

The Trafalgar School at Downton

## Knowledge Organiser

Year 7: Terms 1 and 2 2025/2026

Name ...... Tutor....... Tutor......



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anecdote: telling your own story to support your point.

P

R

pronouns: use pronouns that directly address your reader/audience - we, you, our, us.

emotive language: make them feel an emotion.

facts and opinions: include genuine information and your personal point of view.

repetition: repeat a key phrase/word.

rhetorical questions don't require a response, but trigger internal responses for the reader e.g. empathy,

shock, desire to know more etc.

experts: use quotes from experts to back you up.

statistics: use percentages and other data in favour of your point.

triples: use powerful and effective words/phrases in threes.

Methods to include:

otion: ensor

Homework Example: Termly Writing Challenge: First Person Narrative

You should include these methods/foci.

If you click on each one on the slide, it's hyperlinked to another slide to help you learn about that method, with

examples.

æ)

Here you will find prompts so you don't forget important things like planning, punctuating accurately, etc.

Here you will find an

image: sometimes it's

just to illustrate or

contextualise the

task. For some tasks,

the image will be part

of the writing

challenge.

Don't forget to plan

writing!

V: tter at ning top, ion or

Accuracy

question mark at the end.

- Use paragraphs.
- Spell accurately.

Write a short story based on t to a haunte

> Here you will find the task details. Read them carefully as it will provide more information about about what you

are writing (form,

purpose).

Each term, you will have an TWC PPT loaded onto ClassCharts. You will be taught how to write that type of text in English lessons. Your homework is to make notes, learn from, and prepare for the task and methods included, ready to write it in your TWC writing lesson.

beg

the









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

## 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 ...





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

## CONTEXT

George Orwell

#### Context - Animal Farm was written by George Orwell in 1945.

George Orwell – George Orwell was the writing name of Eric Blair (1903-1950). He was outspoken in his support of democratic socialism, and spoke out frequently against totalitarianism and social injustice. He wrote a wide range of fiction, poetry, literary criticism and polemical journalism, although without doubt his two most famous works are Animal Farm (1945) and Nineteen Eighty-Four (1949).

Nicholas II— Tsar Nicholas II was the last emperor of Russia. Tsar Nicholas was deemed to be a poor ruler—the country lost key battles against Japan and Germany during his reign, costing large military casualties and financial losses. There were also gross inequalities: Nicholas lived in luxury while thousands of unemployed peasants struggled to survive. Tsar Nicholas was eventually overthrown by the Bolsheviks and was executed in July 1917.

Karl Marx and Communism— Karl Marx was a German philosopher from the 19<sup>th</sup> Century, who <u>rejected capitalism</u>. He instead believed in the introduction of a system in which wealth was communal and labour was shared. He believed this would produce a <u>fairer</u>, more stable way of life. Whilst he lived a long time before the Russian Revolution (and in a different country) his theories formed the foundations for what became Communism.

The Russian Revolution – The revolution was the movement that removed the reigning Tsarist autocracy from power and led to the rise of the Soviet Union. The Bolsheviks, led by Vladimir Lenin, were able to overthrow the provisional government and establish their own federal government, creating the world's first socialist republic. Eventually they became reconstituted as the Communist Party.

Jospeh Stalin — Following the death of Lenin in 1924,
Stalin rose to power through discreetly canvassing,
manipulating and intimidating others, sidelining other
potential leaders such as Victor Trotsky. Under Stalin, the
Soviet Union became more <u>autocratic and totalitarian</u>: he oversaw
mass <u>repressions</u>, hundreds of thousands of <u>executions</u> and millions of
non-combatant deaths. He has hence become known as one of the
most significant and vilified figures of the 20<sup>th</sup> Century.

Life in the Communist Soviet Union – The working class in the Soviet Union were supposed to be the country's <u>ruling class</u> under the doctrines from which their socialism was derived, and yet they grew increasingly <u>repressed</u> throughout the progression of the USSR's existence. It is generally accepted that the standard of <u>living decreased</u>, working conditions deteriorated, and personal freedoms were significantly violated.

Year 7, Terms 1 & 2:
Animal Farm

CHARACTERS & THEMES

#### Themes - A theme is an idea or message that runs throughout a text.

The Corruption of Socialist Ideals — Animal Farm is famous for being a stinging critique of the development of Soviet communism.

Although Orwell strongly believed in the socialist ideals upon which the revolution was built, he abhorred the ways in which these values had been repeatedly manipulated by those who rose to power. The gradual disintegration of the seven commandments visually depicts this.

Class – Animal Farm demonstrates through its allegory the means by which human beings seek to maintain and reestablish class structures. The novella shows how the oppressed who are able to stand united in the face of adversity often generate their own class divisions over time after the enemy is eliminated. This is evident in the slow rise of the pigs to fill the void left by Mr Jones.



Naivety – Animal Farm is not only told from the viewpoint of those in power, but also from the viewpoint of those who are oppressed. Orwell makes clear that these types of situations are formed not only because of the strategies of the oppressors, but also the naiveté of the people who do not have the education or the position to know better. For example, Boxer believes everything that he is told.

**Religion** — An idea of heaven (Sugarcandy Mountain) is promised to the animals by Moses (the raven) at some points throughout *Animal Farm.* Moses is derived from the name of the bible character who brought the word of God to the people. The thought of an evergreen, beautiful afterlife awaiting them drives the animals on to work harder, and so the pigs use Moses to their benefit.

## 十

#### Main Characters – Consider what Orwell intended through his characterisation of each of the below...

Napoleon – Napoleon is the pig who emerges as the <u>leader</u> of Animal Farm after the rebellion. Napoleon's character is based on <u>Joseph Stalin</u> – the leader of the communist Soviet Union. Napoleon is <u>cunning</u>, <u>treacherous</u>, <u>lazy and selfish</u>. He uses Squealer (<u>propaganda</u>) and the dogs (military force) to exert power over others. He has no real talents, rather he is a corrupt opportunist.

Napoleon Quote: "To the prosperity of The Manor Farm!" (10.32)

**Boxer**— Boxer is a cart-horse, who demonstrates incredible strength, work ethic, and loyalty. He represents those in the working classes who were hugely overworked. Boxer completes the most work on the farm, and is admired by others for his physical accomplishments and mental grit. His downfall is his slow wit, which ensures that he is unable to think for himself and is easily manipulated.

Boxer Quote: "Napoleon is always right" (5.22)

Old Major – Old Major is a prize-winning boar whose vision of a place in which the animals work for themselves serves as the inspiration for the rebellion. He is based on both Karl Marx and Vladimir Lenin, who inspired communism. Old Major is well-respected, articulate, and persuasive. He is a clear leader who the other animals listen to. When he dies, Napoleon and Snowball are left to struggle for control over the animals.

Old Major Quote: "my message to you, comrades: Rebellion!" (1.11)

Snowball – Snowball is one of the other leading pigs, who challenges Napoleon for leadership of the farm after the rebellion. He represents Leon Trotsky. He is intelligent and passionate, yet he does not resort to the same levels of cunning and manipulation as Napoleon. Despite largely winning the support of the animals on the farm, Snowball is driven from the farm by Napoleon's forces.

Snowball Quote: "liberty is worth more than ribbons" (2.7)

**Squealer** — Squealer represents the Soviet propaganda machine. He is a pig who is an exceptionally gifted and persuasive speaker, and is utilised to spread positivity about Napoleon, and negativity about Napoleon's competition. He uses false statistics to suggest that the farm thrives under Napoleon, and twists the truth to ensure that the pigs retain political and social control.

Squealer Quote: "It is for YOUR sake that we ... eat those apples." (3.14)

**Benjamin** — Benjamin is a long-lived donkey who refuses to feel enthused by the rebellion. Some say he represents the aged people of Russia, who remained cynical of the revolution. Benjamin is seen by the other animals as a pessimist, however his prediction that life will remain unpleasant regardless of who is in charge proves correct. He is the only animal who appears able to understand the atrocities that are taking place, yet he refuses to openly oppose the pigs.

Old Major Quote: "None of you has ever seen a dead donkey"(5.22)

## Year 7, Terms 1 & 2: Animal Farm

## KEY TERMINOLOGY



STRUCTURAL TERMINOLOGY		Key Vocabulary	LANG	UAGE TERMINOLOG	GY
KEY TERMINOLOGY	DEFINITION	Propaganda	KEY TERMINOLOGY	DEFINITION	
Contrast	Where something is strikingly different from something else – used by writers for effect.	<ul><li>Tyrant</li><li>Dictator</li></ul>	Noun	The name of a pe thing For example: The	
Juxtaposition	Two contrasting things/ideas being seen or placed close together for impact.	Allegory	Adjective	Describes the not For example: The	
Foreshadowing	An indication of something that will happen in the future, often used as a literary device to hint at future plot developments	<ul><li>Symbolism</li><li>Rebellion</li></ul>	Verb	An action word – For example: The <b>spoke</b>	
Focus Shifts	Where a reader is introduced to different things/ideas by a writer – our attention is moved from one to another e.g. setting to character, outside location to inside location	<ul><li>Comrade</li><li>Communism</li></ul>	Adverb	Describes how a viscarried out). Or always, end in -ly	ften, but not
Zoom in – where the writing takes you from something vague, to something very detailed (for example, describing an		Slaughter		For example: The spoke <u>loudly</u> .	old teacher
	assembly in general terms to then describing, in detail, the person speaking at the front). Zoom out – the opposite. If in doubt, think of how a camera moves when filming	Overthrow    Commandment	RHI	ETORICAL DEVICES APE FOR REST	
Chronological	A record of events starting with the earliest and following the order in which they occurred.	• Equality	Anecdote	Pronouns	Emotive Lang
Dialogue	Conversation between two or more people as a feature of a book, play, or movie.	Democracy     Utopia	Fact Rhetorical Expe	Opinion erts Statistic	Repetition cs Triples
			Question		

**Year 7 Maths Term 1 Sequences** 

#### **Keywords**

Sequence: items or numbers put in a pre-decided order

**Term**: a single number or variable

Position: the place something is located **Rule**: instructions that relate two variables

Linear: the difference between terms increases or decreases by

the same value each time

Non-linear: the difference between terms increases or

decreases in different amounts

**Difference**: the gap between two terms

**Arithmetic**: a sequence where the difference between the terms

is constant

**Geometric**: a sequence where each term is found by multiplying

the previous one by a fixed non zero number

#### **Linear and Non Linear Sequences**

**Sequences** usually follow a pattern and when you discover the pattern you can determine the following things:

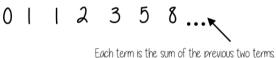
- The rule for the sequence we call this the n<sup>th</sup> term rule
- The next term in the sequence
- Any term in the sequence, the 100<sup>th</sup> term or the 511<sup>th</sup> term
- Whether a term appears in the sequence

**Linear Sequences** – increase by addition or subtraction and the same amount each time.

Non-linear Sequences – do not increase by a constant amount - quadratic, geometric and Fibonacci.

- Do not plot as straight lines when modelled graphically
- The differences between terms can be found by addition, subtraction, multiplication or division.

Fibonacci Sequence look out for this type of sequence



**Draw and continue a sequence** 

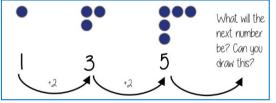
lines in each

Count the

number of

circles or

image



This is an infinite sequence – It will go on forever. The difference between each term is +2, we call this the **term to** term rule.

#### **Explain term-to-term rule**

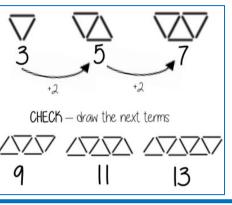
Sparx M381

#### It is How you get from term to term.

Try to explain this in full sentences not just with mathematical notation.

Use key maths language e.g. doubles, halves, multiply by two, add four to the previous term etc.

To explain a whole sequence you need to include a term to begin



#### **Predictions:**

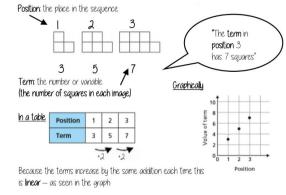
Look at your pattern and consider how it will increase. e.g. How many lines in pattern 6?

Sparx M241

Prediction 13 If it is increasing by 2 each time...

in 3 more patterns there will be 6 more lines

#### Sequence in a table and graphically



#### **Continue Linear Sequences**

7, 11, 15, 19 ...

#### How do I know this is a linear sequence?

It increases by adding 4 to each term.

#### How many terms do I need to make this conclusion?

At least 4 terms

Two terms only shows one difference not if this difference is constant. (a common difference).

#### How do I continue the sequence?

You continue to repeat the same difference through the next positions in the sequence

#### **Continue non-linear Sequences**

1, 2, 4, 8, 16...

#### How do I know this is a non-linear sequence?

It increases by multiplying the previous term by 2. this is a geometric sequence because the constant is multiply by 2

#### How many terms do I need to make this conclusion?

At least 4 terms-

Two terms only shows one difference not if this difference is constant. (a common difference).

#### How do I continue the sequence?

You continue to repeat the same difference through the next positions in the sequence.

#### Year 7 Maths Term 1 - Algebra

#### What do I need to be able to do?

- Understanding what is Algebra and how do I use correct notation
- Recognise the difference between an expression, equation, formula and identity
- Simplifying Expressions
- Forming and solving equations
- Expanding and Factorising brackets
- Substitution into single and two step functions
- Form sequences from expressions
- · Represent functions graphically

### **Key words**

Data
Algebra
Equation
Expression
Formula
Identity
Variable
Coefficient
Expand
Factorise

Substitution

Factors
Operations
Terms
Sequences
Graphs
Functions
Input
Output
Commutative
Linear

#### What is Algebra and how do I use correct notation

**Algebra** – Is the use of letters to represent an unknown, we call this letter a **variable**.

For example, imagine this sum:

-2 = 4

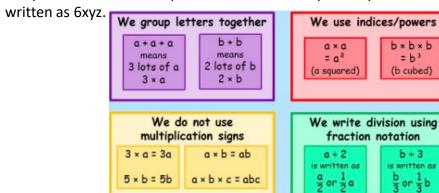
The empty box represents the unknown number in this sum. We replace this box with a letter, a variable. This is helpful when talking about the sum and when the problem contains more than one unknown.

**Notation** is the way in which we write things and present a sum. Using the correct notation in Algebra is important with multiple variables, it becomes even more important to be organised in the way we lay out the sum.

Sparx M813

#### Key rules:

- In algebra we don't use the multiplication sign as it is the same as the letter x. We instead remove the times sign and push the variables or **coefficients** and variables together. The **coefficient** is the number in front of the variable.
- The division symbol is also not used and the sum is written as a fraction.
- If there are multiple variables then it is best to organise the variables in alphabetical order and power order. For example: 6zxy is better



#### **Expression, Equation, Formula or Identity**

**Expression** – An **expression** is formed of variables and numbers, combined with **operation** signs and brackets. Each part of an expression is called a **term**. In the expression 3n + 5 the **terms** are 3n and 5 and the operation is +. An expression does NOT have an equals sign.

**Equation** – A mathematical statement showing that two expressions have equal value. The expressions are linked with the equals symbol =. For example, in the equation 5x + 4 = 29 the = symbol shows that 5x + 4 has the same value as 29 and therefore this equation can be solved to find the value of x.

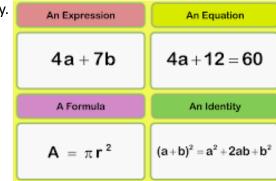
**Formula** – An equation linking sets of variables. For example, the formula v = u + at, has 4 variables v, u, a and t related by the formula. If the values of three variables are known, the fourth value can be calculated. There are lots of formulas you will learn in Maths and Science and some you already know, eg. S=D/T, A=L x W, A =  $\frac{1}{2}$  B x H

**Identity** – When the expressions are said to be *identically equal*. The expressions are linked with the symbol  $\equiv$ .

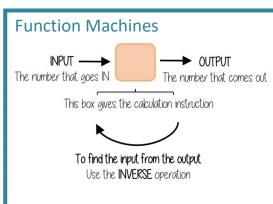
For example,  $4(a + 1) \equiv 4a + 4$  is an identity, because the expressions 4(a + 1) and 4a + 4 always have the same value, whatever value a takes and they are the same expression just

written in a different way.

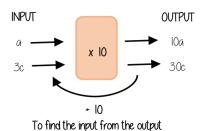
Example of each:



#### Year 7 Maths Term 1 Algebra

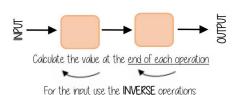


#### **Examples with algebra**

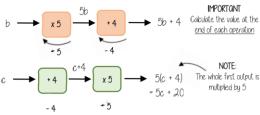


Use the **INVERSE** operation

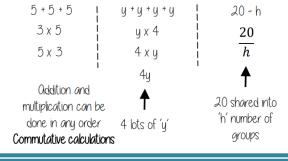
#### 2 Step Function Machines



#### **Examples with algebra**



#### Using letters to represent numbers



#### Substitution into expressions

4y 
$$4$$
 bits of 'y'

If y = 7 this means the expression is asking for 4

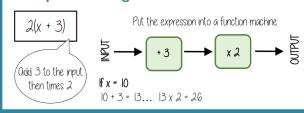
'lots of' 7

 $4 \times 7$  OR  $7 + 7 + 7 + 7$  OR  $7 \times 4$  =  $28$ 

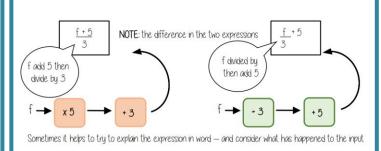
eg: y - 2

=  $7 - 2 = 5$ 

#### **Examples with algebra**



#### Find functions from expressions



#### Graphs

**Sequences** and **Graphs** have a lot in common. A **linear graph** is a visual representation of a sequence. We use **substitution** to calculate the coordinates of a graph when we are given the equation of a line.

For example: The sequence 3, 5, 7, 9, 11, .....

Sparx M618, M932

If the terms in the sequence are now labelled x instead of n, and the given sequence is labelled y then we can represent this in a table as:

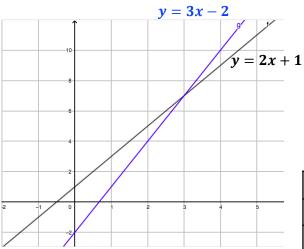
x	1	2	3	4	5
у	3	5	7	9	11
Coordinates	(1, 3)	(2, 5)	(3, 7)	(4, 9)	(5, 11)

The **n**<sup>th</sup> **term rule** of this sequence is **2n + 1**, replace n with x and we have the equation of this line. This is the line of y = 2x + 1

If we plot these points on a graph we get a straight line.

A linear sequence produces a linear (straight line) graph.

A quadratic sequence produces a quadratic graph.



Example: Draw the graph of y = 3x - 2

- 1. Select your values for *x*, you need a minimum of 3
- 2. Substitute your *x* values into the formula to calculate *y*
- 3. Plot your coordinates

$$y = 3x - 2$$
 is the same as  $y = 3 \times x - 2$ 

х	1	2	3	4
y	1	4	7	10
Coord	(1, 1)	(2, 4)	(3, 7)	(4, 10)

#### Year 7 Maths Term 1 Algebra

#### **Simplifying Expressions**

When there are multiple variables then it is important to simplify so there are the least number of terms possible.

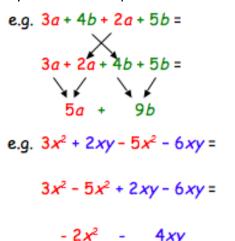
We simplify by **collecting like terms** together.

**Like terms** can be defined as 'Terms with the same letter variables raised to the exact same powers'

For example:

Sparx M795, M531

- 6m and 3m are like terms because they both have the variable m.
- 4xy and 5y are NOT like terms because they do not both have the same variables x and y.
- 3x<sup>2</sup> and 5x are NOT like terms because they have different powers.



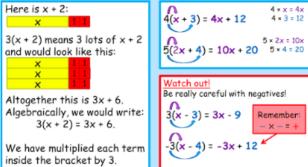
Like terms are those whose variables are he same **o** and 3**o** are like terms **Examples and non-examples** the variable is Un-like terms Like terms the same y, 7y are unlike terms  $2x^2$ ,  $x^2$ ab, 10ba

#### **Expanding**

the variables are

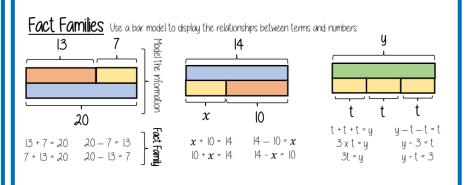
NOT the same

**Expanding –** Means removing the brackets. We do this by multiplying the term in front of the brackets by each of the terms inside the bracket. Here is x + 2:



Sometimes there are multiple brackets, so the question will ask you to Expand & Simplify: 5(x+3)+6(x-4)

Sparx M237



#### **Factorising**

y, 7x

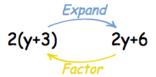
2x2, 2c2

ab. 10a

5, -2t

Note here ab and ba are commutative operations, so are still like terms

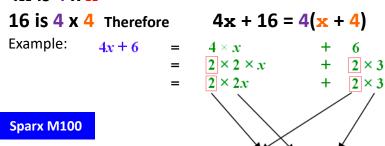
**Factorising** – Is the direct opposite of expanding, factorising is returning the brackets. With singles brackets we do this by finding the highest common factor and placing it outside of the bracket, the remaining factors go inside the bracket.

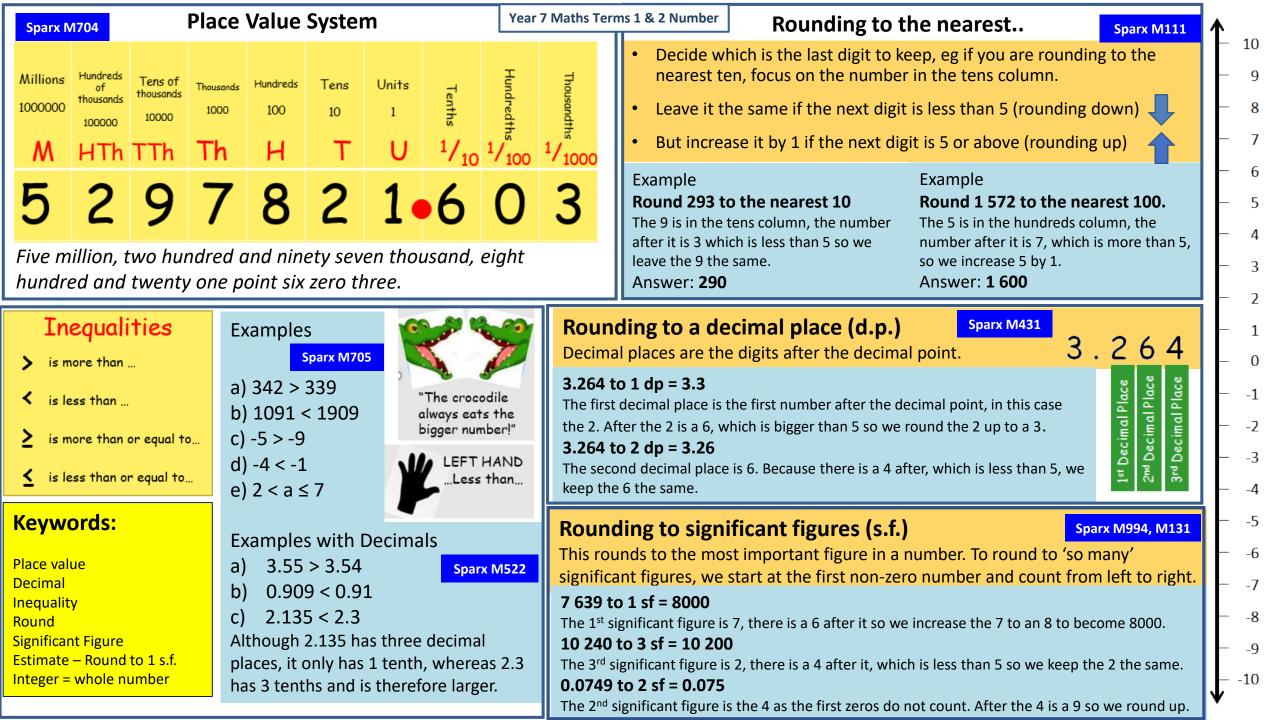


Example:

4x + 16Highest common factor of 4 and 16 is 4

4x is 4x





### Multiplying by powers of 10

x 10 = move digits 1 place to the left

x 100 = move digits 2 places to the left

x 1000 = move digits 3 places to the left....

#### Example

54.2 x 10 = 542

Sparx M113

Sparx M113

×10

100's	10's	1's	1/10
	5	4 (	2
5	4	2	. ◆ ○

## Dividing by powers of 10

÷ 10 = move digits 1 place to the right

÷ 100 = move digits 2 places to the right

÷ 1000 = move digits 3 places to the right....

#### Example

 $235 \div 10 = 23.5$ 

	100's	10's	1's	1/10
	2	3	5 (	
÷10	$\longrightarrow$	2	3 (	5

$$1/_{10}$$
  $\stackrel{\times}{\cdot} 0.1$  is the same as  $\stackrel{\div}{\cdot} 10^{\circ}$   
is the same as  $\stackrel{\times}{\cdot} 10$ 

$$1/_{100}$$
  $\times 0.01$  is the same as  $\div 100$   
 $\div 0.01$  is the same as  $\times 100$  $\circ$  $\bigcirc$ 

 $\times$  0.001 is the same as ÷ 1000

 $\frac{1}{1000}$  ÷ 0.001 is the same as × 1000

## Multiplying doesn't always make a number larger.

$$7 \times 0.1 = 7 \times \frac{1}{10} = 7 \div 10 = 0.7$$

Dividing doesn't always make a number smaller.

$$4 \div 0.01 = 4 \div \frac{1}{100} = 4 \times 100 = 400$$

#### **Standard Form**

Standard form is a system of writing numbers which can be particularly useful when working with very large numbers or very small numbers. Standard from is written in the form

$$a \times 10^{n}$$
 (where 1 < a \le 10)

#### Example

What is 86 000 in standard form? 86 000 can be written 8.6 x 10 000 10 000 = 10 x 10 x 10 x 10 =  $10^4$ 

So  $86\ 000 = 8.6 \times 10^4$ 

(You would have to move 8.6 four place values larger to get back to 86000)

#### Example

What is 0.005 in standard form? 0.005 can be written 5 x 0.001

$$0.001 = \frac{1}{1000} = 10^{-3}$$

So  $0.005 = 5 \times 10^{-3}$ 

(You would have to move the 5 three place values smaller to get back to 0.005)

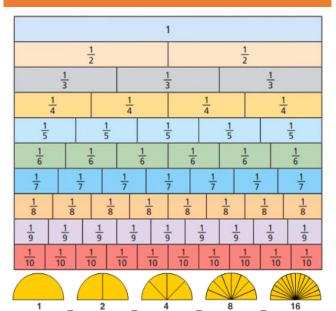
=	10 <sup>4</sup>
=	10 <sup>3</sup>
=	10 <sup>2</sup>
=	10 <sup>1</sup>
=	10 <sup>0</sup>
=	10 <sup>-1</sup>
=	10 <sup>-2</sup>
=	10 <sup>-3</sup>
=	10 <sup>-4</sup>
	=



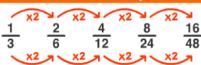
A negative power doesn't mean that the number is negative, it means we have gone from multiplying to dividing.

Sparx M719, M678

#### **Equivalent Fractions**

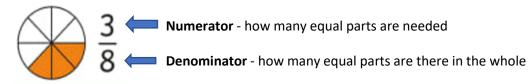


You can make equivalent fractions by multiplying or dividing the numerator and denominator by the same number.



Sparx M410

#### **Year 7 Maths Term 2 - Fractions**



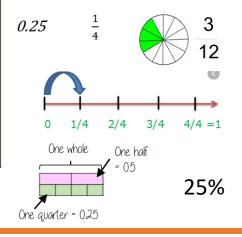
#### What do I need to be able to do?

To determine and generate equivalent fractions

To write fractions in their simplest form To convert between improper fractions and mixed numbers

To add and subtract fractions To multiply and divide fractions To find a fraction of an amount To find a whole given a fractional amount

#### Different ways fractions can be represented (all of these are "one quarter")



#### **Simplifying Fractions**

Simplifying a fraction means finding an equivalent fraction where the numbers are reduced as much as possible.

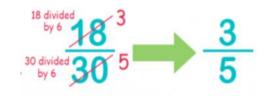
To simplify a fraction, we divide the numerator and denominator by the same number, a common factor.

You could do this in multiple steps:





Or divide through straight away by the highest common factor:



### One **hundredth** (one whole split into 100 equal parts) **=** 1 **=** ()()| $\overline{100}$

One tenth (one whole split into 10 equal parts) =  $\frac{1}{10}$  = 0.1

#### **Mixed Numbers and Improper Fractions**

Convert  $2\frac{1}{a}$  to in improper fraction



$$2 \text{ wholes} = \frac{18}{9}$$

So 
$$2\frac{4}{9} = \frac{2}{6}$$

Or: Multiply the whole number by the denominator and add on the numerator.  $2 \times 9 + 4 = 22$ 

the numerator is bigger than the denominator

Convert  $\frac{3l}{q}$  to a mixed number

Sparx M601



An **improper fraction** is a 'top heavy' fraction where

$$2 \text{ wholes} = \frac{18}{9}$$

$$3 \text{ wholes} = \frac{27}{q}$$

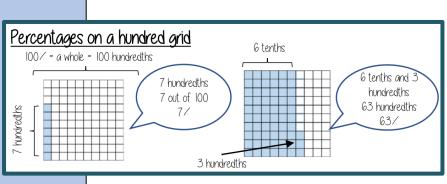
So, 
$$\frac{3l}{q} = 3\frac{4}{q}$$

Or: Ask yourself how many times the denominator fits into the numerator, with what remainder?  $31 \div 9 = 3$  with 4 remaining.

#### **Keywords:** Numerator

Denominator Whole Equivalent Simplify Common Factor Multiple Mixed Number Improper Reciprocal





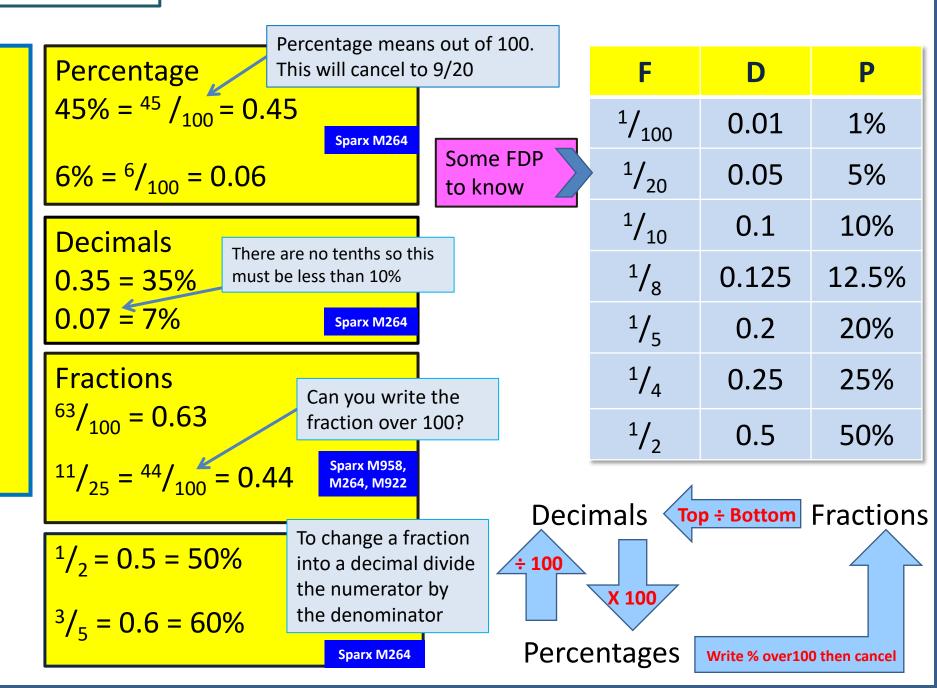
## You need to be able to:

Convert between simple fractions, decimals and percentages.

Convert between fractions and recurring decimals and percentages.

Compare fractions, decimals and percentages.

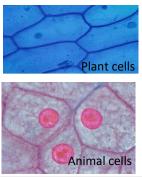
Order fractions, decimals and percentages by converting.



#### **Year 7 Biology - Cells and systems**

Term	Definition
Antagonistic muscles	Pairs of muscles that contract and relax in opposition to each other allowing movement
Cardiac	Relating to the heart
Diffusion	The passive movement of particles from an area of high concentration to an area of low concentration
Joint	Structure at which two parts of the skeleton are fitted together
Ligament	A short band of tough, flexible fibrous connective tissue which connects bone to bone
Magnification	The enlargement of an object by an optical instrument such as a microscope
Multicellular	An organism that is made up of different types of cells
Organ	Tissues grouped together to perform a particular function
Organelle	The small parts that make up a cell
Organism	An individual living thing such as a dog, human, oak tree
Respiration	The process of breaking down glucose to release energy
Tendon	A flexible but inelastic cord of strong fibrous collagen tissue connecting muscle to bone
Tissue	Group of similar cells working together to perform a particular function
Unicellular	A living thing that is made of one cell only e.g. bacteria, yeast

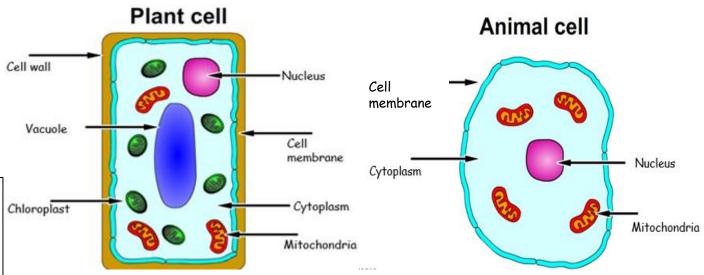
**Hazard:** A hazard is something that can cause harm **Risk:** A chance that the hazard will cause someone harm **Precaution:** Rules put in place to reduce the risk of harm



# In multicellular organisms, different cells are organised to perform different functions.

Cells are organised

into tissues
Tissues are
organised into
organs
Organs are
organised into organ
systems such as
respiratory system
and digestive system



Organelle	Function	In Plants or Animals
Cell membrane	Controls what substances can get into and out of the cell.	Both
Cytoplasm	Jelly-like substance, where chemical reactions happen. In plant cells there's	Both
	a thin lining, whereas in animal cells most of the cell is cytoplasm.	
Nucleus	Controls what happens inside the cell. Carries genetic information.	Both
Mitochondria	Where respiration happens – energy is released	Both
Chloroplast	Where photosynthesis happens – chloroplasts contain a green substance	Plant
	called chlorophyll.	
Vacuole	Contains a liquid called cell sap, which keeps the cell firm.	Plant
Cell wall	Made of a tough substance called cellulose, which supports the cell.	Plant

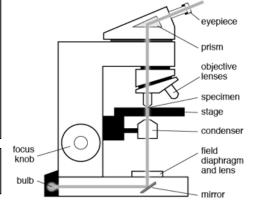
#### Method for creating onion cell microscope slide

- 1. Collect a piece of onion and remove one of the onion layers.
- 2. Using forceps, carefully peel off the inner skin of the onion layer.
- 3. Place the onion skin onto a clean glass slide. Use your forceps to keep the onion skin flat on the glass slide.
- 4. Using a pipette, add one or two drops of dilute iodine solution on top of the onion skin.
- 5. Place a coverslip on top of the skin.
- 6. Place the slide on the microscope for observation using 4 x objective lens to find the cells
- 7. Once the cells have been found, they can then be viewed at higher magnification

#### **Magnification**

Total magnification = magnification of eye piece lens x magnification of objective lens

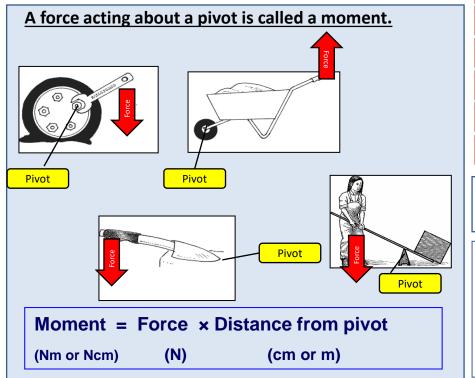
## The microscope



#### **KS3 Physics – Forces**

A contact force is a push or a pull on one object by another object that is touching it.

A force that pushes or pulls on an object without touching it is called a non-contact force.



#### Types of force:

Tension force Forces pulling apart a rope, string or wire Force acting in the opposite direction Frictional force to the movement of an object Friction between air particles and the object Air Resistance force moving through the air Electrostatic force Forces between electrically charged particles

Thrust force Act of pushing with force

Weight force Force of gravity x mass of object

Upwards force exerted on a object in a fluid Upthrust force

Magnetic force Force that pulls materials together

Normal contact force Force exerted from a surface on an object

Pressure = Force Area

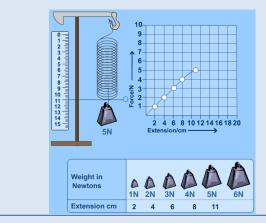
Pressure: (N/m or Pascals)

Area: (m<sup>2</sup> or cm<sup>2</sup>) Force: Newtons, N)



Decreasing the surface area, increases the pressure





#### Hooke's Law

The gradient of the graph is what we call the spring constant, k.

The spring constant is a measure of the stiffness of a spring

k=F/e

K = spring constant

F = force

e = extension

**Balanced** 

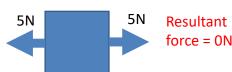
forces

Streamlined objects easily push the air out of the way. They have a low air resistance.

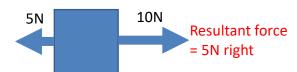
Objects that are not streamlined have a high air resistance.



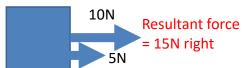
If two forces acting on an object are equal and in opposite directions, the resultant force is ON.



If two forces act in opposite directions, to work out the resultant force you must subtract one from the other.



If two forces act in the same direction, to work out the resultant force you must add them together.



Resultant force = ON

**A Resultant** Unbalanced force forces

**Stationary** or **Constant speed** 

> **Accelerating** or **Decelerating**

or Changing direction

or Changing shape

#### KS3 Chemistry Unit 1 – Matter, atoms and elements

What are the three main	Solid, liquid, gas
states of matter?	
What is melting?	When a solid turns into a liquid.
What is freezing?	When a liquid turns into a solid.
What is evaporation?	When a liquid turns into a gas at its surface.
What is boiling?	When a liquid turns into a gas throughout the substance.
What is condensation?	When a gas turns into a liquid.
What is sublimation?	When a solid turns into a gas without becoming a liquid first.
What is deposition?	When a gas turns into a solid without becoming a liquid first.
What is a melting point?	The temperature that a solid turns into a liquid.
What is a freezing point?	The temperature that a liquid turns into a solid.
What is a boiling point?	The temperature that a liquid turns into a gas throughout the substance.
What is a condensing point?	The temperature that a gas turns into a liquid.
What is a reactant?	The chemicals that react in a chemical reaction.

What are the arrangements of particles in the three states of matter?	Solid: particles in contact and in a regular arrangement. Liquid: particles in contact and in a random arrangement. Gas: particles not in contact and in a random arrangement.
What is the movement of the particles in the three states of matter?	Solid: particles vibrate on the spot. Liquid: particles flow past each other. Gas: particles move around the container very fast.
What is the compressibility of the particles in the three states of matter?	Solid and liquid: cannot be compressed easily.  Gas: can be compressed easily.
How do the three states of matter behave in a container?	Solids: maintain their shape at the bottom of the container. Liquids: flows to fill the bottom of the container. Gas: fills the whole container.

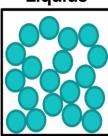
## Particle Arrangement in Phases of Matter

#### Solids



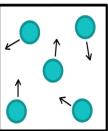
Particles are packed tightly together in a fixed arrangement. Particles can vibrate but not move

#### Liquids



Particles are close together with no distinct arrangement. Particles can move and slide around each other

#### Gases



Particles are freefloating with no distinct arrangement. Particles move and collide with each other

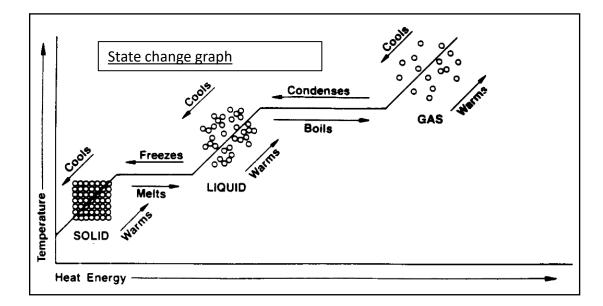
Atom - The smallest particle that can be chemically broken down.

Molecule - Two or more atoms bonded together

Elements - Made from only one type of atom. All elements can be found on the periodic table.

Mixture - Two or more atoms and/or compounds not bonded but mixed together.

Compound - Made from two or more different types of atom.



Ice melts at 0°C

Water boils at 100°C

Water will be in a solid state (ice) -3°C

Water will be in a gas state (steam) at 103°C

When three or more different elements combine, and one of them is oxygen, the ending will usually be something "-ate"

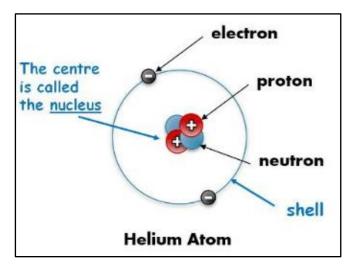
E.g. 1 calcium atom, 1 carbon atom and 3 oxygen atoms calcium + carbon + oxygen → calcium carbonate

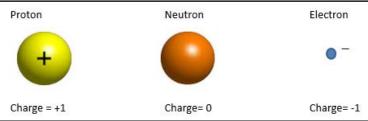
When two different elements combine the ending is usually something "-ide"

E.g. Magnesium + oxygen → magnesium oxide

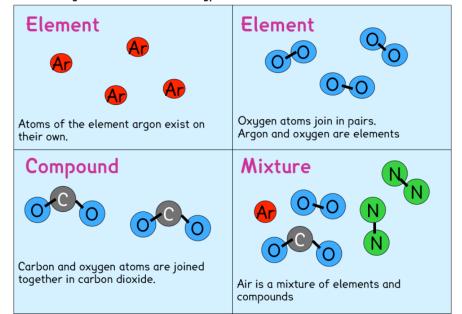
E.g. Copper + oxygen  $\rightarrow$  copper oxide

What is a product?	The new substances that are formed in a chemical reaction.	
What is a word equation?	An equation showing the reactants and the products of a reaction: reactants → products	





Blob diagrams to show different types of substance:



#### 2. UNDERSTANDING COMPUTERS

#### **Year 7 Computer Science – Autumn Term**

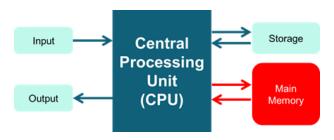
#### HARDWARE, SOFTWARE, & THE CPU

Hardware: Objects you can touch e.g. Disks, disk drives, screens,

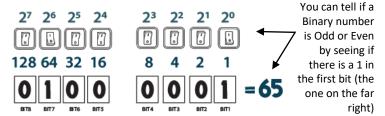
keyboards, printers, boards and chips

**Software**: refers to programs that run on a computer e.g. *Windows, MS* 

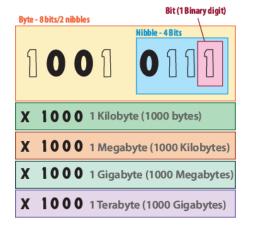
Word, MS Excel, Google Chrome



#### THE BINARY NUMBER SYSTEM

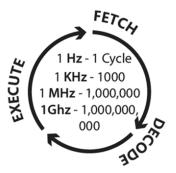


#### **UNITS OF MEASUREMENTS & COMBINATIONS**



Number of Switches	Possible Combination
1	2
2	4
3	8
4	16
5	32
6	64
7	128
8	256
9	512
10	1024

#### THE FETCH-DECODE-EXECUTE CYCLE



The Processor (CPU) FETCHES from Main Memory (RAM) the data and/or instructions which it then **DECODES** and finally **EXECUTES**. One iteration of this cycle is measured in 1 hz.

Modern computers today are measured in Ghz – which equates to billons of instructions per second.

Memory (also known as Primary Storage) is divided into two main types: RAM and ROM. Other types include the registers and the cache.

> **Purpose** Stores data and instructions during

processing

Volatility Volatile, data lost without power

Read/Write Read and write

## **RAM**

**ROM** 

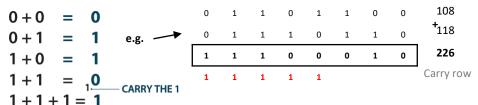
Stores boot-up instructions set by the manufacturer

Non-volatile, data remains after power switched off

Read only

A few megabytes in size

#### **BINARY ADDITION RULES**



Binary addition is like addition you are familiar with. When you find that you don't have enough space in the place value you are in, you move over to the next place holder. For example, if I add 5 + 5 in our number system (denary), I create 10 which means I need a 1 in the 10s column and a 0 in the 1s column. In binary, if I add 1 + 1 I get 2, this means I would need to put a 1 in the 2 column and a 0 in the 1 column.

The key thing about technology convergence is the fact that Computers are getting faster, networks are capable of carrying data over greater distances and at high speed, and storage capacity is increasing all the time. When this is combined with the advances in micro and nanotechnology, we are seeing increasing amounts of technological breakthroughs on

devices that are getting smaller and smaller.

The applications of such technology are

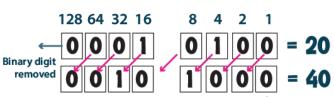
becoming very far reaching.

**CARRY THE 1** 

Capacity

Usually several gigabytes

#### **BINARY SHIFTS**



If you shift left you multiply If you shift right you divide

Shift	left=	right =
1	x 2	÷2
2	x 4	÷4
3	x 8	÷8
4	x 16	÷16
5	x 32	÷32

By moving a binary number to the left you increase by an order of 2, it is the reverse when you

move it to the right.

Add a 0 to

the empty

holder

place value

#### TIMELINE OF COMMUNICATION METHODS



#### **Year 7 Computer Science – Autumn Term**

#### **COMPUTATIONAL THINKING**



#### **LOGICAL DEDUCTION**

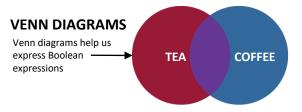


Computer Science



Electricity is in Two States (on/off). On can be represented by 1/TRUE and Off can be represented by 0/False.

**Logical deduction** is the process of working out if something is TRUE or FALSE. Logical thinking helps Computer Scientists work out how to solve problems. George Boole was an English mathematician who worked on Logical Algebra and Boolean Algebra (and the Boolean data type) is named after him. The Boolean Operators AND, OR, and NOT are also named after him.



#### All lessons and support materials the Computer Science Tile.

can be found under



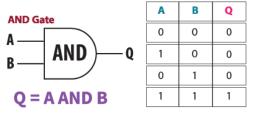
All classwork and will be done in your

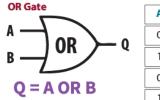
Class Team.



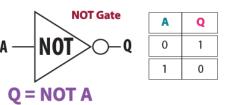
All communication will be via ClassCharts.

#### LOGIC GATES AND THEIR TRUTH TABLES





Α	В	Q
0	0	0
1	0	1
0	1	1
1	1	1

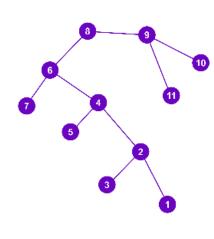


#### COMPRESSION

Compression means reducing the amount of data needed to store or transmit something.

- **Lossy compression** means that some of the original data will be lost.
- Lossless compression means that none of the original data will be lost.

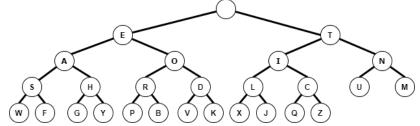
# Ø 5



#### **ABSTRACTON IN PRACTICE**

We can use the principles of **Computational Thinking** (including Abstraction and **Decomposition**) to aid us in the solving of a problem like a maze. This allows us to then see the shortest path by using a Graphing technique. From this point onwards, we can apply the solution to solving a maze to everyday activities like routing data through a network, or plotting the most effective route using GPS.

#### **ABSTRACTON IN PRACTICE #02**

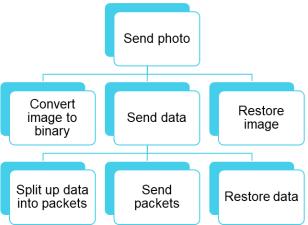


Again, using Computational Thinking we can analyse the most common letters in the alphabet to create a more efficient blinktyping system for people who have severely restricted mobility. By winking with your left or right eye, you can quickly access the most common letters and be within the least common letters within four winks.

#### **DECOMPOSITION IN PRACTICE**

By breaking down the act of sending a Photograph over the Internet, we can see what would be required in order to create a system that will send and receive images over a network.

The four main pillars of Computational Thinking are: Abstraction, Decomposition, Pattern Recognition, & Algorithm Design.



#### **Year 7 History, Term 1:**

## **Introduction to History Skills –** Tollund Man Investigation **1066**– How did William I become 'the Conqueror'?

#### **History Skills**

Historians are like **detectives.** We must use **evidence** to explain the past. There are two types of evidence historians use: sources & interpretations. We can use evidence to make **inferences** (explain what we can learn). We must consider how **reliable** evidence is.

'Handy' source questions:
What is the source? Who made the source? When did they make it?
Why did they make it? Where did they get their information?

Sources	This is evidence produced <b>at the time</b> of the period you are studying (diary, newspaper, artefacts, official records, photographs)	
Interpretations	This is evidence produced in the <b>modern period</b> using sources. (historian's books, documentaries, horrible histories)	

#### **1066 Succession Crisis: Timeline**

6th January 1066 - Harold Godwinson crowns himself King of England

**20 September 1066** - Harald Hardrada, a Viking claiming the English throne invades England with more than 10,000 men in 200 longships. Battle of Gate Fulford.

**25 September 1066** Harold Godwinson, defeats and kills Harald Hardrada at the Battle of Stamford Bridge

**27th September 1066** - The William the Duke of Normandy (France), invades the south of England from France. His Normans pillage and burn the south

**14 October 1066** – The Battle of Hastings. Harold marches south to meet William, where they battle at Hastings. William defeats Harold, who is killed.

**25**<sup>th</sup> **December 1066** – William the Conqueror is crowned king of England.

	Key Words	
Anglo- Saxon	The Anglo-Saxon age in Britain was from around 410AD to 1066. They were a mix of tribes. The three biggest were the Angles, the Saxons and the Jutes.	
Vikings	People from Scandinavia who were fighters, sea-travellers, traders & farmers.	
Norman	Normandy was a region of France, ruled by a Duke	
Witan	Anglo-Saxon noblemen who advised the king and chose the successor	
Earldoms	England was divided into 6 areas of land, each controlled by an Earl.	
Succession	When a title (such as king) changes from one person to another	
Heir	The person who will inherit a title or rank after someone death	
Invasion	Attacking a country by force to take land or power	
Claimant	Someone who thinks they deserve to be the next king.	
Danelaw	Area in the North of England with Viking laws and customs.	
Pope	Leader of the Catholic Church	
Conquer	Someone who takes over land, using force.	
Fyrd	Part of English army made up of peasants, who were untrained and unexperienced.	
Thegns	Noblemen who had some experience fighting for the English Army.	
Housecarls	Professional, full-trained, experienced Anglo-Saxon soldiers.	
Archers	Soldiers who used a bow and arrow against the enemy.	
Cavalry	Soldiers who fought on horseback.	

#### **1066 Succession Crisis**



In 1066, King Edward the Confessor died with no heir. It was up to the Witan to decide who the next king would be. 4 different claimants wanted to be king.

## Harold Godwinson Earl of Wessex

#### **Harold Godwinson**

English, Earl of Wessex

Godwinson was the richest and most powerful man in England. His sister has been married to Edward. He claims Edward promised him the throne on his deathbed. Godwinson has the support of the English and was chosen by the Witan to rule.

#### **William of Normandy**

French, Duke of Normandy

William was a distance relative of Edward. He claims Edward promised him the throne and Godwinson has sworn an oath to support hum in 1064. William was an experienced ruler and had the support of the pope. But the English people didn't want a French king.



## Harald Hardrada King of Norway

#### **Harald Hardrada**

King of Norway

Hardrada's father has promised the throne by the previous king. Hardrada thought he was entitled to the throne as it had been promised to his family. He was a powerful Viking warrior and had some support in the Danelaw.

#### **Edgar Aetheling**

#### English

Edgar was King Edward's closest living relative. However he was only 14 when the king died and had no army, no money and no experience. Many thought he was too young to rule and protect the country from invasion.

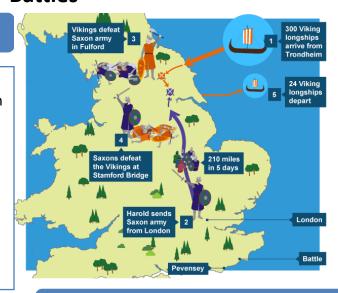


#### **Battles**

#### **English vs Vikings**

On the 20<sup>th</sup> September 1066, the Viking arrived in England. They fought Earls Edwin and Morcar at the **Battle of Gate Fulford**. The Vikings were victorious.

King Harold marched his army quickly North and met the Vikings on 26<sup>th</sup> September at the **Battle of Stamford Bridge**. Here the English were successful and Hardrada was killed, removing the Viking threat.

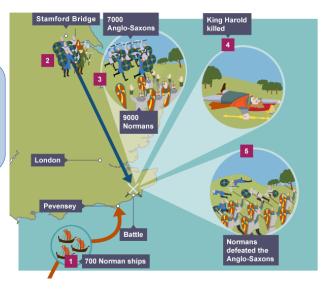


#### **English vs Normans**

On the 27<sup>th</sup> September, William of Normandy arrived on the South Coast of England. Harold is forced to march his tired army South again. On the 14<sup>th</sup> October 1066 the English and the Normans fight in the **Battle of Hastings**.

William's army is larger and made up of experienced soldiers. Harold's army is mostly peasants (fyrd). However, Harold has the better position on top of hill and only needs to hold his defensive line to win.

William wins the battle of Hastings due to his skill and tactics (such as feigned retreat), Harold's mistakes (such as standing in the front lines) and a bit of luck. Harold is killed in battle.



#### Year 7 History, Term 2:

## Norman Conquest- Did the Norman Bring a 'truckload' of trouble?

#### **Norman Invasion Timeline**

25<sup>th</sup> December 1066 - William is crowned king of England at Westminster Abbey.

1068 – William begins the building of his first castles. A Motte and Bailey castle is built in Warwick to keep control of the Midlands.

1069-70 — Rebellions in the North of England leads to the Harrying of the North where William devastates the north to stop the rebellions. He burns fields, cattle and destroyed villages leading to the death of 100,000 people die.

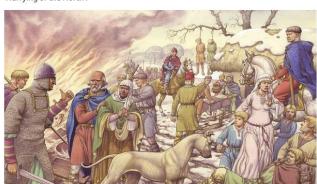
1085 – William orders the Domesday Book, a survey of England

1087 – William I of England dies

After the Battle of Hastings, William had to assert his power over the rest of England. When he was crowned King of England on 25<sup>th</sup> December 1066 he still faced challenges.

There were three main ways he consolidated his control of the country: the building of **castles**, the establishment of the **feudal system**, and the creation of the **Domesday book**.

William's 'scorched earth' policy came to be known as the 'Harrying of the North'.

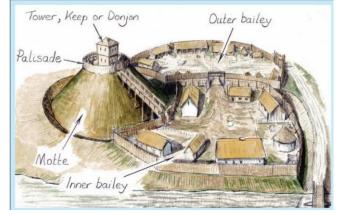


There were lots of **rebellions** in the North of England. William responded harshly with the **Harrying of the North** in the winter of 1069-70

'he made no effort to restrain his fury and punished the innocent with the guilty. In his anger he commanded that all crops, herds and food of any kind be brought together and burned to ashes so that the whole region north of the [river] Humber be deprived of any source of sustenance'.

<u> </u>			
Key Words			
Rebellion	Acts of resistance against a leader.		
Control	Having power or influence other others		
Motte and Bailey	First castles built in England by William I. William built around 700 castles to keep control and prevent rebellion.		
Feudal System  New social system introduce by William I. This ensure the king had the most power and owned all the land. People has to remain loyal to the king to keep their status.			
Domesday Book	In 1085 William I created a record of all the land and wealth in England. This allowed William to increase control and ensure taxes were correct.		
Bayeux Tapestry	An embroidered cloth created in the 1070s to tell the story of the Norman Conquest from the Norman point of view.		
Homage or Oath	To promise to give allegiance to someone (e.g. King) publically.		
Villein	Peasants at the bottom of the Feudal System		
Noble	Barons, Earls or other rich land owners who pledge their loyalty to William in the Feudal System		
Knight	A soldier who serves a noble, they usually ride horses and wear amour. Ruled over the villeins		
Тах	Compulsory money paid to the king or government.		
Archbishop of Canterbury	Most important member of the Church in England. Pope's representative in the country. Performed coronation ceremony of the new king.		

William I built 700 castles in England. Norman castles were often built in locations that were considered of strategic value. The first Norman castle in England was built a few miles from where William landed and was used as a base for soldiers to terrorise the local population and gather supplies. William then started to build castles in major cities to prevent rebellion.

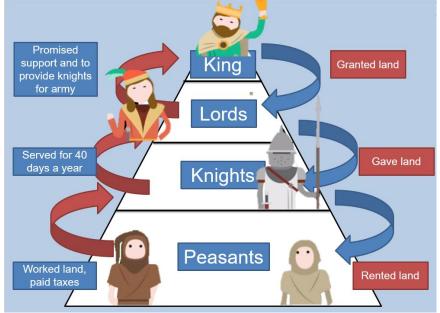


Keep

Wooden

Bridge

Bailey



 The barons had to fight for the king and train knights for him. The knights then received some land from the barons. The villeins worked on the land for the knights and barons. They paid them

William replaced the social

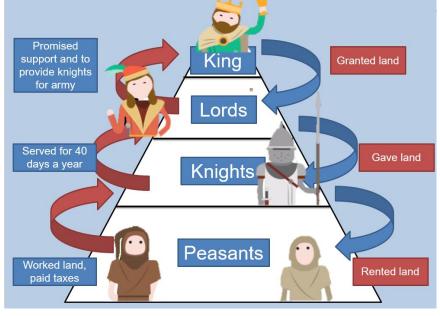
system with the feudal

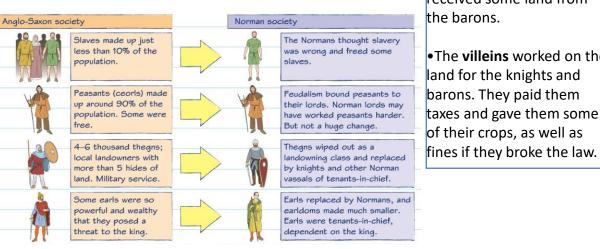
The king owned all the

land but gave some to the

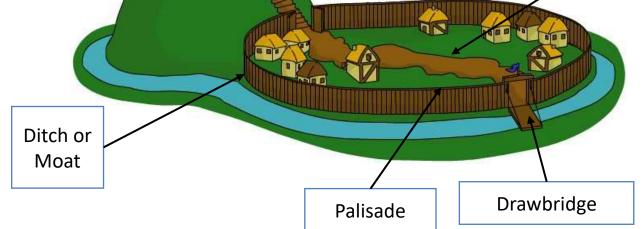
system:

barons.





Motte



Between 1085-86 the **Domesday Book** was created, it **recorded** who owned what land in England so that William knew what tax he could collect. It assessed the wealth and assets of his subjects throughout the land. This survey was also needed to asses the state of the country's economy in the aftermath of the Conquest and the unrest that followed it. The survey also showed who lived where so William knew where he could get soldier if the country was invaded.

## Map skills

Skill	Key ideas	Site One	Key terms	Definitions
Field Sketches	<ol> <li>Identify the landscape that needs to be sketched.</li> <li>Write a title that will help to locate the sketch, e.g. 'Site One'.</li> <li>Draw an outline of the main features of the landscape with a pencil, e.g. hills and valleys or buildings and roads.</li> <li>Add detail to the sketch to record more information.</li> <li>Annotate the field sketch to give more information e.g. weather.</li> </ol>	Mountains Single 1	Country	Land that is controlled by a single government (e.g. UK).
		Line of latitude  Line of longitude	Continent	Large solid area of land (Africa, Asia, Europe, South America, North America, Antarctica, Australia).
Annotated	Annotate and label the photograph to give more information about the		Annotations	Notes added to a diagram to explain things.
photographs Compass	landscape and conditions, including things which the photo doesn't capture – perhaps how busy the area was, or wildlife seen in the area.  The four main points of the compass are North, East, South and West.		Мар Кеу	Features on a map are represented by a symbol. On each map the KEY tells you what each symbol means.
Directions	Between each of these there are four other points: North-East, South-East, South-West and North-West. This makes an eight-point compass.  Ordnance Survey maps are printed so that North is at the top of the map.	Equator Prime meridian  47 48 49  34	Latitude	How far north or south of the Equator. (Horizontal lines)
Grid	Find the grid square containing the symbol you are looking for.	3	Longitude	How far east or west of the Prime Meridian. (Vertical lines)
	<ol> <li>Follow your forefinger down (or up!) until you reach a number on the vertical line. This is the first two digits of your 4 figure grid reference.</li> <li>Follow your thumb right (or left!) until you reach a number on the horizontal line. This is the final two digits of your 4 figure grid reference.</li> <li>For a 6 figure grid reference, now decide how many tenths across the</li> </ol>	33 32 47 48 49 32 baseplate	Axis	The lines on a graph:  • X-axis goes across.  • Y-axis goes up.
			Independent Variables	The thing you change in an experiment to see what happens, that are shown on a graph.
		direction-of-travel	Scale	Shows how map distance relates to real life (e.g., 1 cm on the map = 1 km in real life).
	goes at the end i.e. AA7 BB <u>5</u> to give you the six numbers.	index pointer	Gradient	How steep something is (like a hill).
Height on maps	Spot heights and triangulation pillars show exact heights by using a black dot with a number next to it, or a blue triangle with a number next to it. Contours are brown lines drawn on maps that join places of the same	declination marks orienting arrow orienting lines	Equator	An imaginary line around the middle of Earth (0° latitude).
	height. It is possible to use them to see the shape/gradient of the land.	needle	Tropics of	Imaginary lines at:
Measuring distance	Use a piece of string that does not stretch, or the edge of a piece of paper, to follow the route you wish to measure – then compare it to the scale.	nousing s candi	Cancer and Capricorn	<ul><li>23.5° North (Tropic of Cancer),</li><li>23.5° South (Tropic of Capricorn).</li></ul>

Amazing Africa				
Key Idea	Key knowledge	Continues Constituted Constitu	Key	
Geography of Africa	<ul> <li>54 countries in the continent of Africa today, according to the United Nations. They are very diverse in terms of their physical landscapes, ranging from hot deserts to tropical rainforests, flat to mountainous, coastal to land-locked.</li> <li>Africa is second-largest continent and is bounded by the</li> </ul>	ALGERIA LIBYA  EGYPT  Lafe  AMAIRTANIA  Problem  Trabulati  NIGER  CHAD  Date SUDIAN  Bandala  Trabulati	Pero Ster	
	<ul> <li>Mediterranean Sea, the Red Sea, the Indian and Atlantic Ocean.</li> <li>It is divided in half almost equally by the Equator.</li> <li>It's highest point is Mt. Kilimanjaro (5895m), while the Danakil Depression is actually 125m below sea level!</li> </ul>	SOUTH Assertion ATLANTIC OCEAN  OCEAN  South State of the Column of the	Cult	
Cradle of Mankind	Africa has a unique place in human history. Widely believed to be the "cradle of humankind," Africa is the only continent with fossil evidence of human beings and their ancestors through each key stage of their evolution.	Political  NAMBIA  NAM	Rura	
Bantu Migration	Migration patterns define the cultural geography of the continent. The Bantu migration involved people moving Southeast from the Niger region and a great exchange of skills, ideas and tools occurred, helping to give Africa it's diverse cultural landscape we see today.	NORTH  ATLANTIC  OCEAN  ATLANTIC  ATLANTIC  OCEAN  ATLANT	Pop den Nat Reso	
Colonialism	<ul> <li>Colonialism forced environmental, political, social, and religious change to Africa.</li> <li>Natural resources, including diamonds and gold, were overexploited. European business owners benefitted from trade in</li> </ul>	Representation of the second o	Slav	
	these natural resources, while Africans laboured in poor conditions without adequate pay.	ACCHANIC SOUTH  ATLANTIC OCEAN  Balla  Control	Phy: Geo	
Redrawing the map	European powers drew new political borders that divided established governments and cultural groups. These new boundaries also forced different cultural groups to live together.	Physical  Physical	Reli	
	This restructuring process brought out cultural tensions, causing deep ethnic conflict that continues today.	Comment boundary Figure 1 Lake 9 500 1,000 Miles  Whardang peak 9 500 1,000 Miles  Whardang peak 9 500 1,000 Miles  Copylight 6 2020 www.magachworld.com	Dep	

Key terms	Definitions
Perceptions	The way in which something is regarded, understood, or interpreted based on secondary sources e.g. the media.
Stereotype	An often unfair and untrue belief that many people have about all people or things with a particular characteristic.
Cultural Bias	Based on stereotypes, the notion that a group of people/countries have the same characteristics simply because of the region/continent they are from.
Rural	An area of low population density e.g. the countryside
Urban	An area of high population density such as a city.
Population density	Number of people per kilometre squared.
Natural Resources	Useful materials found in or under a country which can be used to develop, sell, or 'used'.
Slave trade	The movement of slaves from one part of the world to another against their will.
Physical/Human Geography	Physical= the natural Geo of a place whereas human = man-made/altered interactions with the landscape.
Relief	The shape and height of the land (e.g. Ethiopian Highlands)
Depression	A low lying area of land.

## **Amazing Africa**

## Key Idea Key knowledge

Slave Trade

#### Between the 15th and 19th centuries, more than 15 million Africans were transported across the Atlantic Ocean to be sold as slaves in North and South America.

- Millions of Africans died in the slave trade. Most slaves
  were taken from the isolated interior of the continent.
  They were sold in the urban areas on the West African
  coast. They died in the brutal process of their capture, on
  the forced migration to trading centres and on
  the treacherous voyage across the Atlantic Ocean.
- Calculations have projected that if there had been no slave trade, the population of Africa would have been 50 million instead of 25 million in 1850. Communities and infrastructure were so damaged by the slave trade that they could not be rebuilt and strengthened before the arrival of European colonisers in the 19th century.
- While Africans suffered greatly during the slave trade, they made tremendous economic, political, and cultural contributions to the societies that enslaved them. Many Western cultural practices, especially in music, food, and religion, are a hybrid of African and local customs.

#### Fair Trade



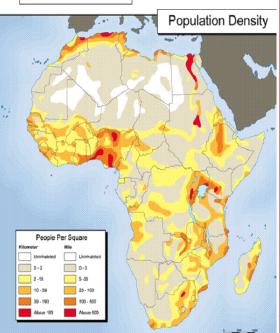
Fairtrade changes the way trade works, through getting better prices for farmers, helping create decent working conditions and achieve a fairer, more sustainable deal for farmers and workers in developing countries such as Ethiopia.

#### Morocco



Morocco is a vibrant and diverse country, and many tourists first contact with this is the rich and energetic culture of Marrakech, but it is very different in the Atlas Mountains. The country depends heavily on tourism for income, especially in the rural mountainous areas and in Marrakech.





### Key Idea

### Key knowledge

## Cotton and Coffee

Coffee and cotton are two important crops grown in a variety of countries in Africa. Around 15 million Ethiopians rely on coffee for a living and it is the country's top export! Almost all of Ethiopia's coffee is grown on small family farms on the hillsides of the Ethiopian Highlands, where it has been grown for over 1000 years! In Cameroon, the cotton is picked by hand. After harvesting, the cotton is taken to a factory and is cleaned of any twigs or stones. The fibres are separated and remove any seeds or smaller particles of dirt. The fluffy cotton is then dried and pressed into bales, ready for selling, to make into cloth for clothes.

#### River Nile

- Most of Egypt is a vast desert
- One of the longest rivers in the world
- It flows northwards from the mountains of Tanzania for over 6,600km on its way to the Mediterranean Sea.
- It has two main tributaries the Blue Nile and White Nile and flows through several countries along it's course.
- For more than 6,000 years the river has enabled people to live in Egypt. Today, 50 million people live within a few miles of the river and completely depend on its water.
- Ancient Egyptians invented a number of different ways to bring water from the Nile up onto dry land.
- Farmers in Egypt have traditionally relied on the Nile bursting it's banks to fertilise their lands.
- Climate change, and the installation of dams to generate electricity, has stopped this flooding – and this causes conflict.

## **Life of Jesus**

	Beliefs	Key terms	Definitions
Jesus	Born in <b>Bethlehem</b> to Mary and Joseph. He was visited by the wise men and shepherds and said to be the Messiah.	Ascension	After 40 days being resurrected, Jesus ascended (went up) to Heaven.
	<ul> <li>At age 30 Jesus was baptised by John the Baptist in the River Jordan.</li> <li>By the age of 31 Jesus has called all 12 disciples to follow him.</li> <li>Jesus performed many the miracles e.g. The Loaves and Fishes, Calming the storm, walking on water.</li> <li>When Jesus arrived in Jerusalem this is the start of Holy Week, which</li> </ul>	Atonement	Jesus make up for our sins by dying on the cross. His sacrifice.  "God loved the world so much he gave his only Son" Bible
Parables	<ul> <li>Prodigal Son: Father has 2 sons who he gives their inheritance. One son stays, the other leaves and wastes /spends his money. He returns sorry</li> </ul>	Baptism	To show faith and commitment to Jesus and Christianity. Completed using water showing a fresh start to the faith.
	and his father forgives him.  • Widows Offering: At the temple collection rich men give lots, but a	Disciple	A believer and follower of Jesus.
	<ul> <li>widow gives only one coin. Jesus tells the disciples she has given all she has.</li> <li>Lazarus and the Rich man. Lazarus begs each day, the rich man ignores</li> </ul>	Incarnation	God lives through Jesus. Jesus is in part God and part of the Trinity. "The Word became flesh and lived for a while among us" Bible
	him. When the rich man dies he sends Lazarus to heaven and the rich man to Hell.	Messiah	The saviour; Jesus was born to save mankind's sins.
Holy Week	<ul> <li>Palm Sunday: Jesus arrives in Jerusalem; said to be the Messiah, many people cheer and lay down palm leaves.</li> <li>Maundy Thursday: Last Supper with the disciples. The Eucharist is established with bread and wine. Jesus calls Judas out for betraying him</li> </ul>	Miracle	A natural wonder that cannot be explained. Jesus performed these because he was the incarnation or son or God.
	and is arrested by Roman guards in the evening.  • Good Friday: Jesus is crucified after 6 hours suffering on the cross. Jesus	Omnipotent	God is all powerful
	atones mans sins.  • Easter Sunday: Jesus resurrected when 3 women see the tomb stone	Parable	Stories told by Jesus with hidden messages
	moved and empty. They are told by an angel Jesus is reborn.	Resurrection	Jesus is reborn comes back to life after death.
Jesus die?	<ul> <li>Jesus died to make up for or atone mankind's sins.</li> <li>God must punish sinners, but also loved mankind, so he sacrificed Jesus to take on the punishment for mans sins.</li> <li>This meant that mankind would be forgiven by God and they could go to Heaven (salvation)</li> </ul>	Salvation	Acceptance into heaven by God.
		Trinity	God is One, but in 3 parts. Father, Son, Holy Spirit.

## **Christian Practices**

#### **Practices** Worship • Worship – to praise, connect, show love and respect to God. • Communal worship with others at church. Liturgical or non Liturgical. • Private worship more personal with God e.g. Prayer • Altar: The table in the centre at the front of the congregation. It **Features** is used for Eucharist service. in a • Font: Basin to hold water for infant baptism. It is near to the Church door to represent entering and joining the church. • Lectern: Stand which holds the Bible. • **Pulpit**: Podium stand from which the preacher talks and gives his sermon to the congregation. • Water is used at baptism to represent a fresh start – this Baptism represents starting a new life as a Christian. • Infant Baptism: Baby is welcomed to the Christian church. They are protected by God once baptised. This also means they can take part in other sacraments like Eucharist when growing up. Believers Baptism: When a person chooses to be baptised, so they are old enough to understand and make this decision. They are committed to God and Jesus and showing their faith. Jesus was also baptised as an adult. Journey to a religious and sacred place important to that Pilgrimage religion. Reasons to go: Feel close to God at religious sites, mix with other Christians, learn history of their religion, reflect on their faith – taking a break from usual life. Santiago de Compostela: Pilgrimage site where St James (disciple of Jesus) body is buried. Pilgrimage journey to walk 500 miles along a pilgrimage route in Spain.



#### THE LORD'S PRAYER

Our Father, who art in heaven, hallowed be Thy name. Thy kingdom come. Thy will be done on earth as it is in heaven. Give us this day our daily bread and forgive us our trespasses as we forgive those who trespass against us. And lead us not into temptation, but deliver us from evil. Amen.

	Key terms	Definitions
	Baptism	A ceremony to join the Christian church and community.
	Eucharist	Service at church to remember the Last Supper and Jesus' atonement.
	Liturgical Worship	Always the same; following a set pattern and order. The same hymns and prayers. E.g. Eucharist.
	Non Liturgical Worship	Different each time, like attending regular worship on Sunday. Based on the sermon, teachings and reading from the Bible.
	Pilgrimage	Journey to a place of religious importance.
	Sacrament	Important events in Christians lives where Christians receive Gods love.
	Sermon	The talk and teachings given by the preacher at worship, from the pulpit.









## **Christian Practices**

#### **Practices**

# Service to remember Jesus' sacrifice and atonement using bread and wine. To remember the Last Supper and follow the instructions Jesus gave at this. "Take, eat, this is My body..... Do this in remembrance of me". Jesus.

- Catholic Eucharist they bless the wine and bread at the altar and read the Eucharist prayer.
- Protestant Eucharist, the wine is often given in small cups and can be non alcoholic. They read the story of the Last Supper.

## Role of the church

**Eucharist** 

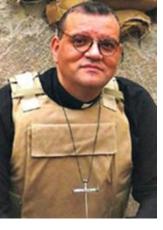
- Church is about the people; who they are and how they support their community.
- Much church support is given to the local community, in areas such as food and clothes banks, groups to help bring people together like the elderly or mother and baby groups.
- The Church plays a role nationally and globally too.
- Around the world are church groups and charities supporting people that need help from poverty, discrimination, that are in war zones and more.
- These groups and people see themselves as carrying on the good work that Jesus did. This is called discipleship continuing the faith and work of Jesus.

#### **Teachings to help others**

The Good Samaritan and The Widows Offering
"Let's not love with words ... but with our actions" Bible
"Blessed are the peacemakers" Jesus
"God made man in his image" Bible
"For I was hungry and you gave me something to eat. I was thirsty and you gave me something to drink". Bible









## **Judaism**

#### **Teachings: Origins of Judaism**

Abraham	•
	•
	•
	•
	•

Abraham believed in **One God**, but many others including his father believed in **idols**.
Abraham smashed the idol statutes and started to preach

Abraham smashed the idol statutes and started to preach about one God.
God spoke to Abraham and told him he had been chosen. He

grant him his own nation and people and protect him.
This agreement between God and Abraham and his people was called the covenant.
God said to Abraham: "Leave your country.... I shall make you

must lead his people to the promised Land. Here God would

a great nation... I shall bless those that bless you".

God gave Abraham 10 tests to complete. The first to leave and go to the Promised Land.

• The last test was to sacrifice his son **Isaac**. Both Isaac and Abraham agreed to this, but at the last moment God sacrificed a **ram** instead.

#### Moses

 Moses lived in Egypt as an Israelite. The Egyptians saw the Israelites as a threat so forced them into slavery.
 Moses killed an Egyptian guard attacking a slave so was forced

to flee to the desert.Here God spoke to him in a burning bush and told him to free

his people the Israelite slaves.

 Moses unleashed 10 Plagues on the Pharaoh using the power of God.

 The Pharaoh let Moses go with his slaves but they were chased and trapped at the Red Sea.

Moses held up his staff and used the power of God to part the

Red Sea to escape.

• Moses said "Fear not, stand your ground... the Lord himself will fight for you".

• After this Moses and his people spent 40 days in the desert.

Here on Mount Sinai Moses received the **10 Commandments**.

## YEAR 7 FRENCH – PRONUNCIATION AND THE ALPHABET

We need to make some new sounds when we speak French. You might feel as if your mouth and nose have had a bit of a workout when you try to sound 'really French', because you're making different shapes with your mouth, tongue – you even use your nose more!







## L'alphabet

A ah H ash O oh V vay

B bay I ee P pay W doobla-vay

C say J shee Q coo X ix

D day K car R air Y ee-grek

E er L ell 5 ess Z zed

Feff Memm T tay

G shay N enn U ooo



## Essential numbers you need to know to build the others Un Deux **Trois** Quatre Cinq Six Sept Huit Neuf Dix Onze Treize Quatrorze Quinze Douze **Trente Quarante Cinquant** Seize Vingt Soixante Soixante Quatre Quatre- Cent -dix vingts vingt-dix



#### **Describing people**

Personal pronouns

je = 1 **tu** = you il = he

elle = she **on** = one (we)

**nous** = we **vous** = you (formal) ils = they (m)elles = they (f) avoir - to have

the school

the dog

the lorry

**i'**ai = I have tu as = you have

il a / elle a = he has / she has

we have nous avons = **vous** avez = you (formal) have ils ont / elles ont = they have

**MASCULINE** 

le collège

le camion

le chien

être – to be

ie suis = Iam tu es = you are

il est / elle est / on est = he is / she is / one is

**nous** sommes = we are vous êtes = you (formal) are

ils sont / elles sont = they are



FEMININE		PLURAL	
	some schools	des collèges	
	some dogs	des chiens	
	some lorries	des camions	
la voiture	some cars	des voitures	
la maison	some houses	des maisons	W
la chaise	some chairs	des chaises	cc

vert(e) bleu(e) orange rouge violet(te) rose brun(e) noire(e) blanc(he) Why do certain colours have (e)?

The word for 'some' is: des

Nouns are things. They can be singular or plural.

In French, nouns can be 'masculine' or 'feminine'.

**Using nouns** and adjectives

The words for 'a' and 'an' are: un and une

the car

the house

the chair

J'ai une voiture **verte** 

Tu as une chaise noire

Il a des chiens bruns

Nous avons une maison *rouge* 

The words for 'the' are: le, la and les.

#### YEAR 7 SPANISH – PRONUNCIATION AND THE ALPHABET

2

dos

12

3

tres

cuatro

We need to make some new sounds when we speak Spanish. You might feel as if your mouth and nose have had a bit of a workout when you try to sound 'really Spanish', because you're making different shapes with your mouth, tongue – you even use your nose more!

uno



6

seis

16

#### **SPANISH ALPHABET**

ocho



10

diez

20

A – ah	J – h
B-bay	K-I
C-say	L – e
D - day	M -
E-ay	N -
F - ef-fay	Ñ-
G – hey	0-
H - ah-chay	P-F
I - eee (like we)	Q-

7

siete

17

ho-tah R - air-ray kah el-lay em-may en-nay en-yay oh pay COO

9

nueve

19

S-es-say T-tay U - 00 (like boo) V - 00-vay W - oo-vay doble X-ec-keys Y-yay Z - zay-tah

Care I	
A.	
	90
	65





TONGUE TWISTERS IN SPA

٩N	IS	Н
•		
1		

	3.00	12		-	15	10	**	10	12	20
	once	doce	trece	catorce	quince	dieciséis	diecisiete	dieciocho	diecinueve	veinte
	21	22	23	24	25	26	27	28	29	30
	veintiuno	veintidós	veintitrés	veinticuatro	veinticinco	veintiséis	veintisiete	veintiocho	veintinueve	treinta
	31	32	33	34	35	36	37	38	39	40
	treinta y uno	treinta y dos	treinta y tres	treinta y cuatro	treinta y cinco	treinta y seis	treinta y siete	treinta y ocho	treinta y nueve	cuarenta
	41	42	43	44	45	46	47	48	49	50
	cuarenta y uno	cuarenta y dos	cuarenta y tres	cuarenta y cuatro	cuarenta y cinco	cuarenta y seis	cuarenta y siete	cuarenta y ocho	cuarenta y nueve	cincuenta
	51	52	53	54	55	56	57	58	59	60
	cincuenta y uno	cincuenta y dos	cincuenta y tres	cincuenta y cuatro	cincuenta y cinco	cincuenta y seis	cincuenta y siete	cincuenta y ocho	cincuenta y nueve	sesenta
Н	61	62	63	64	65	66	67	68	69	70
	sesenta y uno	sesenta y dos	sesenta y tres	sesenta y cuatro	sesenta y cinco	sesenta y seis	sesenta y siete	sesenta y ocho	sesenta y nueve	setenta
	71	72	73	74	75	76	77	78	79	80
	setenta y uno	setenta y dos	setenta y tres	setenta y cuatro	setenta y cinco	setenta y seis	setenta y siete	setenta y ocho	setenta y nueve	ochenta
	81	82	83	84	85	86	87	88	89	90
	ochenta y uno	ochenta y dos	ochenta y tres	ochenta y cuatro	ochenta y cinco	ochenta y seis	ochenta y siete	ochenta y ocho	ochenta y nueve	noventa
	91	92	93	94	95	96	97	98	99	100
	noventa v uno	noventa v dos	noventa v tres	noventa v cuatro	noventa v cinco	noventa v seis	noventa v siete	noventa v ocho	noventa v nueve	cien

cinco



#### **Describing people**

Personal pronouns

yo = | tú = you é| = he

ella = she

**Ústed** = you (formal)

tener – to have

tengo = I have

tienes = you have

tiene = he has / she has

**tenemos** = we have

tenéis = you (plural) have

tienen = they have

ser – to be

soy = I am

eres = you are

**es** = he is / she is

somos = we are

sois = you (plural) are

son = they are

nosotros = we
vosotros = you (pl)
ellos = they (m)
ellas = they (f)

Often, Spanish doesn't bother to use these pronouns. They just use the verb. How can you tell the difference?
Look at the ending of the verb!



## **Using nouns and adjectives**

Nouns are things.
They can be singular or plural.

In Spanish, nouns can be 'masculine' or 'feminine'.

	MASCULINE		FEMININE		PLURAL
the school	el colegio			some schools	unos colegios
the dog	el perro			some dogs	unos perros
the lorry	el camión			some lorries	unos camiónes
		the	la montaña	some	unas
		mountain		mountains	montañas
		the house	la casa	some houses	unas casas
		the chair	la silla	some chairs	unas sillas

The word for 'some' is: unos / unas

The words for 'the' are: el, la and los and las.

The words for 'a' and 'an' are: un and una



Tengo una casa <u>roja</u> Tengo un perro <u>rojo</u>

<u>Check the video – why do</u> <u>the adjectives change?</u>



#### LINE

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.



#### **TONE**

**TONE** means the lightness or darkness of something. This could be a shade or how dark or light a colour appears.



#### SHAPE/FORM

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** 



#### **TEXTURE**

**TEXTURE** is the surface quality of something, the way something feels or looks like it feels. There are two types of texture: ACTUCAL TEXTURE and VISUAL TEXTURE.

ACTUAL TEXTURE: really exists so you can feel it and touch it VISUAL TEXTURE: created using different marks that represent actual TEXTURE



#### **COLOUR**

There are 3 primary COLOURS: RED,

By mixing any 2 PRIMARY COLOURS together you create SECONDARY COLOURS; ORANGE, GREEN, PURPLE



#### **PATTERN**

**PATTERN** is a design that is created by repeating LINES, SHAPES, TONES or COLOURS. Patterns can be manmade or natural.



# GREEN VERMILLION BLUE PRIMARY COLORS SECONDARY COLORS TERTIARY COLORS

#### Giorgio Morandi

Morandi was an Italian painter and printmaker. His work is known for it's simplicity. He used a range of strong, directional mark making to create a sense of space, form and texture.



#### Michael Craig Martin

Michael Craig Martin is an Irish born, American artist known for his paintings of objects. He simplifies his images, using bright, bold, block colour schemes with overlapping lines and shapes.



#### Sonia Delaunay

Delaunay was a French artist, printmaker and textile artist. She spent most of her working life in Paris. Her work was largely focused on bright, bold, sometimes weaving and overlapping shapes and patterns.

Lewin in a British artist and

the natural world around her.

stones and shells within her

images. Her work is abstract

bold colour and

pattern.

printmaker. Her work is inspired by

Using found objects like feathers,

through simplification and use of

#### ARTIST RESEARCH SENTENCE STARTERS

- My chosen artist works with the materials:...
- I like/don't like the work of my chosen artist because...
- The mark making in the image creates...
- In my own work I will try to create...in the style of my chosen artist.
- I would describe the pattern/tone/detail in this image as...



#### **SENTENCE STARTERS**

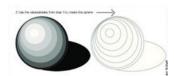
I can vary tone by...

- layering mark making
- using a range of pencils
- varying the pressure of my marks
- using an eraser to add highlights

My work is successful because... I could develop my work further by... My design was inspired by the work of...













# FOUNDATIONS Exploring the Elements of Music



The volume of the Music



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







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**

Italian terms relating to Tempo:

Allegro-fast, Vivace-lively, Presto-very fast, Andantewalking pace, Adagio-slow, Largo-very slow

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

#### Italian terms and musical symbols relating to **Dynamics:**

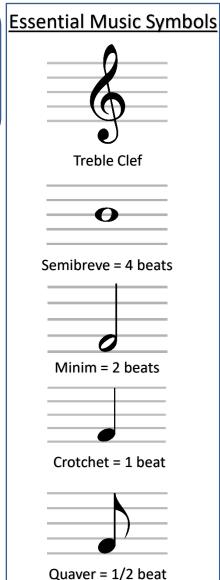
Fortissimo (ff)-very loud, Forte (f)-loud, Mezzo Forte (mf)-medium loud,

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



#### **FOUNDATIONS**

#### Exploring the Elements of Music

#### A. Pitch

The highness or lowness of a sound.



E. Texture

THIN TEXTURE: (sparse/solo) - small

amount of instruments or melodies.

THICK TEXTURE: (dense/layered) -

lots of instruments or melodies.

How much sound we hear.

B. Tempo The speed of a sound or piece of music.

FAST: Allegro, Vivace, Presto SLOW: Andante, Adagio, Lento

GETTING FASTER -

Accelerando (accel.)

GETTING SLOWER -

Ritardando (rit.) or Rallentando (rall.)



#### C. Dynamics

The volume of a sound or piece of music.

VERY LOUD: Fortissimo (ff)

LOUD: Forte (f)

QUITE LOUD: Mezzo Forte (mf) QUITE SOFT: Mezzo Piano (mp)

SOFT: Piano (p)

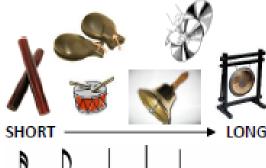
VERY SOFT: Pianissimo (pp)

GETTING LOUDER: Crescendo (cresc.) GETTING SOFTER: Diminuendo (dim.)



#### D. Duration

The length of a sound.







F. Timbre or Sonority

Describes the unique sound or tone quality of different instruments voices or sounds.







Velvety, Screechy, Throaty, Rattling, Mellow, Chirpy, Brassy, Sharp, Heavy, Buzzing, Crisp, Metallic, Wooden etc.

#### G. Articulation

How individual notes or sounds are played/techniques.

LEGATO - playing notes in a long, smooth way shown by a SLUR.

STACCATO - playing notes in a short, detached, spiky way shown by a DOT.



The opposite or absence of sound, no sound. In music these are RESTS.





#### I. Notation

How music is written down.

STAFF NOTATION - music written on a STAVE (5 lines and spaces)





GRAPHIC NOTATION/SCORE — music written down using shapes and symbols to represent sounds.





# **Exploring Treble Clef Reading and Notation**





## **Language for Learning**

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

Melody

Instrumentation

The instruments used by the composer

Tempo

The Speed of the Music

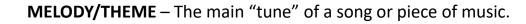


Harmony

All the musical parts that support the Melody

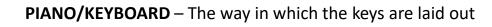
Sounds:

**SCALE** – The highness or lowness of a sound or musical note.



**KEYBOARD CHORDS** –Triads, broken chords, arpeggios, or Alberti bass.

**OCTAVE** – Notes with the same letter name but at differing frequencies



**TREBLE CLEF** – A symbol found at the beginning of a stave to show highpitched notes and is usually used for the right hand on a piano or keyboard.

**TREBLE CLEF STAFF NOTATION** – Music which is written down on a stave or staff using, notes clefs and other musical signs and symbols.

**STAVE/STAFF** – The five lines where musical notes are written.

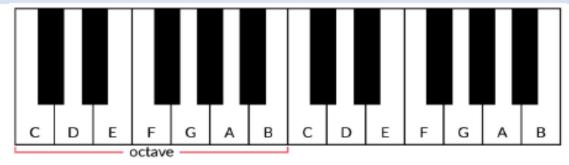


BLACK KEYS/SHARPS/FLATS – Arranged in groups of twos and threes going up a piano or keyboard.



"MIDDLE C" – The white note to the left of two black notes normally found in the centre of a piano or keyboard.

#### A. Layout of a Keyboard/Piano

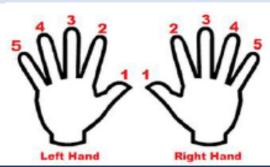


A piano or keyboard is laid out with WHITE KEYS and Black Keys (see section G). C is to the left of the two Black Keys and the notes continue to G then they go back to A again. Notes with the same letter name/pitch are said to be an OCTAVE apart. MIDDLE C is normally in the centre of a piano keyboard.

#### D. Keyboard Functions



#### E. Left Hand/Right Hand (1-5)





#### Exploring Treble Clef Reading and Notation

#### B. Treble Clef & Treble Clef Notation

A STAVE or STAFF is the name given to the five lines where musical notes are written. The position of notes on the stave or staff shows their PITCH (how high or D low a note is). The TREBLE CLEF is a symbol used to show high-pitched notes on the stave and is usually ised for the right hand on a piano or keyboard to play the MELODY and also used by high pitched instruments such as the flute and violin. The stave or staff is made up of 5 LINES and 4 SPACES.

Every Green Bus Drives Fast. Notes in the SPACES spell "FACE"



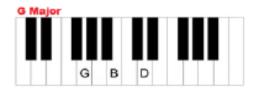


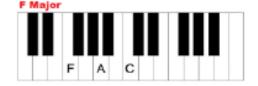
Notes from MIDDLE C going up in pitch (all of the white notes) are called a SCALE.

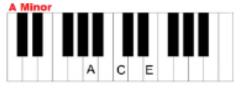


#### C. Keyboard Chords





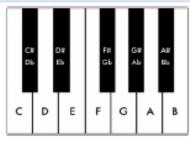




Play one - Miss one - play one - miss one - play one

#### F. Black Keys and Sharps and Flats

There are five different black notes or keys on a piano or keyboard. They occur in groups of two and three right up the keyboard in different pitches. Each one can be a SHARP or a FLAT. The # symbol means a SHARP which raises the pitch by a semitone (e.g. C# is higher in pitch (to the right) than C). The b symbol means a FLAT which lowers the pitch by a semitone (e.g. Bb is lower in pitch (to the left) than B). Each black key has 2 names -C# is the same as Db - there's just two different ways of looking at it! Remember, black notes or keys that are to the RIGHT of a



white note are called SHARPS and black notes to the LEFT of a white note are called FLATS.

# "The Trials & Tribulations - Joys & Jubilations of starting at new school"

#### **An Introduction to Drama & Theatre Studies**

**Drama & Theatre Studies** is a three year course of study. The aim is for you to become informed, responsible and effective communicators of meaning through the disciplines of **theatre art**.

#### **Study Focus**

A key focus of this term's work is the challenges and opportunities that you each face in moving from a primary school to a secondary school. We explore these in a variety of short scenarios that you devise and fit together in a montage. We call these collections of mini scenes, "The Trials & Tribulations – The Joy & Jubilations of Changing School". You will be introduced to and use all of the drama skills and ideas that are listed here.

Early on we investigate some key questions such as: where do we belong and are we different or tshe same? We explore these ideas in fun, practical, whole class activities. You reflect upon them some more in a written homework task.

#### I) Devise/ Devising-

This means, 'to plan & make.' It is one of the key disciplines in all drama lessons. You will always use the *ingredients of a play* when devising. You will plan and make your own plays in groups of different sizes- sometimes on your own (we call this solo work). Later, you will learn to use your **Personal & Interpersonal Skills** (PIPS) when devising in groups.

It is important to remember that it is <u>devising</u> not <u>dividing</u>. You are more likely to do dividing in mathematics ... although we sometimes divide ourselves into different groups during lessons.

#### **Essential** things to learn & Practise.

- What is the, **first person singular**, how to use it and why we use it?
- Why we have a, 'Hands Free' policy in drama lessons
- What does devising mean in drama?
- What are the Ingredients of a Play and how you can use them?
- What montage is and how to use it to express your ideas?
- What a **freeze frame** is and the things to consider when making one.
- How to work constructively with others in a group.

#### **Devising** means...

'Planning & Making'

#### Montage means...

A collection of short scenes or plays based on the an idea.we base our montage on the idea of transition- of changing from one school to another

Transition means ...
change- you make a
transition when you
move from one freeze
frame to another

Key drama & theatre theory to learn and use

#### The Ingredients of a Play- (IOP)

- Characters- the <u>people</u> in the play.
- Plot- The storyline .
- Setting- Where & when the scene is set. The time & place.
- Speech The words that the characters say
- Theme What the play <u>is about -</u>
   <u>its meaning-</u> its message
- Genre The <u>style</u> of the play. You are using, montage in this SOW

#### Freeze Frame

This is a *still image* like a photograph. We use them a lot in lessons. You must be perfectly still- even your eyes. This can be difficult. It helps for you to choose one thing to focus your gaze on. Until you have more experience, it is better not to focus on another student. As there is no moving or speaking in a freeze frame, other ways of communicating become very important to consider. These are your *facial expression*, *posture*, *body language*, *spacing* and *levels*. Sitting, standing on a block and laying down are all *different levels*. All of these things help the audience understand what the freeze frame is about and make the stage picture more interesting. You will learn lots more about making the stage picture interesting in your third and sixth scheme of work.

## Things to consider when making and studying a freeze

#### frame

There is no movement or speaking in a freeze frame, so the only way that the spectators understand what is happening is through the things that they can see. We call them the visual elements. There are six and they are:

Facial Expressions
Body Language
Gesture
Posture
Space (between characters)
levels

## Two guidelines for effective learning in Drama

# Speaking in the <u>first</u> person singular

You will be encouraged to speak in the Ist person singular – that's: I, me, my & mine, when speaking about your own experience in lessons. This allows you to 'own' your ideas, opinions, judgements and begin to take responsibility for what you are saying. This is the most important step in your journey to becoming conscious, responsible communicators of meaning. You will be reminded and have lots of time to practise so that it becomes a habit for you in drama.

#### **Personal Pronouns**

Singular 1st Person -- I/ me 2nd Person -- You 3rd Person -- S/he

Plural 1st Person – We /Us 2nd Person – You

3<sup>rd</sup> Person – They / Them

Remember use; I, me, my when speaking about your own ideas and experience

#### 2) The Hands Free Zone

Students do not generally put their hands up in class unless they want to ask a specific question or have a request or emergency.

Most class activities and discussions take place without raising hands. The teacher will invite different students to contribute at different times so that everyone participates in lessons.

#### The teacher will always, either;

Give you an opportunity to discuss and prepare a response first with other students or,

Frame the question in such a way as you cannot be wrong...

We are not interested in being right, or wrong- we are interested in learning.

So, no hands! (unless there is an emergency of course).

You will be reminded and have lots of time to practise so that it becomes a habit for you in drama.

Term 2

Classic Play Structure

#### Aristotle 385 BC - 323 BC

An Ancient Greek philosopher living almost 2500 years ago. **Aristotle** was one of the first people in the West to have serious ideas about drama and the theatre. The idea of *The Ingredients of a Play* that we use in most lessons here at Trafalgar are developed from his ideas of drama. The idea of thinking about a play in three parts; beginning, middle and end was originally one of **Aristotle's** ideas.

**Aristotle** had very definite ideas about what each section of a play should communicate to its audience. You will learn some of these as you make your own play and study an extant text.

#### **Classic Play Structure.**

**Aristotle's** ideas are deceptively simplistic: plays have a **Beginning**, **Middle** & **End**. This is his idea of how a play should be **structure**d. Each of the 3 sections has a particular job to do in terms of the whole play and its impact on an audience:

- **Beginning scenes-** introduce the characters, show what they are like and their relationships. They begin the story (the plot). They show the setting (where and when the play/scene is set) and they give us any back story that we need.
- <u>Middle scenes</u> These develop the story and move it on. The main character(s) encounter a problem, a difficulty, something that changes their plans, their journey and makes them change tack. It is a pivotal point in the play.
- <u>End scenes-</u> The problems and difficulties are all resolved. In a comedy there is a happy ending often contained in a wedding or a celebration party.

# A statue of Aristotle – can you find out who made it and when they made it? What has he got in his arms?

## Actors/ characters- what's the difference?

Drama students often confuse these two things, so let us be clear from the beginning. Actors 'play' characters. In drama lessons you will often work, 'as an actor' and you will play a character. This may be a character that you make up in your devising or a character in a written play script. You will get to look at this difference very clearly in our next scheme of work.

Actors
'play'
characters

#### La Piece Bien Faite - The Well Made Play.

A French playwright built on Aristotle's ideas and came up with some very strict rules about how plays should be set out and ordered (structured). Each section of a play had a specific part to play in the workings of the plot and the effect it has on the audience. There are quite a few parts and they have grand and exotic names (for an English speaker) like, *peripeteia* and *denouement*. Our simple use of the ideas of; Introductions, Developments and Resolutions, come from these ideas.

**Play writing** is a particular **genre** of writing. Plays have two forms of writing:

- The words that are written for the characters to say. We call this the dialogue – the characters lines.
- Stage directions tell the actors what the characters do and how to say a line. (<u>stage directions are</u> written inside brackets)

You will practise structuring your play in the *Classic Style* 

#### Year 7 Food

#### Macro & Micro Nutrients







carbs

Proteín

Fats

#### What are Nutrients?

Nutrients are the building blocks that make up food and have <u>specific</u> and <u>important roles to play in the body</u>. Some nutrients provide <u>energy</u> while others are essential for growth and maintenance of the body.

Macro Nutrient	Role in the body	Food Example
Carbohydrate	The main source of energy for the body.	Bread, rice, pasta, potatoes
Protein	Provides the body with growth and repair.	Meat, poultry, beans, eggs, lentils, tofu, fish
Fat	Provides the body with insulation and a small amount protects vital organs. Provides essential fatty acids for the body.	Butter, oil, cheese, cream, nuts, oily fish, crisps

Vitamin	Role in the body	Food examples
A	Helps to keep the eyes healthy and strengthen the immune system.	Dark green leafy vegetables, carrots, liver
В	Helps to release the energy from the food we eat.	Bread, milk, cereals, fish, meat
С	Help with skin healing and healthy skin. Help with the absorption of Iron.	Fresh fruit, broccoli, tomatoes
D	Important for absorbing calcium and help with healthy bone structure.	Oily fish, eggs, butter, Sunshine

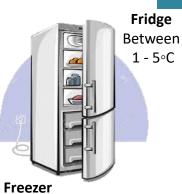
Vitamins -Help to keep our immune system up and help our body to stay healthy – they important for body maintenance.

Mineral	Role in the body	Food Examples
Calcium Important for strong teeth and bones. It also helps with blood clotting.		Milk, yoghurt, soya, dark green leafy vegetables
Iron	Needed for red blood cells which help to transport oxygen around the body.	Nuts, whole grains, dark green leafy vegetables, meat, liver

Minerals- Help to keep our immune system up and help our body to stay healthy. Vitamins and minerals are Micronutrients.



#### **Key Temperatures**



Below -18°C

Bacteria multiply quickest between 5 - 63°C

**Danger Zone** 

Cooking

Food should be cooked above 75°C

#### Knife Skills

Bridge Hold – Hand creates a bridge holding the food in between. The knife slices through the middle of the bridge. Used for cutting food in half.

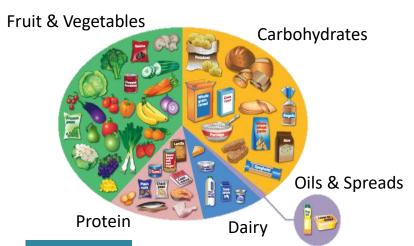




Claw Grip – Fingers tucked under holding food. Knife comes down from flat knuckles to slice food. Used for slicing.

#### Knowledge Organiser – Year 7 Food

#### **Eatwell Guide**



#### The Cooker

Control panel Top oven/grill

PREVENT CROSS CONTAMINATION

USE CORRECT COLOUR CODED

**CHOPPING BOARDS & KNIVES** 

**RAW MEAT** 

**RAW FISH** 

**COOKED MEATS** 

**SALADS & FRUITS** 

**VEGETABLES** 

**DAIRY PRODUCTS** 

Main oven

#### 8 Tips for healthy eating

1)Base your meals on starchy foods

- 2)Eat lots of fruit and veg
- 3)Eat more fish
- 4)Cut down on saturated fat and sugar
- 5)Eat less salt
- 6)Get active and be a healthy weight
- 7)Drink plenty of water
- 8)Don't skip breakfast

#### Weighing and Measuring

For good results in most recipes, accurate weighing and measuring is essential. When you are baking with flour, sugar and liquids, you must measure accurately or your cooking will be spoiled. If you weigh out too much sugar or too little raising agent, your cakes would not rise or you could spoil the taste and/or texture.

Food can be weighed in Grams (g) and there are

1000g in a Kilogram (kg). Liquid is measured in Millilitres (ml) or litres.





Weighing scales, knife, chopping board, measuring spoons, saucepan, wooden spoon, tablespoon, teaspoon dessert spoon, mixing bowl, grater, panstand, baking tray, cooling rack, peeler, pastry brush, spatula.





#### **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.





#### **YEAR 7 GRAPHIC DESIGN**



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

#### 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.

#### **Graphic Designers:**

- Freya Hartas
- Jon Burgerman
- Alexander Calder
- Abigail Burch













#### **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.







CATERPILLAR

**OPTIMISM, CLARITY, WARMTH** 



FRIENDLY, CHEERFUL, CONFIDENCE



**EXCITEMENT, YOUTHFUL, BOLD** 

CREATIVE, IMAGINATIVE, WISE. EXPENSIVE,



TRUST, DEPENDABLE, STRENGTH



PEACEFUL, GROWTH, HEALTH, NATURE, ENVIRONMENT

JOHN DEERE

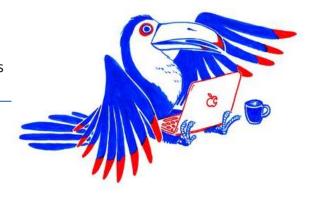
BALANCE, NEUTRAL, CALM

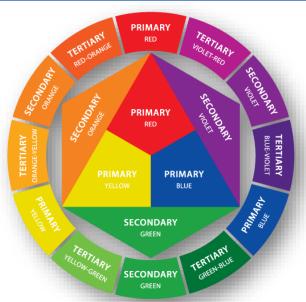
Complimentary colours are colours which are opposite to each other on the colour wheel. Examples of complementary colour combinations are: Red and green; yellow and purple; orange and blue; green and magenta. Complementary colour combos tend to be bold, which is why sports teams

often use this formula for their colours.









#### What do illustrators do to promote their work?

Illustrators and graphic designers include many processes into their practice to promote their work. For children's books illustrators, this could include designing shop windows/shop spaces which could include memorabilia linked to their children's books.

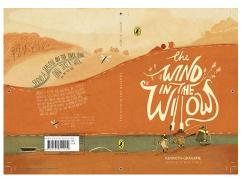




# Promoting your own children's book design:

Making a book cover is a very important aspect in promoting your book. The book cover allows the target audience to have a glimpse into what the book might be about and most important who the illustrator/author is.

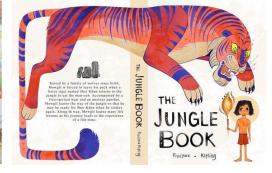




#### Merchandise:

Merchandise are goods that can be bought/sold by themselves or sold to promote books, fashion etc.
Examples of merchandise are badges, t-shirts, bookmarks and posters.





#### Paper puppet characters:

Bringing our characters to life by making them **MOVE** by combining the technique of **PAPER-CUT** and **COLLAGE** using **WATERCOLOURS**, **OIL PASTELS & COLOURED PENCILS**.

These puppets are constructed using card and split pins.

















#### **SHAPE**

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** 



#### **TEXTURE**

**TEXTURE** is the surface quality of something, the way something feels or looks like it feels. There are two types of texture: **ACTUCAL TEXTURE** and **VISUAL TEXTURE**.

**ACTUAL TEXTURE**: really exists so you can feel it and touch it

**VISUAL TEXTURE**: created using

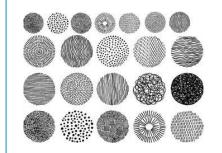
different marks that represent actual **TEXTURE** 



#### LINE

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.



#### **PATTERN**

PATTERN is a design that is created by repeating LINES, SHAPES, TONES or COLOURS.

Patterns can be manmade or natural



















## Follow the Safety Rules in the Textiles Technology workroom to stay safe!

- 1. FOLLOW instructions.
- 2. Put all bags and coats under the table.
- 3. Keep chairs tucked in.
- 4. Do NOT run in the Textiles workroom WALK!
- 5. Use all equipment correctly and appropriately.
- 6. Put all equipment away in the correct place after you have used it.
- 7. Always make sure that you have been shown how to use equipment before using it.
- 8. Tie long hair back.
- 9. Carry scissors closed and by the blades.
- 10. A sewing machine is used by one person don't try to use a sewing machine with someone else.
- 11. NEVER distract anyone who is using a sewing machine.
- 12. Turn sewing machines off when you have finished using them.
- 13. No food and drink in the Textiles workroom.





#### **Key Terms**

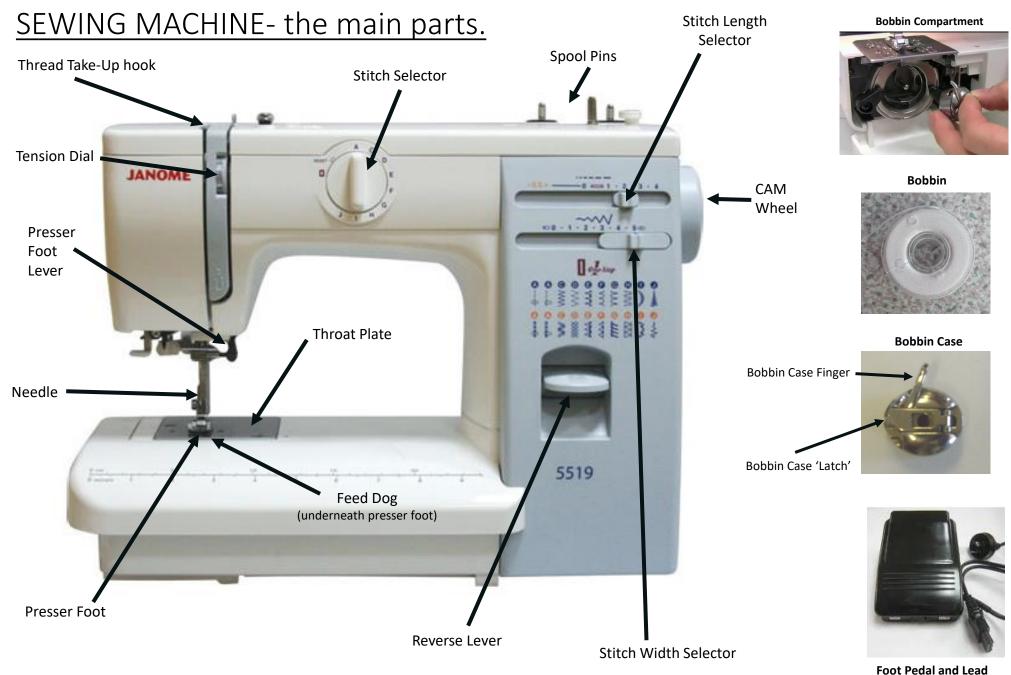
**Safety:** taking care not to hurt or injure yourself or others.

**Hazard:** any feature of a situation which may cause harm or injury.

Risk: the chance of a hazard causing harm or injury.

**Risk Assessment:** calculating how big a risk is by thinking about whether the harm or damage is likely to happen.

**Risk Control:** action taken to ensure that the harm or damage is less likely to happen.



Hand sewing Needle		Hand sewing needles are used with thread for sewing by hand. They have a point at one end - this is very <b>sharp</b> - and a hole at the other which is called an 'eye'; this is where the thread goes. Needles are <b>sharp</b> so you need to be careful when using them so you don't prick yourself!
Pins  temporarily while sewing. They are also used for fabric while you cut out. Pins are sharp so you need for fabric while you cut out.		They are also known as <i>Dressmaker Pins</i> . They are used for holding fabrics together <i>temporarily</i> while sewing. They are also used for holding pattern templates onto fabric while you cut out. Pins are <i>sharp</i> so you need to be careful when using them so you don't prick yourself!
Pin Magnet		This might also be known as a <i>Magnetic Pincushion</i> . This keeps the pins in one place. Pins should be put onto a pin magnet and not left on the table or near the sewing machine as they will get damaged.
Fabric Scissors	41000	Sometimes called <i>Fabric Shears</i> . We use these for cutting fabric. <i>Only fabric</i> . They cut fabric accurately and they allow you to cut for longer periods of time without getting hand fatigue. Notice that the blades are longer and they have one large for 3 -4 fingers and a small hole just for your thumb.
Embroidery Scissors		We use these for cutting threads. They have short blades and can cut right to the tip. We use them by the sewing machine but they are also useful for cutting detail in fabric such as button holes. Not for use with paper!
Pinking Shears	8	These scissors feature a characteristic zig-zag edge. We use them to create a ravel-resistant edge on fabric; this means it will help prevent the fabric from <i>fraying</i> . These scissors can also be used to give a decorative edge on craft projects.
Paper Scissors Y7 Textiles: Knowledge		We use these for cutting paper. <i>Only paper and cardboard.</i> Notice that the two holes are small and the blades are short.

Y7 Textiles: Knowledge Organiser

#### **Design and Technology**

**Hardwood** comes from a broad leaved tree whose seeds are enclosed in a fruit. They grow quite slowly, often taking over 100 years to be big enough to be used for timber.

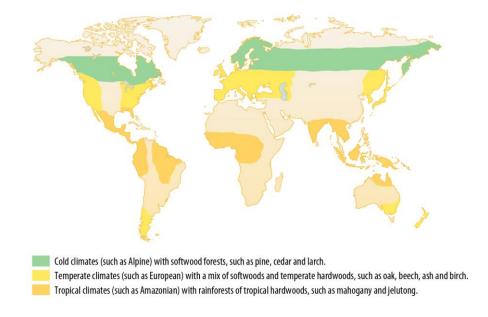


Hardwoods	Advantages	Disadvantages	Common uses
Oak	Strong and durable Has an attractive grain when well finished	Expensive, becoming rarer Harder to work than other woods Corrodes iron and steel	Building houses and boats, high quality furniture, wine and whisky barrels
Mahogany	Has a very attractive finish Quite easy to work with	Expensive, environmental problems with sourcing from tropical forests, oil in the wood can cause skin or breathing problems	High quality furniture, jewellery boxes and window frames
Beech	A tough wood Does not crack or splinter easily Hard	Expensive, not very resistant to moisture Not suitable for exterior use	Toys, cooking implements, solid wood and laminated furniture
Ash	Strong, tough and flexible Finishes well	Low resistance to rot and insect attack	Handles for tools, sports equipment and ladders
Balsa	Very lightweight Easy to cut	Much too soft and weak for most products	Model making, surfboard cores, buoyancy aids
Jelutong	Even close grain Easy to cut and shape	Soft and not very strong Not good for structural use	Model making, moulds for casting or vacuum forming
Birch	Regular even grain Easy to work	Low resistance to rot and insect attack	Veneers to make plywood and surface cheaper materials that are used for furniture or doors

**Timber** is wood that has come from tree trunks and has been dried and cut into planks. Timber has been used as a building material for thousands of years to make homes, furniture and tools. Timber is still used a lot as trees grow naturally, their wood is easy to work with and it is relatively strong and lightweight.

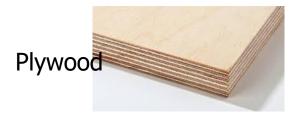
**Softwood** comes from a tree with needle like leaves, and seeds in a cone, they are coniferous. Most softwood trees are evergreen, meaning they have leaves all year. They grow quite quickly, and can be used for timber after about 30 years. This means they can be grown commercially, which is why softwood is a lot cheaper than hardwood.

Softwoods	Advantages	Disadvantages	Common uses
Pine	Very durable, easy to work, quite cheap as it grows quickly enough to be forested, reasonably strong and lightweight	Can warp, crack and splinter more than some other woods	House construction for roof joists and floorboards Furniture doors and interior woodwork
Cedar	Natural oils make it resistant to water and fungal growth	More expensive than pine and not as strong	Outdoor furniture, fences, sheds and boats
Larch	Tough, durable and resistant to water It can be used outside untreated and weathers to a silvery grey	Costs more than other softwoods	Small boats, yachts, exterior cladding on buildings





**MDF** 









#### **Properties**

It is important to know the correct meaning of the words that describe a material's properties. Comparing materials helps to define each material's properties. For example, do not say oak is hard, because there are lots of harder materials. Say: oak is harder than pine.

<u>Hardness</u> is the ability of a material to withstand cutting and scratching. Timber is generally quite a soft material. It can easily be scratched and cut with metal tools, which are much harder than wood. Oak is quite hard for a wood. Balsa is very soft for a wood. This should not be confused with the classification of trees as hardwoods and softwoods.

Toughness is the ability of a material to withstand being hit. A tough material can be quite soft, and might bend or deform when hit, but not break. Timber is quite a tough material. If you hit it with a hammer it may dent, but not break.

**Durability** is the ability of a material to last a long time. Timber that has been dried out and is kept dry is durable. Oak beams in old buildings can be hundreds of years old. However, wood that is left wet can rot quite quickly and won't then be very durable. Some timbers contain natural oils that make them more durable outside. Timber can be treated with preservatives to make it more durable for outside use.

**Elasticity** is the ability to stretch and return to its original length or shape. Timber is not generally elastic, but some are more than others, yew is used to make archery bows for example.

Tensile strength is the ability to withstand pulling force, timbers tend to have a good tensile strength, often 3 or 4 times better than compressive strength.

Compressive strength is the ability to withstand a crushing force, the denser the timber the better its compressive strength.

**Manufactured timbers** use natural timbers to make boards that have different properties to plain timber. Because of the size of a tree trunk timber is limited to fairly narrow planks. If you need large, thin sheets of wooden material you will need a manufactured board.

Boards	Advantages	Disadvantages	Common uses
Plywood	Flat and structurally sound, surface looks like real wood, resistant to warping, cracking and twisting	Quite expensive, edges can look rough, susceptible to water damage if using the wrong grade	Building and furniture panels that need some strength
MDF	Cheap (made from waste wood), smooth ungrained surface is good for painting or staining, easy to machine	Poor aesthetics, so needs coating, weak compared to real or plywood, tools blunt quickly due to glue content	Flat pack furniture, wall panels, display cabinets, storage units and kitchen units
Chipboard	Use waste materials so is cheap to produce	Poor structural strength, especially in damp conditions, surface is very rough so usually plastic coated	Desktops, kitchen worktops, cheap flat pack furniture

#### Orthographic views

Orthographic projection is used to show the detail and measurements of the product clearly from a range of angles so that a stranger could use

the drawing to work out the shape and dimensions for manufacture. A furniture designer would be a perfect example of someone who may use orthographic projection.

To create an orthographic projection, you draw the front view, side view and plan view of your product in 2D. You can either draw them out by hand or generate the views using various CAD programs from your CAD model. You can use first angle projection or third angle projection although the views may appear the same, the order that they are laid out differ.

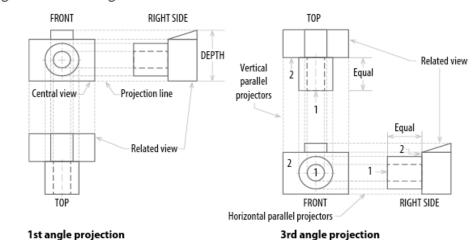
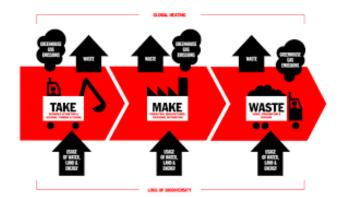
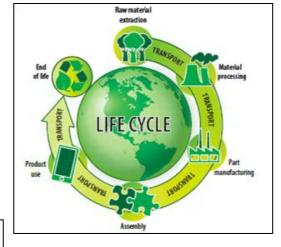


Figure 1.17.7 First and third angle projections for orthographic projection showing all sides of the product

Tools and equipment						
Try Square						
Steel rule	10 20 30 40 50 60 70 80 90 100 110					
Marking gauge						
Saws (tenon, hand, coping, scroll and jigsaw)	O SPECIAL DESCRIPTION OF THE PARTY OF THE PA					
Mallet						
Chisel						
Pillar drill						
Centre lathe						
Disc sander						







The environmental impact of manufacturing and using products

Where have your materials originated from? What is the environmental impacts of using them? Timber comes from trees, which are cut down
How were the trees turned into the timber that you used? Trees are processed in a sawmill to turn them into timber, this has an impact on the environment
How did you shape, join and finish the timber? Using tools, equipment and machinery all have an impact on the environment, some greater than others
If you were to make Funky Truck on a larger scale how would you distribute it to the retailers? Shipping raw materials and products around the planet uses a great amount of energy
Having observed your user playing with Funky Truck what environmental impact could it have? Is the product simple to use, does it require power?
Is Funky Truck durable, does it require frequent servicing to keep it working? Will Funky Truck damage easily in normal use?
Thinking ahead, what would happen to Funky Truck at the end of its life? Could it be easily disassembled and sorted for recycling? Have you include recycling symbols to make this process easier for your user? Are there any treatments that make disposal more difficult? Could the materials be upcycled?



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