes and sound cues worked out and 'cued' and learned. The actors practise their entrances and exits and any costume changes in the technical rehearsal.

Blocking in rehearsal

In theatre we use this word for at least three things. In year 7 you saw how it could mean not **blocking** your partner's ideas while improvising. You will also have heard me tell students to not stand in front of another actor on stage and block them from being seen by the audience. Here we will use it to mean, the way we position and move actors (and set) on the stage when we are rehearsing scenes from the play. When blocking a play it is important to consider 2 things

- i) Why does the actor/character make the move.
- ii) li) how does it look is it aesthetically pleasing remember aesthetics from Year 7?

Blocking can include the actors gestures etc. too.

Ground Plans

These are the different ways that a stage and auditorium can be laid out. Up till now you have naturally had the audience on one end when you have performed your drama work. In fact, this is called, End – On staging. There are several other ways of arranging the audience in relation to the stage and they have a significant impact on the actor audience relationship and present different challenges to actors and directors

Traverse Staging – Audience on 2 sides

You will find out some of the challenges that

Traverse staging presents when you get the chance to stage the opening introductory scene of, An Adventure Underground

S T A G E

Traverse

Experienced directors and many actors enjoy the challenge of staging & performing a play with the audience on two sides. Audiences too can enjoy being able to see themselves across the stage. It gives me the sense that we are all in it. together- the actors and audience all collaborating in the performance

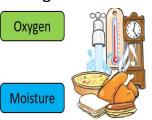
Knowledge Organiser – Year 8 Food

Bacteria are living organisms.



This means they need certain things to survive or like certain conditions to grow and multiply in, but what?

5 things bacteria NEED to grow









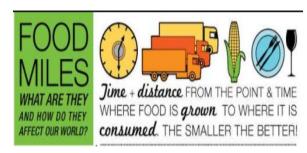
Food Standards

Some of the ethical issues surrounding food production and understanding where your food comes from.









Carbon Footprint

Carbon footprint means: The amount of carbon we as individuals produce as a result of actions we do – such as driving, shopping, using electricity etc.

Carbon dioxide in large amounts contributes to global warming and has a negative effect on our planet.

Fair Trade

There are also rules and initiatives to help the *people* who are involved in food production to ensure they too are treated ethically.

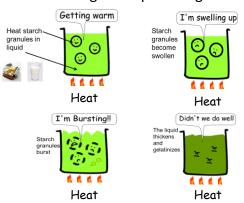




CO2

Gelatinisation

The thickening of a liquid using starch.



When heated at 60°C, the starch granules begin to absorb the liquid and swell up.

At 80°C the particles will have absorbed about five times their volume of water until they burst open and release starch, thickening the liquid.

This process is Gelatinisation

Seasonality

We can help reduce our carbon footprint by eating foods grown locally and foods that are in season in our own country.

Hygiene



Personal

Hair up – Reduces the risk of bacteria transferring to food through hair dropping in Aprons on – Protects you from spillages and reduces risk of bacteria transferring to food from everyday clothing

Washing hands - regularly using hot soapy water to reduce the bacteria on your hands
Blue plasters — Blue plasters should be used to cover cuts and grazes as they will be easily seen if they accidentally fall into food.

Food – Understanding the 4 C's Concept **Cooking** – thorough cooking kills bacteria so ensure food is cooked to 75°c to make sure all bacteria are killed – check this by using a food probe.

Cleaning – effective cleaning removes harmful bacteria and stops them spreading so ensure all work tops, utensils and equipment are cleaned thoroughly with hot soapy water.

Cooling – effective chilling prevents harmful bacteria multiplying so ensure all food is stored at the correct temperatures, ensure cooked food is cooled within 90 minutes.

Cross contamination – Good hygiene practice prevents Cross contamination so when raw food comes into contact with ready to eat food. For example raw meat juices spilling onto salad.

Knowledge Organiser – Year 8 Food

Key Processes

Kneading-

to work dough, to develop the gluten that is found in flour, this gives baked goods their structure and texture. When making dough, the flour and other dry ingredients are combined with the wet ingredients, usually warm water, along with yeast.





Multicultural Foods

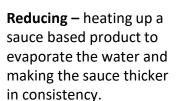


Don't cross-contaminate!

warm water and soap for 20 seconds before and after handling raw meat.

Handling Raw Meat -Always wash hands with

Keep raw meat, poultry, fish, and their juices away from other food. Wash cutting board, utensils, and countertops with hot, soapy water after use.



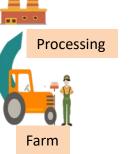


DAIRY PRODUCTS

Cooking Skills

Chop Fold Roll Knead Shape Simmer Boil Bake Fry





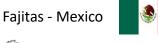
Farm to Fork

Process

Logistics



Plate





Macaroni Cheese & Pizza - Italy

Sweet & Sour - China







- **Vitamins** Minerals
- PLUS Water and Fibre (neither are nutrients but are required for a healthy diet).

Food Labelling

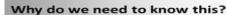


The Government ensures that food manufacturers must include certain information to protect the consumer.

Sources of Food

Ingredients can be grown, gathered, caught, reared or made / manufactured.

This aspect of food is known as FOOD PROVENANCE



How food is produced has an impact on it's quality, its nutritional properties, the environment, as well as its cost.

The general rule is 'the closer to its original form, the better the food is for us'.





Packaging

TYPE OF PACKAGING	EXAMPLE USES	ADVANTAGES	DISADVANTAGES
Glass	Jam, pasta sauces,	Strong, see product through, sense of quality leakproof	Heavy, breaks easily
Aluminium Foil	Takeaway meals, pies,	Can hold heat, can be heated, can be shaped, rigid, leakproof, portion control	Cheap, not very strong
Cardboard & oven proof paperboard.	Ready meals, sandwiches, dry cerealss	Can be printed onto, greaseproof, lightweight, can be recycled, leakproof	Does keep fresh
Paper	Sugar, flour,	Cheap, lightweight, can be printed onto	Not water resistant or leakproof,
Cling film	Meat onto of plastic trays	Easy to shape, cheap	Not strong
Plastics	Milk bottles, yoghurt pots, margarine tubs,	Can be moulded into shapes, can be see through, cheap, can be recycled, can be see through	Not always easy to recycle, hygienic
Polystyrene	Takeway meals, hot drinks	Keeps food hot	Can't be printed onto, difficult to recycle
Tin cans	Baked beans, meat sauces, fruit, vegetables	Strong, leakproof, portion control, product sealed so extends shelf life	Heavy, cannot be printed onto

Y8 GRAPHICS

Graphic design is a craft where professionals create visual content to communicate messages

TYPOGRAPHY

Typography is the art of arranging letters and text in a visual, creative, clear and legible manner. Typography is the art of font, using appearance and structure to convey a message whilst still being visually engaging and interesting.

The 'golden rule' of typography is that it should link well to your brand. This can include elements such as; design of letters, shape of letters, subject matter or imagery used next to or with letters.

Max





GRAPHIC DESIGN



GAMES

POSTERS & BILLBOARDS

WEBSITES

VIDEO & ANIMATION

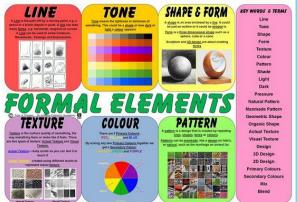
BOOKS & PUBLICATIONS

FLYERS & BROCHURES

CD'S

BOOKS & PUBLICATIONS

FORMAL ELEMENTS













What does a graphic designer do?

Graphic Designers create visual concepts to communicate information. They create everything from posters and billboards to packaging, logos and marketing materials. Graphic Designers use elements such as shapes, colours, typography, images and more to convey ideas to an audience.

KEY TERMS	DEFINITION
Graphic Design	The art or skill of combining text and pictures in advertisements, magazines, or books.
Design Process	An approach for breaking down a large project into manageable chunks.
Target Audience	A particular group at which a product is aimed towards.
Design Brief	Outlines the specifics of a design project which can include the design project overview, timelines, target audience information, and budget.
Research	A collection of new knowledge and/or the use of existing knowledge in a new and creative way so as to generate new concepts and understandings.
Colour Theory	The collection of rules and guidelines which designers use to communicate with users through appealing colour schemes in visual interfaces.
Typography	The art or practice of setting and arranging type.
Mood board	An arrangement of images, materials, pieces of text, etc. intended to present a particular style or concept.
Evaluation	Is a process that critically examines a design.
Modelling	Making a model allows designers to visualise and test how a product looks and performs in 3D and is a great way of checking a product's viability.

Y8 GRAPHICS

Graphic design is a craft where professionals create visual content to communicate messages

MOOD BOARDS

Mood boards are used to inspire us creatively. Mood boards comparing colour combinations are a fantastic way to gain a visual understanding of colours which compliment each other.







Elements of a successful mood board:

- Colour swatches/blocks which explore colour themes
- Inspirational imagery
- Your own text, photos to support ideas
- Your own sketches to support ideas
- · A theme as a starting point





WATERCOLOUR







- Start with the lightest colour first, add a wash of the colour.
- Layer in darker colours and tones over the top.
- Control the amount of water on your brush too much and it will run.
- Let sections dry before you add detail, this will keep them clear.



COLOUR THEORY

Colours can convey a message that give us an idea of how the product or company wants to be perceived. They can entice a certain type of customer and can make us think of different things.

Complimentary colours are colours which are opposite to each other on the colour wheel. Examples of complementary colour combinations are: Red and green; yellow and purple; orange and blue; green and magenta. Complementary colour combos tend to be bold, which is why sports teams often use this formula for their colours.



PACKAGING DESIGN INSPIRATION













Graphic Designers:

Sarah Dennis Georgina Luck Jennifer Hines Alice Pattullo Mike Steffanini May Van Milligan







What is the difference between labelling and annotating?

Labelling is when you show what something is for example a logo. Annotation is when you explain why the logo looks like it does and reasons for your design choices.

INITIAL DESIGN IDEAS

An opportunity to explore possible solutions that meet the design brief that has been set and the specification. Initial drawings do not need to be perfect and can be quick 'concept' sketches. Annotation should be added to explain your ideas in detail and depth.

DESIGNER ANALYSIS PROMPTS

- I have been looking at the work of
- I would describe their style as
- The colours used are
- I would describe the lines used as
- I could use this artist to influence my own work by

YR8 Textiles

Textiles are highly adaptable and can be constructed to maximise different properties including a very high strength and weight ratio, which means less materials can eb used to make strong and robust products. Textiles are available in many different forms including rolls, yarns, and fibres. Some textiles can be very cheaply produced and some are extremely expensive, especially when using rare fibres and labour intensive techniques.

The categories of textile are:

- Natural Fibres
- Woven Textiles
- Synthetic Fibres
- Non-woven Textiles
- Regenerated
- Knitted Textiles

Patchwork Block Pattern Inspiration

Patchwork

The tradition of the patchwork we know today was taken to America by the Pilgrims.

Patchwork is a great way to consider the 6 Rs and RECYCLE materials and fabrics – a good form of **SUSTAINABILITY**

Construction Key Words

RIGHT SIDE = the side of the **fabric** is the side that is meant to be seen. It usually looks nicer.

PRESS = Iron the fabric/seam. This must be done after every stitched seam.



Chemical Fabric Dyes



Elastic bands



Dye Bath/Vat



Apron



CROSS PIN = placing pins in fabric horizontally to keep the two pieces together temporarily whilst stitching.

'10 LINE' = the 1cm distance from the machine needle to the line on the throat plate.

SEAM ALLOWANCE = the area between the fabric edge and the stitching line on two pieces of material being sewn together.

QC CHECKS = checking for quality and accuracy of your stitching and construction

Tie - Dye

A resist technique. The process of tie-dye typically consists of folding, twisting, pleating, or crumpling fabric or a garment and binding with string or rubber bands, followed by application of dye/s.

Natural Fabrics are best for tie-dye. Pre washed cotton is more absorbent. New cotton fabric has a waxy finish applied to stop it creasing too much.

You must always follow the health and safety rules when using dyes. An apron and gloves should be worn when working with dyes. In industry eye protection would be worn as well.

All equipment should be used correctly.

CARE INSTRUCTION LABELS

The world of care labels can be confusing. There are many **symbols**, all with slightly different meanings.







Reasons to have care labels:

- To make sure that the garments we buy stay in the condition we buy them and do not shrink or stretch.
- Symbols provide the same information to everyone without language barriers.
- Using symbols allows for smaller, more comfortable care labels.
- Smaller labels also cost less to produce which could translate into consumer savings.





BELOW 30°C







WASH AT OR BELOW 60°C







WASH

TUMBLE DRY

ON NORMAL



BLEACHED

BELOW 40°C





BELOW 50°C



TUMBLE DRY SAFE



TUMBLE DRY

ON LOW

ONLY





TUMBLE DRY



BLEACH



DRY FLAT



DRIP DRY

IRON SAFE





DRY IN

SHADE

IRON ON

LOW



LINE DRY IN

SHADE

IRON ON

MEDIUM



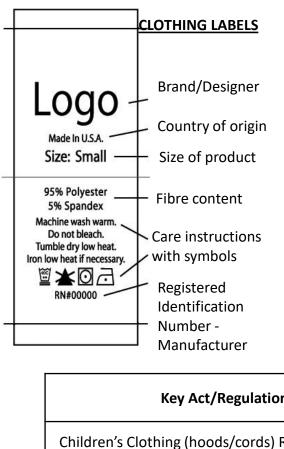


DRY FLAT IN SHADE









Designers need to be aware of the issues related to products that they design. The regulations detailed below need to be incorporated into their design specifications to ensure that the product created meets the demands of regulations and the end user.

∰ GOV.UK

There are four areas of information that are required to be displayed by **LAW**:

- Garment care symbols
- Country of origin
- Fibre content
- Manufacturer (Registered Identification Number) And on children's clothing/toys SAFETY e.g. flammability.

Key Act/Regulation	Which area of the textiles/fashion industry is it related to?
Children's Clothing (hoods/cords) Regulations 1976	Children's wear
Nightwear (safety) Regulations 1985 Nightwear (Amendment) Regulation 1987	Nightwear for adults and children
Furniture and Furnishings (Fire) (Safety) Regulations 1988 1989 1993	Any furniture, furnishings including chairs and cushions.
Toys (safety) Regulations 1995	All toys
Textile Products (indication of fibre content) Regulations 1986, 1988, 1998	All textile products, usually shown on the care label.
Footwear (indication of Composition) labelling Regulations 1995	All footwear needs to clearly show the key details of fibre content/fabric composition.

<u>The Electric Iron.</u> <u>Think safe- Act safe – Be safe</u>

Temperature Dial

This adjusts the TEMPERATURE.

Power Lead

Don't allow the cable to trail on the floor.

If the plug and/or power lead are damaged in any way DO NOT USE it (any electric item).

Temperature Indicator

It switches off when the iron reaches the set temperature.

You need to know how to keep yourself and others safe in the Textiles Workshop.

Sole Plate

It is METAL. It gets HOT. DO NOT TOUCH.

Make sure that the iron is switched off and always placed securely on the board when not in use.

As there might not be a super hero to rescue you!



This is the PLUG.

When you are finished with an iron TURN IT OFF at the mains.

Ensure the iron is placed on a secure surface, out of the way.

Most fabrics are prone to creasing. To work with fabrics you need them to be flat and as crease-free as possible. The best way to achieve this is to use an iron.

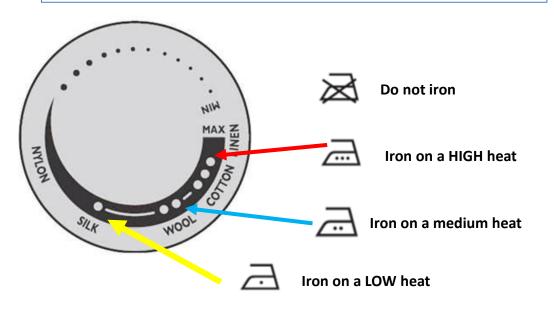
Ironing helps to remove creases. Irons are used for pressing too. Pressing is when you want a crease to stay in a fabric; on a collar for example or a pleat down the front of a pair of trousers.

In industry, ironing is done by hand using large steam irons.

Another use for irons is to apply the interfacing material Bondaweb which can be used for the decorative technique – Applique. Bondaweb requires heat to activate the adhesive within it.

What do the 'dots' mean?

The dots on the iron relate to the dots found on the iron symbol found on the care label. They show the temperature you should iron the garment on, so one dot = cool, two dots = medium, three dots = hot. The cross through the iron means – you guessed it – do not iron.



Design and Technology





Drop (Snail) Pear-shaped Eccentric/circular Effect of shape · Circular to give a · Motionless (dwells) for · Gives a slow rise about half the cycle with a spiral crosssmooth continuous section and then a movement as the · During the second sudden fall half it rises and falls follower rises or falls Example Opens and closes . In a fuel pump or in Used in hammers/ punches or machines valves in a car steam engines needing a sudden engine drop Cams



4 Types of movement

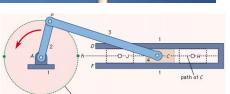
Rotary - Motion around a central point Example: a fan or a bike wheel

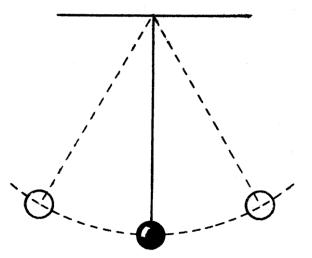
Oscillating - Motion that swings backwards and forwards in an arc from a central point Example: child on a swing or a pendulum

Linear - Moving in a straight line in one direction Example: train travelling along a track or a conveyor belt

Reciprocating - Moving backwards and forwards in a straight line Example: sewing machine needle or car piston



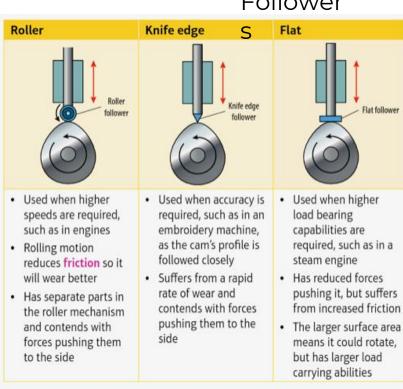


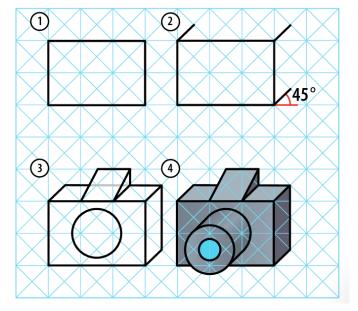




Cams

Follower





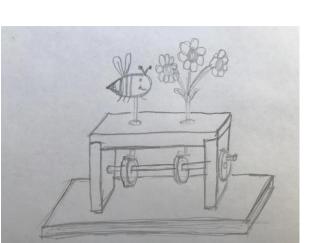
Oblique

Oblique projection is the simplest method of creating 3D designs based on 45-degree lines. For support, use oblique grid paper to guide your angles:

- **1** Draw the front view in 2D.
- **2** From each corner, draw construction lines projecting out at 45 degrees.
- **3** On the construction lines, measure half the true length.
- **4** Draw the back of the product to complete the product.

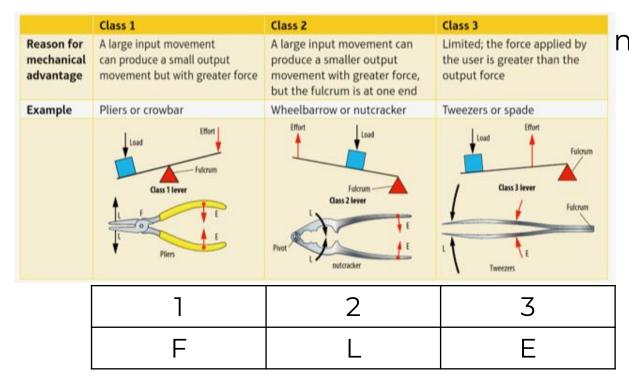
Specification Point to Include	Questions to Answer
Form	Why is the product shaped or styled as it is? What shape / style should it be?
Function	What does it do?
Client and user	How does it meet the needs? How is the product designed for the user?
Performance	How does it work? How does it do the job it was designed to do? How will it work? What other factors / issues does it need to take into consideration?
Materials and Components	What materials should it be made from? What properties / characteristics should the materials / components have? What materials/components / parts have they used and why
Scale of Production and Cost	What scale of production has been used? How does this affect the overall cost?
Sustainability	How has sustainability been taken into consideration?
Aesthetics	How is it made to be aesthetically pleasing?
Marketability	What makes this product different from anything else on the market?
Consideration of Innovation	What elements of the product are innovative or move the product forward compared to other versions available on the market?
	Time week a wide a duil an accuse aut in acceptu

SCAMPER TECHNIQUE

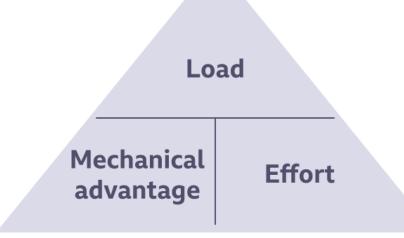


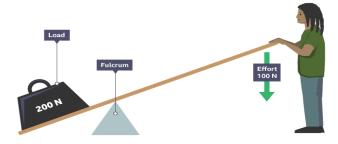


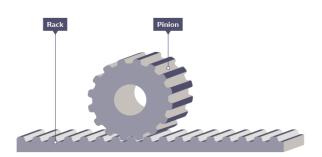
- **Jigs** used to guide a drill or saw to cut in exactly the same place each time on every piece of timber reduces marking out time thus increasing the efficiency of the manufacturing process
- **Fixtures** holds the piece of timber in place whilst it is being worked on
- Templates made out of paper, card, thin metal or wood, these are drawn around to mark out the same shape repetitively, with the aim of speeding up the marking-out process and decreasing the chance of an error occurring
- **Patterns** a collection of templates that go together to make a part, or all, of a product

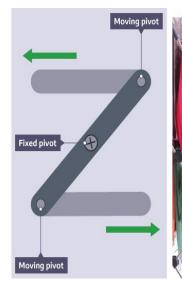


mechanical advantage = load (N) ÷ effort (N)

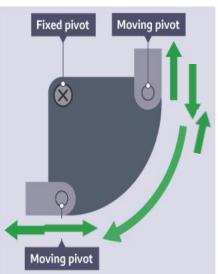














Here are some useful methods to use that will help commit the information to your long-term memory



How to use a knowledge organiser – step by step guide

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