



# Year 7

# Curriculum Support

# Booklet

What you need to know,  
to do well in school



# Contents

1. English
2. Maths
3. Science
4. Art
5. Computing and ICT
6. Design & Technology
7. French
8. Humanities
9. PE
10. Performing Arts

# How to use this booklet

This is a booklet designed to support you in your school studies. It is important you understand how to use it.

Your teachers have collected together all of the interesting facts, key words, techniques, and memory aides they think you need to know in their subject. There is a lot of helpful information in these pages that you can use to help you understand and enjoy your subjects.

You can use this booklet in the following ways:

- **To help you revise.** This might be for a test, or it might be in your own time. It is important to remind yourself of what you have learned, particularly if it was a tricky topic, so that you can build on what you know. You remember more if you revise regularly (e.g. during the holidays).
- **To learn new information.** You may come across words or ideas in this booklet that you haven't covered in your lessons. Don't worry – this is an excellent opportunity to stretch yourself and learn new things. You can always ask your teacher in your lessons to explain a word or concept if you aren't sure – or impress them with something you have remembered.
- **To help you with homework.** You can look up key words or strategies to help you with homework tasks. It is recommended that you keep this booklet at home: you will keep it safe, and you can also ask someone to help test you. If you only complete homework at school, it is best to keep it in your locker.

Your teachers want you to learn as much as possible, so it might seem at first that there is a lot of information here. Do not worry: it is designed to help you, and learning from it is not an impossible task. You could start by:

- Looking at each section when you do that subject for homework.
- Highlighting in different colours words you do and don't know.
- Choose 5-10 words or terms each weekend to memorise, in a subject you know you need some support in.
- Use the Look-Cover-Write-Check system to ensure you know things really well – and keep testing yourself!



Look



Cover



Write



Check



You need to be able to answer the question 'What is...?', or 'Can you define...?'

1.	...a noun	<p><b>A person, place or thing.</b>  <b>Proper noun:</b> A person, place or thing with a name that requires a capital letter                  e.g. Chris, East Anglia, Nimbus 3000.  <b>Abstract noun:</b> An idea or emotion                  e.g. anger, inspiration, a plan.  <b>Concrete noun:</b> A noun with a physical aspect e.g. chair, boy, rain.</p>			
	...an adjective	<p><b>A describing word.</b>                  e.g. blue, sunny, free.</p>			
	...a verb	<p><b>A 'doing' word.</b>                  e.g. to go, to play, to like.</p>			
2.	...an adverb	<p><b>A word that describes a verb.</b>                  e.g. quickly, carefully, practically.</p>			
3.	...a pronoun	<p><b>A word that can replace a noun.</b>                  e.g. I, you, he, she, it, they, them, we</p>			
4.	...a co-ordinating conjunction	<p><b>A connective placed between clauses that are equally important:</b>                  For, And, But, Or, Yet, So (FANBOYS).</p>			
5.	...a subordinating conjunction	<p><b>A connective that links clauses to suggest time, reason or condition:</b>                  As, Because, Although, Though, Even Though, Whereas, If</p>			
6.	...a preposition	<p><b>...of time:</b> A word that indicates <i>when</i> something happens                  e.g. 'During lesson one, the fire alarm rang.'  <b>...of place:</b> A word that indicates <i>where</i> something happens                  e.g. 'A fire broke out <u>in</u> Room 51.'</p>			
7.	...the comparative	<p><b>An adjective that shows comparison.</b>                  e.g. better, stronger, worse.</p>			
8.	...the superlative	<p><b>An adjective that shows the highest degree of a quality.</b>                  e.g. best, strongest, worst.</p>			
9	...the subject	<p><b>The person, place or thing that is carrying out an action or being something.</b> e.g. 'The <u>boy</u> shouted loudly.'</p>			
10	...the object	<p><b>The person, place or thing that is having an action done to it.</b>                  e.g. 'The boy shouted loudly into <u>the megaphone</u>.'</p>			
11	...a definite article	the	13	...the singular form	A noun that is just one thing. e.g. girl, memory
12	...an indefinite article	a	14	...the plural form	A noun that is more than one thing. e.g. girls, memories



## Sentence and clause types

15	...a simple sentence	<b>A simple sentence is made up of one main clause.</b> e.g. The cat sat on the mat.
	...a compound sentence	<b>A complex sentence is made up of two main clauses, joined by a conjunction.</b> e.g. The cat sat on the mat <b>and</b> he purred quietly.
	...a complex sentence	<b>A complex sentence is made up of a main clause and at least one subordinate clause.</b> e.g. The cat sat on the mat, <i>eyeing the mouse in the corner</i> , and purred quietly.
16	...a main clause	<b>A main clause is a complete sentence that makes sense by itself.</b> e.g. The shop closed at six o'clock.
	...a subordinate clause	<b>A subordinate clause is an incomplete sentence that depends on a main clause to make sense.</b> e.g. ... <i>having been open all day.</i> / ... <i>after which everybody went home.</i> /

## Tense

You need to be able to define, recognise and use:

17	<b>The present tense</b>	The tense that describes what is happening now.	I am
18	<b>The past tense</b>	The tense that describes what happened in the past.	I was
19	<b>The future tense</b>	The tense that describes what will happen in the future.	I will be
20	<b>The conditional tense</b>	The tense that describes what might happen.	I would be / could be

## Perspective

You need to be able to recognise the pronouns that describe these points of view:

21.	<b>1<sup>st</sup> person</b>	I	<b>1<sup>st</sup> person (plural)</b>	we
22.	<b>2<sup>nd</sup> person</b>	you	<b>2<sup>nd</sup> person (plural)</b>	you
23.	<b>3<sup>rd</sup> person</b>	he/ she /it	<b>3<sup>rd</sup> person (plural)</b>	they

## Homophones

You need to know the different spellings of these similar-sounding words:

24.	<b>There</b>	Indicating place.
25.	<b>Their</b>	Indicating possession or belonging.
26.	<b>They're</b>	Contraction of 'they are'.
27.	<b>Your</b>	Indicating possession or belonging.
28.	<b>You're</b>	Contraction of 'you are'.
29.	<b>Its</b>	Indicating possession or belonging.
30.	<b>It's</b>	Contraction of 'it is'.
31.	<b>To</b>	A preposition.
32.	<b>Too</b>	Indicating addition or excess (e.g. too much).
33.	<b>Two</b>	A number.

How to **parse** a sentence  
(label its grammatical features):

Verb

Adjective

We waited for our best friend, but she didn't arrive.

Co-ordinating conjunction

The pronoun 'we' means it's the 1<sup>st</sup> personal plural



Punctuation

You need to be able to define, recognise and use:

34.	<b>Capital letter</b>	ATA	Used after a full stop to begin a sentence. Used to indicate a proper noun (name, place, organisation).
35.	<b>Full stop</b>	.	Used to mark the end of a sentence.
36.	<b>Exclamation mark</b>	!	Used at the end of an exclamatory sentence to show strong emotion. e.g. The rollercoaster was terrifying!
37.	<b>Question mark</b>	?	Used at the end of a question. e.g. Can't you see my point?
38.	<b>Interrobang</b>	?!	Informally used to show disbelief. e.g. What?!
39.	<b>Semi-colon</b>	;	Used to join two related main clauses. e.g. Their shoes were muddy; their feet were painful.
40.	<b>Colon</b>	:	Used before lists, or to introduce an idea. e.g. Picture this: you're walking down the road...
41.	<b>Dash</b>	-	Used to separate information from a main clause, or instead of brackets. e.g. They had to sit at the back - and they weren't happy.
42.	<b>Comma</b>	,	Used to separate subordinate clauses from main clauses. Used to separate items in a list.
43.	<b>Brackets</b>	( )	Used to show an afterthought. e.g. Ben would always choose an action film (except when he had to babysit his sister).
44.	<b>Apostrophe</b>	'	A possessive apostrophe is used to show ownership. e.g. Joe's. A contraction apostrophe is used to merge two words into one e.g. they're, it's, don't, here's, you'll. The apostrophe replaces the missing letter.
45.	<b>Ellipsis</b>	...	Used to show a long pause or omitted (left out) words. e.g. I couldn't believe it...

Spelling: The 30 most commonly misspelled words in English

46.	accommodation	56.	disappointed	66.	persuade
47.	beautiful	57.	embarrass	67.	queue
48.	because	58.	extremely	68.	queueing
49.	beginning	59.	friend	69.	quiet
50.	believe	60.	immediately	70.	quiet
51.	business	61.	minute	71.	receive
52.	ceiling	62.	necessary	72.	separate
53.	decided	63.	neighbour	73.	sincerely
54.	definitely	64.	nervous	74.	surprised
55.	disappear	65.	opportunity	75.	until



**Imagery (all fiction)**

*Hint: These are examples of how an author uses language in writing.*

Simile	When a writer compares one thing to another using the words 'like' or 'as'. E.g. The snow was like a blanket.
Metaphor	When a writer compares one thing to another by saying it <u>is</u> something else. E.g. Love is a rollercoaster.
Personification	When a writer presents an object as having human emotions or feelings. E.g. The chair looked lonely.
Pathetic fallacy	When the writer describes the weather as if it reflects the character's thoughts or feelings. E.g. Rainy weather when a character feels sad.

**Poetic devices (poetry)**

Alliteration	When a writer repeats the same sound at the start of several words. E.g. The wild winds whisk to the west.
Couplet	When the end of two lines rhyme together. 'For sweetest things turn sourest by their deeds; Lilies that fester smell far worse than weeds.' (Shakespeare's Sonnet 94)
Enjambment	When the writer doesn't use punctuation at the end of a line in poetry. (When the writer does use punctuation, it is called end-stopped.)
Onomatopoeia	When the writer uses a word that sounds like an action that is being described. E.g. The car <u>crashed</u> through the window.
Rhyme	When the writer repeats the sound of words at the start or ends of lines.
Rhythm	When the writer uses syllables and the number of syllables in a word and line to create patterns.
Sibilance	When the writer uses sounds such as sh and s, to create a hissing sound. E.g. Slow splashing shoots of water.

**Dramatic devices (plays)**

Dramatic irony	When the audience knows something that a character on stage doesn't. e.g. The audience knows there is a killer in the house, but the character doesn't!
Soliloquy	When a character, in a play, talks to the audience on stage. e.g. Romeo talks to himself about his feelings for Juliet.
Stage directions	Extra information in italics that help the director and actors know what to do. e.g. <i>Exit, pursued by a bear.</i>

**Narrative devices (novels, autobiographies)**

*Hint: These are examples of how an author uses structure in writing.*

Narrator	The person telling the story. A 1 <sup>st</sup> person narrator makes the story personal, as the narrator shares things with the reader. A 3 <sup>rd</sup> person narrator keeps the story more distanced and neutral.
Plot	The storyline
Flashback	When a character remembers something that happened in the past
Chronological order	When the story is arranged in the order in which it happened
Setting	Where the story is set
Climax	A moment of great tension or excitement in the story
Protagonist	A main character
Antagonist	A villain or 'bad' character
Dialogue	What the characters say. They usually use speech marks. Dialogue is important as it tells us about a character e.g. their thoughts..
Description	Visual details of the scene. It allows a reader to build an image of it in their mind.



Analysing writing using PEA

Follow this structure when analysing fiction and non-fiction:			How to improve your answer:
<b>P</b>	Point	Your answer to the question	<ul style="list-style-type: none"> <li>• Turn the question around.</li> <li>• Choose words that are <b>clear</b> and easy to understand.</li> </ul>
<b>E</b>	Evidence	A quote A summary of something that happens in the text.	<ul style="list-style-type: none"> <li>• Quotes must be <b>short</b> (1-10 words) and <b>relevant</b> to the question.</li> <li>• Use <b>quote marks</b>.</li> <li>• Pick out a <b>one-word quote</b> and explain why this is a key word.</li> <li>• Use <b>more than one quote</b> to support your point.</li> </ul>
<b>A</b>	Analysis	Your ideas and interpretation	<ul style="list-style-type: none"> <li>• Explain your 'point' in further <b>detail</b>, using different words.</li> <li>• Explain what you can <b>infer</b> from the quote.</li> <li>• Explain what the <b>writer</b> is trying to do.</li> <li>• Explain how the <b>reader</b> might feel.</li> <li>• Explain the effect of a <b>language technique</b>.</li> </ul>

What A Good One Looks Like

Beginners' PEA:	
<p>The writer <b>shows</b> that Fred is happy to see his dog.</p> <p>He uses the phrase 'light as a feather' to describe his mood.</p> <p>I can <b>infer</b> from this that Fred is delighted to have him back from the vets, <b>because</b> when you're happy you feel like you're floating, which is how a feather falls.</p>	<p><b>Point</b> - clear statement of point, using the adjective 'happy' and the analysis verb 'shows'.</p> <p><b>Evidence</b> - short, relevant quote is embedded in the sentence.</p> <p><b>Analysis</b> - it explains the inference with a similar adjective ('delighted'), and it develops the explanation using the connective 'because'.</p>

Advanced PEA:	
<p>The writer intends to make the reader feel <b>sympathy</b> for the homeless.</p> <p>The adjectives '<b>beaten</b>' and '<b>broken</b>' describe people who have been living on the streets for a long time.</p> <p>The <b>alliteration</b> of these words <b>emphasises</b> the difficult conditions faced by homeless people. It is also an example of <b>emotive language</b>, and might make the reader <b>feel guilty</b>. As this is a charity leaflet, the writer <b>aims</b> to <b>highlight</b> these conditions and <b>persuade</b> the reader to become a volunteer. The language is <b>powerful</b> and <b>thought-provoking</b>, and as these words are <b>at the beginning</b> of the paragraph it draws the reader's attention to them.</p>	<p><b>Point</b> - explains the writer's intentions, describing a precise emotion.</p> <p><b>Evidence</b> - uses one-word quotes, and more than one example.</p> <p><b>Analysis</b> -                      Uses <u>analysis verbs</u> such as 'emphasises', 'highlights', 'persuades' and 'aims';                      Explains <u>the reader's response</u> and <u>the writer's intentions</u>;                      Uses <u>precise adjectives</u> to describe the mood;                      Refers to <u>language techniques</u> (alliteration and emotive language) and a <u>structural feature</u> (at the beginning of the paragraph).</p>





Adjectives for analysis	Explaining the effect on the reader	
<b>How would you describe the writing?</b> <i>The extract/quote is...</i>	You need to be able to explain the effect a piece of writing has on a reader. Use this for analysis ('A' in PEA).	
	<b>How does it make you feel?</b> <i>The writer's intention is to make the reader...</i>	<b>Explain the reader's response</b> <i>The reader might...</i>
frightening / alarming / creepy / intimidating / unsettling / gripping	<b>scared</b>	Feel nervous Feel the tension Prepare themselves for the unexpected Be horrified or frightened
amusing / lighthearted	<b>laugh</b>	Be amused Be entertained Laugh / smile
satisfying / uplifting / cheerful	<b>happy</b>	Feel positive or optimistic
moving / emotional / touching	<b>sympathise/empathise</b> with someone	Understand how the writer is feeling Be affected by the writer's sadness
shocking / outrageous	<b>angry</b>	Clearly or strongly agree or disagree Be offended Want to take action Be left open-mouthed
powerful / thought-provoking	<b>inspired</b> or <b>persuaded</b>	Be convinced Think differently afterwards Be captivated / absorbed
remarkable / impressive / dramatic	<b>interested</b>	Be struck by... Be left with the impression that...

**Tone**

You need to be able to identify a writer's tone. This is the attitude of the writer towards a subject. It is created through deliberate word choices and putting these words in a certain order.

	E.g.	The effect
Formal	<i>There was a delay in the start of the project.</i>	The writer will be taken more seriously. It is appropriate for formal communication.
Informal (Colloquial)	<i>Well, I suppose you're right.</i>	The writer achieves a more personal connection with the reader.
Humorous/light hearted	<i>Of course I disagreed with him - he's my brother!</i>	The writer entertains the reader.



**Understanding non-fiction**

When you read a new piece of writing for the first time, you should consider:

<b>G</b>	Genre	What type of writing is this?	<ul style="list-style-type: none"> <li>Newspaper article, magazine article, recipe, a leaflet, an instruction manual, a poster advertisement, a travel guide.</li> </ul>
<b>A</b>	Audience	What type of person would read this?	<ul style="list-style-type: none"> <li>Are they young, old or middle-aged?</li> <li>Are they male or female?</li> <li>What are their interests?</li> <li>How wealthy are they?</li> <li>What are their life aims?</li> </ul>
<b>P</b>	Purpose	Why did the author write this?	<ul style="list-style-type: none"> <li>What is their opinion on the subject?</li> <li>How do they hope the reader will react?</li> </ul>



**Connectives**

You should use these connectives to link together ideas in analysis (PEA) or in persuasive writing.

In addition,	However,	Therefore,	Finally,	Similarly,
In particular,	whereas	Indeed,	Ultimately,	Furthermore,

**Verbs for analysis**

Use these verbs to explain a writer's purpose. You can use them in the P or A part of a PEA paragraph.

This <b>shows</b> that	This <b>suggests</b> that	This <b>emphasises</b> the idea that
This <b>implies</b> that	This <b>creates</b> a feeling that This <b>creates</b> a sense of	This <b>conveys</b> the idea that
The writer is <b>arguing</b> for/against	The writer is aiming to <b>convince</b> the reader that	The writer is <b>explaining</b> that

**Evaluation**

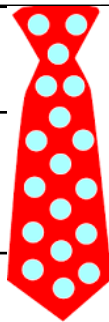
Evaluation means understanding why a piece of writing is effective. It is different to analysis, which means interpreting meaning in language and structure. Use T.I.E.S. to generate ideas.

**T - Themes**  
What are the 'big' ideas?  
*E.g. Friendship, failure.*

**I - Ideas**  
What are the 'small' ideas?  
*E.g. A stereotype of boys is that they like to drive cars.*

**E - Events**  
*E.g. We know the car chase ends in disaster.*

**S - Setting**  
*E.g. A suburban town, late at night.*



**Sentence starters:**

- The writer successfully uses the       of    to show the reader
- For example, this is shown when he/ she writes
- It is effective because
- It engages the reader because it makes us think/ feel



Language techniques: non-fiction

You need to be able to **identify** these language techniques in non-fiction texts, such as articles, leaflets and letters.

You also need to be able to **use them yourself** when you are writing to persuade, inform or advise.

Figurative language	E.g.	Why is it effective?
simile	Life is like a game. You need to win it.	Figurative language allows the reader to visualise the argument more easily.
metaphor	Our future is a weight around our necks.	
personification	The guilt will eat you up!	
Rhetorical devices	E.g.	Why is it effective?
A - Alliteration	Health, happiness and hope for all.	It catches the reader's eye and the listener's ear.
(A - Anecdotes)	One time, a friend of mine fell off his bike.	It makes the argument more <b>realistic</b> .
F - Facts	You have to be in education until you are 18.	It makes the argument more <b>convincing</b> .
O - Opinions	Personally, I believe in equal opportunities.	It makes the argument more <b>personal</b>
R - Rhetorical questions	Why should we believe what we're told?	It <b>appeals directly</b> to the reader or listener.
(R - Repetition)	It's a joke. It's a joke and a lie.	It catches the reader's eye and the listener's ear.
E - Exaggeration	The entire planet knows it's a bad idea.	It makes the argument seem more <b>emotive</b> , and therefore more important. It is clear the author is biased in favour of one opinion.
(E - Emotive language)	Just think of all the families out there working hard.	
S - Statistics	80% of students with poor attendance don't succeed in later life.	It makes the argument more <b>convincing</b> .
T - Triplet/Rule of three	It is embarrassing, it's rude, and it's waste of time.	It catches the reader's eye and the listener's ear.
Vocabulary	E.g.	Why is it effective?
Dynamic verbs	Scorned, pleaded, cheered.	Vocabulary choices enhance your tone and purpose.
Descriptive adjectives	Luminous, broken, fragile.	
Emotive adverbs	Clearly, ultimately, naturally.	
Advanced techniques	E.g.	Why is it effective?
Oxymoron	A broken community.	These convey complex ideas in a sophisticated way.
Juxtaposition	The best and yet the worst idea.	
Direct address	You need to wake up and listen!	The personal pronoun 'you' makes the reader feel it is addressed to them.
Hypothetical situation	If you were to... Put yourself in their shoes...	The reader can empathise more easily.
Superlatives	The brightest and best.	It exaggerates the argument.



Structural techniques: non-fiction

- 'Structure' refers to how writing is laid out; how ideas are developed; and other technical features.
- You need to be able to **identify** these structural techniques in non-fiction texts, such as articles and letters.
- You also need to be able to **use them yourself** when you are writing to persuade, inform or advise.

Structural technique	E.g.	Questions to ask yourself
<b>Beginning</b>	<i>Look around you. What do you see?</i>	How does it make the text interesting or appealing?
<b>Ending</b>	<i>It needs to stop. Now.</i>	How does it leave the reader with a strong impression?
<b>Punctuation</b>	<i>A one-of-a-kind opportunity (except when everybody is doing it).</i>	Is the punctuation varied, to create personality and a specific tone in the text?
<b>Paragraph length</b>	Long vs short	<ul style="list-style-type: none"> <li>• Long paragraphs absorb the reader in the detail.</li> <li>• Short paragraphs are more powerful. They also allow it to be read quickly, if it is meant to be entertaining and not demand too much attention.</li> </ul>
<b>Sentence length</b>	Long - several subordinate clauses Short - one or two words.	<ul style="list-style-type: none"> <li>• Long sentences create a build-up of emotion. They increase the pace of the writing.</li> <li>• Short sentences are punchy and dramatic.</li> </ul>
<b>Word order</b>	<i>Be not afraid (formal tone). Don't be afraid (informal tone).</i>	<ul style="list-style-type: none"> <li>• Why is a certain word at the beginning of a sentence? Is it more important?</li> <li>• Why is a certain word at the end of a sentence? Is the writer trying to focus attention on it by leaving it to the end, to create a bigger impact?</li> </ul>
<b>Speech/quotes</b>	<i>The experience was 'one of a kind', reported theatre-goers.</i>	Quotes from experts or witnesses make persuasive or informative writing more convincing.
<b>Perspective</b>	1 <sup>st</sup> person 2 <sup>nd</sup> person 3 <sup>rd</sup> person	<p>Why has the writer used a certain perspective?</p> <ul style="list-style-type: none"> <li>• First person is more personal.</li> <li>• Second person is more direct.</li> <li>• Third person is more neutral.</li> </ul>
<b>Tense</b>	Present, past, conditional	<p>Why has the writer used a certain tense?</p> <ul style="list-style-type: none"> <li>• Present tense is more immediate and dramatic, and involves the reader in the action.</li> <li>• Past tense can be more neutral. Things are being reported that aren't happening now.</li> <li>• The conditional tense is used to influence an opinion. It can be persuasive, by talking about what could or would happen.</li> </ul>



20 ways to vary your sentences

1	Colons to introduce an important idea	A strange hint of something filled his nostrils and made his stomach lurch: it was blood.
2	Adjectives at the start of the sentence	<u>Cold and hungry</u> , Martin waited for someone to take pity on him.
3	Adjective -ed opening	<u>Wracked with fear</u> , Tommy crept slowly towards the door. <u>Scared for her life</u> , Anna searched frantically for the key.
4	-ing clause before the main sentence	<u>Having no choice about it</u> , Chris decided to agree with her.
5	Sentences with a semi-colon in the middle to connect two main clauses.	Spider-Man was in trouble; he was surrounded by his enemies.
6	The three verb sentence	The monster <u>pushed</u> , <u>crashed</u> , <u>smashed</u> its way through.
7	Sentence, comma and list of verbs ending in -ing	The road unspooled on and on, <u>rising</u> , <u>falling</u> , <u>rising</u> , <u>turning</u> , <u>falling</u> .
8	Two -ings at the start sentence	<u>Raising</u> a hand to my brow, <u>shielding</u> my eyes from the rain once more, I saw no monster.
9	Comma sandwich: a sentence with a subordinate clause in the middle	The sun, <u>which had been absent for days</u> , shone steadily in the sky.
10	Two similes sentence	It's hard to describe how I felt - <u>like an object no longer of use</u> , <u>like a parcel packed up in string and brown paper</u> .
11	The as if and three verb sentence	<u>It was as if</u> the cold was <u>pulling</u> at Tansy, <u>breaking</u> her up, <u>trying</u> to take her away from them, back somewhere.
12	Start with a preposition (e.g. under, by, near, beneath, over)	<u>Under</u> the moon, the river snaked its way to the sea.
13	The less, less, less sentence	<u>The less</u> I tried, <u>the less</u> I cared, <u>the less</u> I got.
14	More, more sentence	Every day, Kitty felt smaller, <u>more ugly</u> , <u>more useless</u> .
15	Three adjective 'of' sentence	I felt <u>full</u> , <u>full of food</u> , <u>full of</u> bad television, <u>full of</u> incessant chat.
16	Not, nor, nor sentences	Nobody, <u>not</u> the postman, <u>nor</u> the housekeeper, <u>nor</u> Jim himself knew how the letter had got onto the doormat.
17	So so sentence	There was one item, <u>so small</u> , <u>so unrecognisable</u> , it didn't register.
18	The writer's aside sentence	The computer, <u>as you know</u> , is quite slow. I think, <u>to be honest</u> , it will never work.
19	Whoever/ Whenever/ Whichever	<u>Whoever</u> had been at the scene, <u>whenever</u> they had been there, it was clear something very sinister had taken place.
20	However after the first word sentence	People, <u>however</u> , were watching gobsmacked

# VOCABULARY

**positive** – greater than zero

**negative** – less than zero

**Integer** – whole number

**sum** – add the numbers together

**product** – multiply the numbers

**difference** – biggest take away the smallest

**estimate** – round the numbers first and give an approximate answer

**solve** – work out the value of the unknown

**correlation** – the relationship between 2

variables, can be **positive**, **negative** or **no**

**correlation**. Draw a line of best fit if correlation is positive/negative.

**expand** – multiply out brackets  $2(x+3)=2x+6$

**factorise** – put brackets back in  $x^2-3x = x(x-3)$

**tessellate** – fit shapes together with no gaps

**Variable** – a quantity that can change

**Unknown** – a specific quantity to be found

**Reciprocal** – turn the fraction upside down

**Congruent** – exactly the same

**Area** – space on the inside

**Perimeter** – distance around the outside

**Parallel** – lines that never meet

**Perpendicular** – at a right angle

**FACES** – Flat sides

**EDGES** – Where two faces meet (lines on the diagram)

**VERTICES** – Where three or more sides meet (corners)

# Basic Mathematical Symbols

## Elementary arithmetic symbols

=	Equals	
+	Addition or "plus"	$2 + 3 = 5$
-	Subtraction, "minus" or "less"	$3 - 2 = 1$
×	Multiplication	$2 \times 3 = 6$ $2 \cdot 3 = 6$
÷	Division	$6 \div 3 = 2$ $6 / 3 = 2$
or	$\frac{(\text{numerator})}{(\text{denominator})} \equiv \frac{(\text{dividend})}{(\text{divisor})} = (\text{quotient})$	$\frac{6}{3} = 2$ $\frac{6}{3} = 2$ $\frac{6}{3} = 2$ $\frac{6}{3} = 2$

## Relational symbols

$\equiv$	"Is equivalent to"	$x / y \equiv \frac{x}{y}$
$\approx$	or $\cong$ "Is approximately equal to"	$\frac{1}{3} \approx 0.33$ $\frac{1}{3} \cong 0.33$
$\propto$	"Is proportional to"	$a \times x \propto x$
$>$	"Is greater than"	$3 > 2$
$\geq$	"Is greater than or equal to"	$1 + x^2 \geq 1$
$<$	"Is less than"	$2 < 3$
$\leq$	"Is less than or equal to"	$1 \leq 1 + x^2$
$\gg$	"Is much greater than"	$100 \gg 1$
$\ll$	"Is much less than"	$1 \ll 100$

# NUMBER

## Types of number:

**odd** – ends in 1, 3, 5, 7, 9

**even** – ends in 0, 2, 4, 6, 8 (is divisible by 2)

**factor** – divides exactly into a number

eg 5 is a factor of 10

**multiple** – in the times table of a number

eg 20 is a multiple of 10

**square number** – can be written as a

number multiplied by itself eg 9 is a square number because it can be written as  $3 \times 3$ .

The first 7 square numbers are 1, 4, 9, 16, 25, 36, 49, ...

**prime number** - can only be divided by one and itself: 2, 3, 5, 7, 11, 13, 17... are prime

## Standard Form

A number is in **standard form** if it is written

**a  $\times 10^n$**  where  $1 \leq a < 10$  and **n is an integer**

When  $+/-/ \times / \div$  with standard form remember the button on your calculator

Take care – should the final answer be in standard form or ordinary form?

## Percentage means “fraction out of 100”

$50\% = 0.5 = \frac{1}{2}$  ..... divide by 2

$25\% = 0.25 = \frac{1}{4}$  ..... halve then halve again

$10\% = 0.1 = \frac{1}{10}$  ..... divide by 10

$1\% = 0.01 = \frac{1}{100}$  ..... divide by 100

## Harder Percentages:

### Remember that you have your calculator

To find any percentage **divide** the amount by **100** and **multiply** by the percentage required.

Eg to find 37% of £248

you do  $248 \div 100 \times 37$  and get £91.76

To calculate a **percentage increase** (or decrease), find the **percentage** and **add it on** (or take it away)

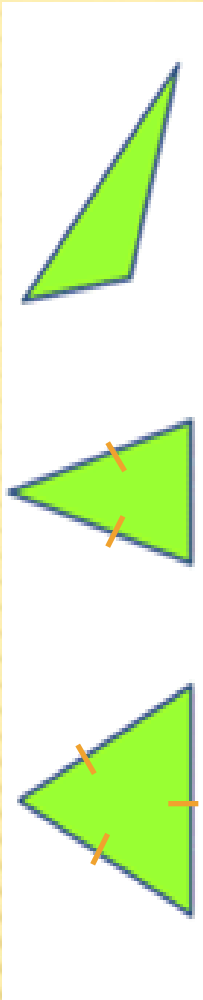
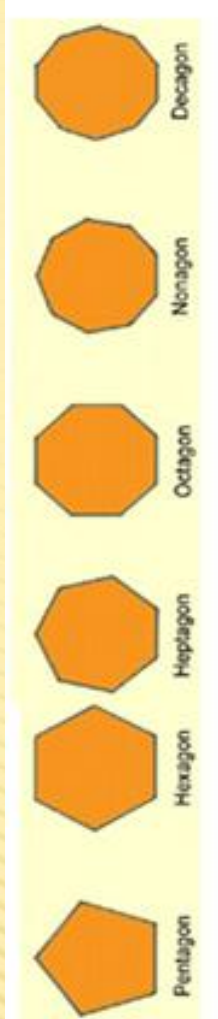
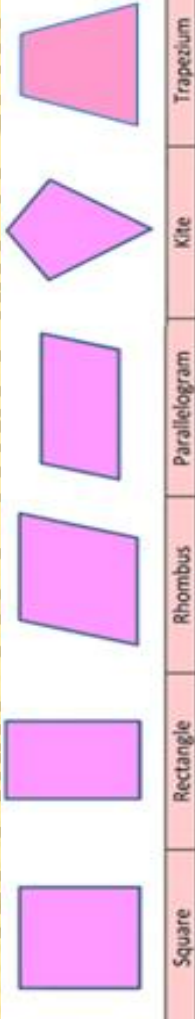
Eg to increase 120m by 15%

$15\%$  of 120m =  $120 \div 100 \times 15 = 18$ m

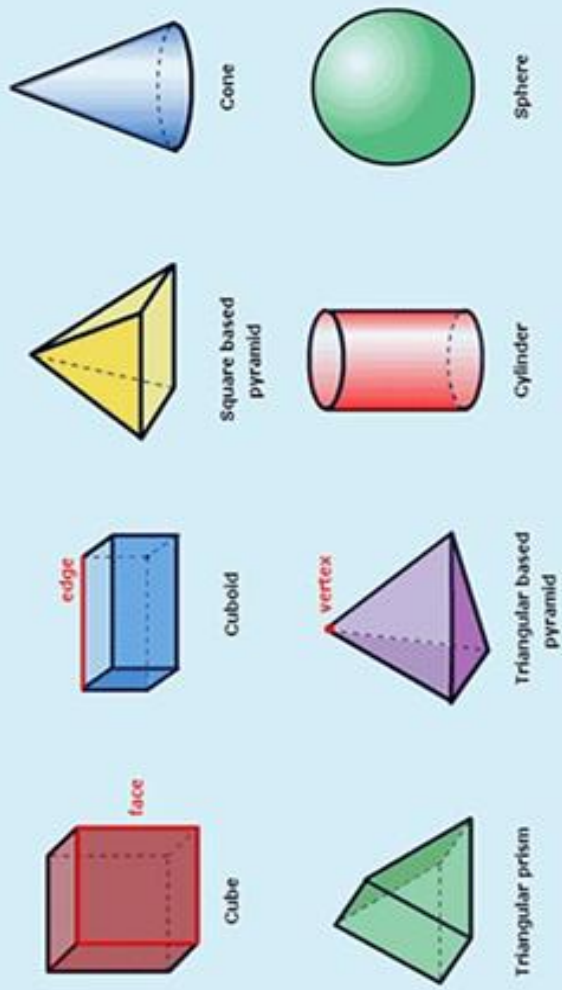
$120\text{m} + 18\text{m} = 138\text{m}$



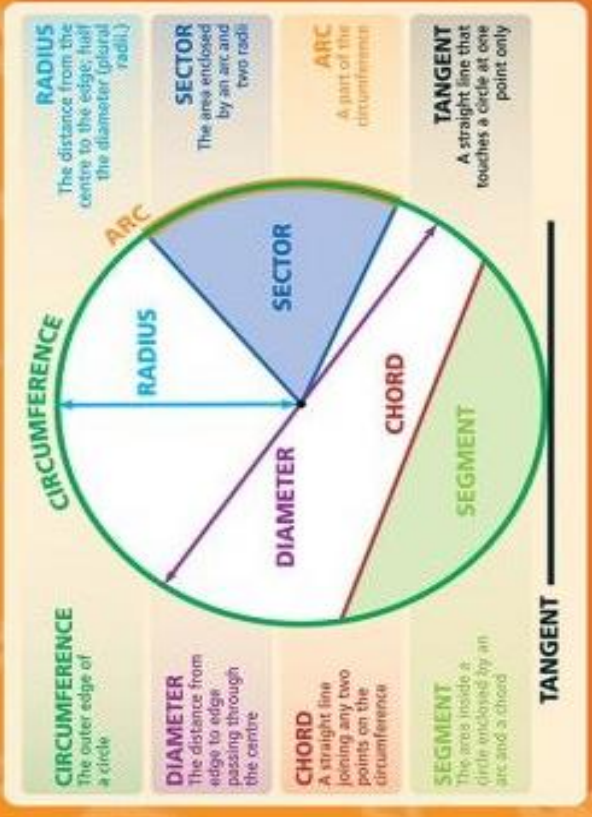
# GEOMETRY AND MEASUREMENT



Equilateral Triangle    Isosceles Triangle    Scalene Triangle



# CIRCLE PROPERTIES



There is a constant relationship between the circumference and diameter of any circle. This is denoted by the greek letter  $\pi$  (pi):

$$\pi = \frac{\text{CIRCUMFERENCE}}{\text{DIAMETER}} = 3.14$$

$\pi$  is an irrational number. Its decimal representation never ends or repeats: 3.141592653589...

The circumference of a circle can be calculated using the diameter or the radius:

**CIRCUMFERENCE =  $\pi \times \text{DIAMETER}$  ( $C = \pi d$ )**  
OR  
**CIRCUMFERENCE =  $2 \times \pi \times \text{RADIUS}$  ( $C = 2\pi r$ )**

The diameter of a circle can be calculated using the circumference.

**DIAMETER =  $\frac{\text{CIRCUMFERENCE}}{\pi}$  ( $d = \frac{C}{\pi}$ )**

The area of a circle can be calculated by using the radius:

$$\text{AREA} = \pi \times \text{RADIUS} \times \text{RADIUS} \quad (A = \pi r^2)$$

# GEOMETRY AND MEASUREMENT

## Angle Rules

Supplementary:  $180^\circ$

straight lines

parallel lines

opposite

alternate

corresponding

Equal

polygons

interior angle

exterior angle

angle sum:  $(n-2) \times 180^\circ$

quadrilaterals

round a point:  $360^\circ$

cut up in  $360^\circ$

## AREA

Always use the perpendicular height

**rectangle**  
Area = base x height

**triangle** is half the area of a rectangle  
Area =  $\frac{\text{base} \times \text{height}}{2}$

**parallelogram**  
Area = base x height

**trapezium**  
Area =  $\frac{(a + b) \times h}{2}$

**circle**  
Area =  $\pi r^2$

## Polygons

**Angle Sum**  
 $(n-2) \times 180^\circ$   
number of triangles

$4 \times 180^\circ = 540^\circ$

**interior angle**  
angle sum / number of sides  
OR  
 $180^\circ - \text{exterior angle}$

**exterior angle**  
 $360^\circ$  / number of sides  
OR  
 $180^\circ - \text{interior angle}$

3 triangle  
4 quadrilateral  
5 pentagon  
6 hexagon  
7 - heptagon  
8 octagon  
9 - nonagon  
10 - decagon

## Circle Theorems

Angles at the circumference are equal.

They must come from the same arc.

The angle at the centre is twice the angle at the circumference.

From any point you can only draw two tangents... and they'll be equal.

Alternate Segment Theorem.

The angle in a semi-circle is  $90^\circ$ .  
Look out for a diameter.

Cyclic Quadrilateral  
Opposite angles add up to  $180^\circ$ .

The angle between a tangent and a radius is  $90^\circ$ .  
Look out for radii.

# Algebra

In algebra, letters (variables) can be used to represent unknown numerical values. For example, in the equation  $3x + y = 16$ ,  $x$  and  $y$  are variables.

A **term** is a collection of numbers and letters. Terms are separated by mathematical symbols.

An **expression** includes terms and operational (mathematical) symbols but not the equals symbol.

An **equation** is made up of two expressions that are equal.

A monomial is another name for a term.  
A binomial is made up of two monomials and a trinomial is made up of three monomials connected by + or - signs.

A polynomial is made up of more than three terms (monomials) linked by + and - signs.  
A linear equation is a statement of equality between two expressions of the first degree.

The value of a variable in an equation is called its root.

$$3x + 4xy = 18 + y$$

$$2x + 5y - 2$$

$$4x + 5y = 23$$

**Simplifying Algebraic Expressions:** To simplify algebraic expressions, like terms can be collected together. Like terms contain the same variable raised to the same power.

## Addition and Subtraction

$a + a + a$	$3a + 5a = 8a$	$4b - b$	$6b - b = 5b$
can be shortened to	$4a + a = 5a$	can be shortened to	$5b - 3b = 2b$
$3a$		$3b$	

## Multiplication

When multiplying (like or unlike) terms, the multiplication symbol is removed.

$a \times b$	can be shortened to $ab$	$y \times y \times X \times y \times X \times y$	$X \times y$ can be shortened to $xy$
$3 \times X \times a$	can be shortened to $3a$	This is an index (power). It shows how many times $y$ is multiplied by itself.	

Remember  $4y$  is not the same as  $y^4$ .

$$4y = y + y + y + y$$

$$y^4 = y \times y \times y \times y$$

## Division

When dividing like terms, the variable can be removed from the answer.

$a \div b$	is written as $\frac{a}{b}$	$\frac{15b}{3b}$	can be shortened to $5$	$\frac{12b}{3b}$	can be shortened to $4$
------------	-----------------------------	------------------	-------------------------	------------------	-------------------------

Expression	Like?	Why?	Simplified
$3b + 2b$	Yes	Same variable	$5b$
$x - y$	No	Different variables	
$x + x^4$	No	Variables raised to different powers	
$2ab + 2ba$	Yes	Same variable (associative property)	$4ab$
$3x + 7y + 4x - 3y$	Yes	Same variables	$7x + 4y$

## Formulae

- $(a + b)^2 = a^2 + b^2 + 2ab$
- $(a - b)^2 = a^2 + b^2 - 2ab$
- $a^2 - b^2 = (a + b)(a - b)$
- $(a + b + c)^2 = a^2 + b^2 + c^2 + 2ab + 2bc + 2ca$
- $(a + b)^3 = a^3 + b^3 + 3ab(a + b)$
- $(a - b)^3 = a^3 - b^3 - 3ab(a - b)$
- $a^3 + b^3 = (a + b)(a^2 - ab + b^2)$
- $a^3 - b^3 = (a - b)(a^2 + ab + b^2)$
- $a^3 + b^3 + c^3 - 3abc = (a + b + c)(a^2 + b^2 + c^2 - ab - bc - ca)$
- If  $a + b + c = 0$ , then  $a^3 + b^3 + c^3 = 3abc$

# ALGEBRA

In Algebra, letters (variables) can be used to represent unknown numerical values. For example, in the equation  $3x+y=16$ , 'x' and 'y' are variables

$$3x+4xy=18+y$$

A **term** is a collection of numbers and letters.

Terms are separated by mathematical symbols.

$$2x+5y-2$$

An **expression** includes terms and operational (mathematical) symbols but not the equal symbol

A **monomial** is another name for a term

A **binomial** is made up of two monomials and a trinomial is made up of three monomials connected by + or – signs.

A **polynomial** is made up of more than three terms (monomials) linked by + or – sign. A **linear equation** is a statement of equality between two expressions of the first degree.

The value of the variable in an equation is called its root.

## Formulae

1.  $(a+b)^2=a^2+b^2+2ab$
2.  $(a-b)^2=a^2+b^2-2ab$
3.  $(a+b+c)^2=a^2+b^2+c^2+2ab+2bc+2ac$
4.  $(a+b)^3=a^3+b^3+3ab(a+b)$
5.  $(a-b)^3=a^3+b^3-3ab(a+b)$

# Simplifying Algebraic Expressions:

To simplify algebraic expressions, like terms can be collected together.  
Like terms contain the same variable raised to the same power.

## Addition and Subtraction

$$a+a+a \quad 5a+3a=8a$$

can be shortened to

$$3a$$

$$4b - b$$

can be shortened

$$\text{to } 3b$$

$$6b - b = 5b$$

$$5b - 3b = 2b$$

## Multiplication

When multiplying (like or unlike) terms, the multiplication symbol is removed  
a x b can be shortened ab

3 x a can be shortened 3a

y x y x y x y can be shortened to  $y^4$

this is the **index** (power). It shows how many times y is multiplied by itself

**Remember : 4y is not the same as  $y^4$**

$$4y = y+y+y+y$$

## Division

$$a \div b$$

Is written

$$\text{As } \frac{a}{b}$$

$$\frac{15b}{3b} \quad \text{can be}$$

shortened to

$$5$$

$$\frac{12b}{3b} \quad \text{can be}$$

shortened to

$$4$$

# Algebra

In algebra, letters (variables) can be used to represent unknown numerical values. For example, in the equation  $3x + y = 16$ ,  $x$  and  $y$  are variables.

## Solving Quadratics:

first rearrange into  $ax^2 + bx + c = 0$  then...

- **Factorise** put into 2 brackets and one of the brackets must = 0
- **Complete the Square**  $(x + a)^2 - b = 0$
- **Use the Formula**

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

## Transformations of $y = f(x)$

$y = f(x) + a$  is a translation of  $\begin{pmatrix} 0 \\ a \end{pmatrix}$

$y = f(x - a)$  is a translation of  $\begin{pmatrix} a \\ 0 \end{pmatrix}$

$y = af(x)$  is a stretch sf  $a$  in the  $y$ -direction

$y = f(ax)$  is a stretch sf  $1/a$  in the  $x$ -direction

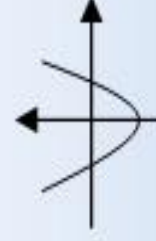
$y = -f(x)$  is a reflection in the  $x$ -axis

$y = f(-x)$  is a reflection in the  $y$ -axis

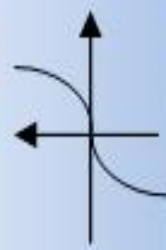
## Types of Graph



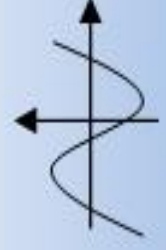
**Linear** ( $y = mx + c$ )



**Quadratic** (contains  $x^2$ )



**Cubic** (contains  $x^3$ )



or



**Reciprocal** (Look for  $1/x$ ) **Circle** ( $x^2 + y^2 = r^2$ )



## Trigonometric Graphs



$y = \sin x$



$y = \cos x$

# ALGEBRA NOTATION & FUNCTIONS

Parentheses and functions

A function is something that relates or "maps"

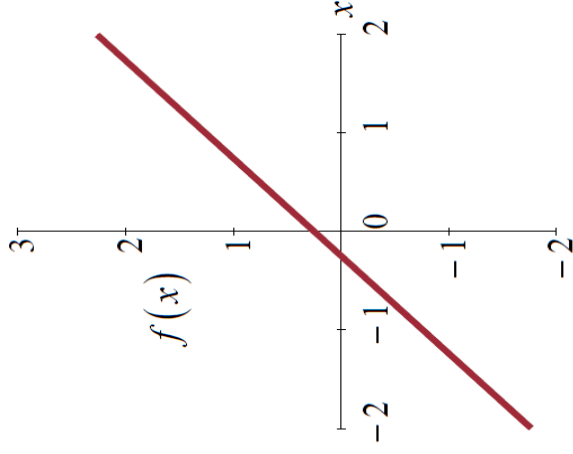
One set of values

Such as an "input" variable or "argument"  $x$

To another set of values which we could think of as an "output"

For example, the function

$$f(x) = x + \frac{1}{4}$$



Parentheses and functions

Conventionally, we say

"f of x" when we read  $f(x)$

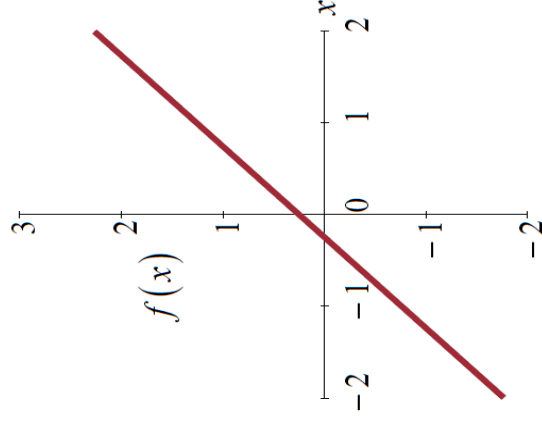
Here obviously

$f(x)$  is not "f times x"

Most commonly

Only parentheses are used around the argument  $x$

not square  $[\ ]$  or curly  $\{ \}$  brackets



# ALGEBRA NOTATION & FUNCTIONS

## Parentheses and functions

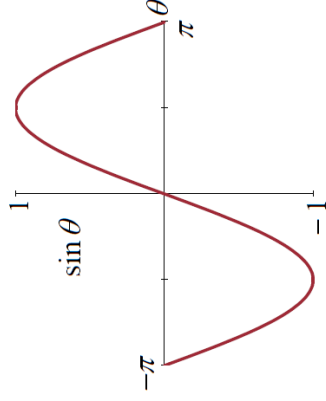
For a few very commonly used functions

Such as the **trigonometric functions**

The parentheses are optionally omitted when the argument is simple  $\sin \theta$  instead of  $\sin(\theta)$

Note, incidentally,

$$\sin(-\theta) = -\sin(\theta)$$



## Parentheses and functions

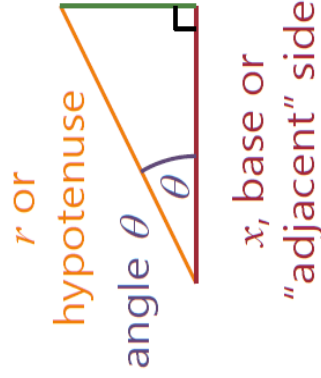
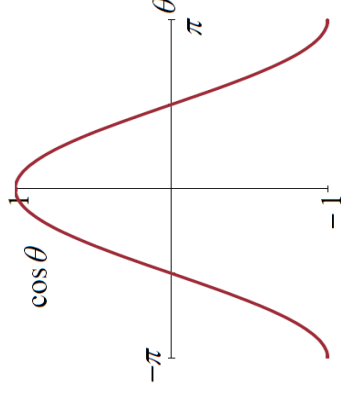
For a few very commonly used functions

Such as the **trigonometric functions**

The parentheses are optionally omitted when the argument is simple  $\cos \theta$  instead of  $\cos(\theta)$

Note, incidentally

$$\cos(-\theta) = \cos(\theta)$$



## Sine, cosine, and tangent

Defined using a right-angled triangle

$$\sin \theta = \frac{y}{r} \quad \cos \theta = \frac{x}{r} \quad \tan \theta = \frac{y}{x} \quad \tan \theta = \frac{\sin \theta}{\cos \theta}$$

Natural units for angles in mathematics are radians

- $2\pi$  radians in a circle
- 1 radian  $\sim 57.3$  degrees



# STATISTICS

## Types of data

Discrete – hair colour, favourite band, type of car, etc

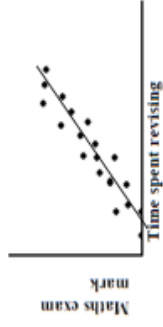
Continuous – time, weight, temperature, length, etc

## Types of data

Primary – Data you collect yourself, eg survey

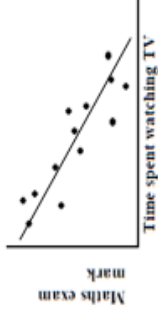
Secondary – Data you get from somewhere else, eg internet

## Scatter Graphs and Correlation



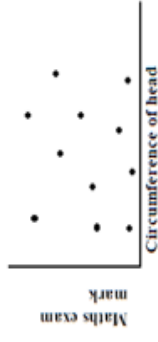
### Positive Correlation:

*The more time revising the higher the maths mark*



### Negative Correlation:

*The more time watching TV the lower the maths mark*

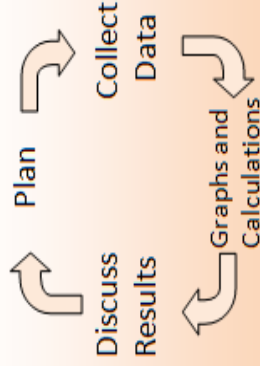


### No Correlation:

*The size of your head does not affect your maths mark*

**Use a line of best fit to make predictions**

## Data Handling Cycle



## Probability:

$$\text{Relative Frequency of event} = \frac{\text{Number of times event occurs}}{\text{Total number of trials}}$$

Relative frequency provides **good estimate for probability**, particularly as number of trials increases

**Expected** number of given event = probability of that outcome x number of trials

**Tree diagrams:** multiply along the branches and **add between** the branches

If events A and B are **independent** then  $P(A \text{ and } B) = P(A) \times P(B)$

If A and B are **mutually exclusive** then  $P(A \text{ or } B) = P(A) + P(B)$

Watch out for successive events... does the number of items decrease by 1?

Eg picking 2 sweets from 10, you will only have 9 sweets left for the second choice.

## Sampling

**Random sample** – every person/thing is **equally likely** to be selected eg picking names from a hat

**Stratified sample** – random sample but in **same proportions** as population ... multiply sample size by appropriate fraction of original total

To improve results **increase the sample size**

## Averages:

**mode/modal** – the most common value or values

**median** – the middle value when they are in order

**mean** – add up all the values and divide by the number of terms

## Measure of spread:

**range** – highest value take away the lowest value  
The smaller the range the less varied the results

## Year 7 factsheets: Science

Unit: Chapter	Keyword	Definition/fact
Working scientifically	Observation	Carefully looking at an object or process.
	Investigation	An experiment or set of experiments designed to produce data to answer a scientific question or test a theory.
	Data	Words or numbers that you obtain when you make observations or measurements.
	Independent variable	A variable you change that changes the dependent variable.
	Dependant variable	A variable that changes when you change the independent variable.
	Control variables	A variable that you have to keep the same in an investigation.
	Accuracy	Close to the true value of what you are measuring.
	Precision	This describes a set of repeat measurements that are close together.
	Repeatable	When you repeat measurements in an investigation and get similar results they are repeatable.
	Reproducible	When other people carry out an investigation and get similar results to the original investigation the results are reproducible.
Risk assessment	A description of how you will make it less likely that people will be injured, or equipment damaged, and what to do if this happens.	

B1 1:1	Organism	Living things. Organisms are made up of cells, the basic building block of life.
	Magnification	To make something appear larger than it is, so it can be seen more clearly or in greater detail.  Total magnification = Eyepiece lens magnification X Objective lens magnification.
1:2	Nucleus	The cell component that controls the cell and contains genetic material.
	Mitochondria	The site of respiration within a cell. Respiration is the reaction that transfers energy to the organism.
	Cytoplasm	A jelly like substance that holds all the cells organelles, the place where chemical reactions take place within the cell.
1:3		Cells have changed their shape and structure so that they are suited to carry out a particular job, these are called specialised cells.
	Red blood cell	An animal cell that transports oxygen around the body.
	Plant cell	Cells that make up a plant. Consists of a cell wall

		and membrane, with a nucleus, a vacuole and chloroplasts as well as all other normal cell organelles such as mitochondria.
	Chloroplasts	The plant cell component where photosynthesis takes place.
1:4	Diffusion	The movement of liquid or gas particles from a place of high concentration to a place of low concentration.
	Concentration	A measure of the number of particles of a substance in a given volume.
1:5	Unicellular organism	Consisting of just one cell.
2:1	Multicellular organism	An organism made up of many cells
	Tissue	A group of similar cells working together to perform a function
	Organ	A group of tissues working together to perform a function.
2:2	Gas exchange	The transfer of gases between an organism and its environment.
	Respiratory system	The organs involved in gas exchange.
2:3	Contract	
	Diaphragm	The sheet of muscle used in breathing.
2:4	Skeleton	Bones are made up of living tissue, supplied with a blood supply and together form the Skelton to support, protect, move and make blood cells
	Bone marrow	
2:5	Joint	A part of the skeleton where two bones join together.
	Ligament	Joins two bones together.
	Cartilage	The strong, smooth tissue that covers the end of bones to prevent them rubbing together.
2:6	Muscle	A tissue that has the ability to contract and relax to produce movement in the body.
	Antagonistic	A pair of muscles that work together to control movement at a joint – as one muscle contracts, the other relaxes.
	Tendons	Joins a muscle to a bone.
3:1		Adolescence involves both physical changes (puberty) and emotional changes. Puberty takes place roughly between the ages of 9 and 14.
		All the changes that take place in the body during puberty are caused by hormones which are chemical messengers. Female sex hormones are produced in the ovaries. Male sax hormones are produced in the testes.
3:2		Male reproductive system consists of the testes which produce sperm and the male sex hormones,

		the scrotum, sperm ducts, urethra which carries urine from the bladder or sperm from the sperm ducts out of the body and the penis which contains the urethra and swells with blood during an erection to release sperm during sexual intercourse.
		Female reproductive system consists of the ovaries which contain the eggs, the oviducts which carry the eggs to the uterus, the uterus where a baby develops during pregnancy, the cervix a ring of muscle that keeps the baby in place during pregnancy, the vagina where the penis enters the female during intercourse and the urethra which carries urine from the bladder out of the body.
3:3	Gametes	Reproductive cells. The male gamete is a sperm cell and the female gamete is an egg cell.
	Fertilisation	The process where the nucleus of a sperm cell joins with the nucleus of an egg cell.
	Sexual intercourse	The process where the penis releases semen into the vagina.
3:4		Human gestation (pregnancy) lasts around 9 months (40 weeks), during this time the baby develops from the fertilised egg.
		The baby develops inside the mother's uterus where it can be supplied with all the nutrients and oxygen it needs to develop. These nutrients are supplied to the baby through blood carried in the umbilical cord which connects the mother at her placenta to the baby.
		At around 40 weeks after fertilisation the baby is ready to be born. The mother's cervix relaxes and the wall of the uterus contracts. This helps to slowly push the baby out followed by the placenta, through the vagina.
3:5	Menstrual cycle	The monthly cycle during which the uterus lining thickens, and then breaks down and leaves the body if an egg is not fertilised.
	Ovulation	The release of an egg from an ovary.
	Contraception	A method of preventing pregnancy.
3:6	Pollination	The physical changes that take place during adolescence.
		The stamen is the male reproductive part of plant it consists of the anther that produces pollen (the male gamete) and the filament which holds up the anther.
		The carpel is the female reproductive part of the plant it consists of the stigma which is sticky to catch the pollen, the style which holds up the stigma and the ovary which contains ovules (the female gamete).
3:7		The process of fertilisation of a plant begins when

		pollen lands on the stigma. If the pollen is the correct species, the pollen grows a tube in the style which when reaching the ovule carries the nucleus of the pollen grain to the nucleus of the ovule, bringing about fertilisation. A seed is then formed.
		A seed consists of a tough protective outer coat, an embryo that will develop into an adult plant and a food store of starch which helps the plant grow until it can photosynthesise.
	Germination	The period of time when a seed starts to grow.
3:8	Seed dispersal	The movement of seeds away from the parent plant.
		There are four different methods of seed dispersal: wind, animal, water and explosive

C1 1:1	Particles	The tiny things that materials are made from.
	Mixtures	A material whose properties are not the same all the way through.
	Substance	A material that is not a mixture. It has the same properties all the way through.
1:2	Solid	In the solid state, a substance cannot be compressed and it cannot flow.
	Liquid	In the liquid state, a substance can flow but cannot be compressed.
	Gas	In the gas state, a substance can flow and can also be compressed.
1:3	Change of state	The process by which a substance changes from one state to another.
	Melting	The change of state from solid to liquid.
1:4	Boiling	The change of state from liquid to gas that occurs when bubbles of the substance in its gas state form throughout the liquid.
1:5	Evaporation	The change of state from liquid to gas that occurs when particles leave the surface of the liquid only. It can happen at any temperature.
	Condensation	The change of state of a gas to a liquid.
	Sublimation	The change of state from solid to gas.
1:6	Diffusion	The movement of liquid or gas particles from a place of high concentration to a place of low concentration.
		Factors that affect diffusion – Temperature, particle size, state of diffusing substance
1:7	Gas pressure	The measure of force exerted by particles of gas within a certain area. The pressure of gas is calculated by calculating the force generated per square metre.
2:1	Element	A substance that cannot be broken down into other substances.

	Periodic table	A table of all the elements, in which elements with similar properties are grouped together.
	Chemical symbol	A one- or two-letter code for an element that is used by scientists in all countries.
2:2	Atoms	The smallest part of an element that can exist.
2:3	Compound	A substance made up of atoms of two or more elements, strongly joined together.
2:4	Chemical Formulae	A formula that shows the relative number of atoms of each element in a compound.
3:1	Chemical reaction	A change in which atoms are rearranged to create new substances.
	Reversible	The ability of a reaction to turn the other way around, so that the products become the reactants. Chemical reactions are not easily reversible.
	Catalyst	A substance that increases the rate of the chemical reaction without being used up.
3:2		Word equations show the process of a reaction in a simplified way. The reactants (the things you start with) are shown on the left and the products (the things you end up with) are shown on the right. The arrow between the two sides means <i>reacts to make</i> .
	Reactants	A starting substance in a chemical reaction.
	Products	A substance that is made in a chemical reaction.
3:3	Fuel	A material that burns to transfer useful energy.
	Combustion	A chemical reaction in which a substance reacts quickly with oxygen and gives out light and heat. (Oxidation reaction)
		Fossil fuels are a non-renewable source of energy and their combustion in engines is damaging to the environment. Other alternatives that are not harmful to the environment need to be found. One possibility is using hydrogen as a fuel as the waste product of the combustion of hydrogen is water which is not damaging.
3:4	Decomposition	A chemical reaction in which a compound breaks down to form simpler compounds and/or elements. (Thermal decomposition)
3:5	Conservation of mass	In a chemical reaction, the total mass of reactants is equal to the total mass of products. This is conservation of mass. Mass is conserved in chemical reactions and in physical changes.
	Balanced symbol equations	In a balanced symbol equation, chemical formulae represent the reactants and products. The equation shows how atoms are rearranged, and gives the relative amounts of reactants and products.
3:6	Exothermic	An exothermic change transfers energy to the surroundings.
	Endothermic	An endothermic change transfers energy from the

		surroundings.
4:1	Acid	An acid is a solution with a pH value less than 7.
	Alkali	An alkali is a soluble base.
	Concentrated	A solution is concentrated if it has a large number of solute particles per unit volume (litre or cubic metre).
	Dilute	A solution is dilute if it has a small number of solute particles per unit volume (litre or cubic metre).
4:2	pH scale	The pH scale shows whether a substance is acidic, alkaline, or neutral. An acid has a pH below 7. An alkaline solution has a pH above 7. A solution of pH 7 is neutral.
	Indicator	A substance that changes colour to show whether a solution is acidic or alkaline.
		Acidic: Hydrochloric acid in stomach ~ pH 1 Lemon juice ~pH 2 Neutral: Water pH 7 Alkali: Bicarbonate of soda ~ pH 9 Drain cleaner ~pH 13
4:3	Neutralisation	In a neutralisation reaction, an acid cancels out a base or a base cancels out an acid.
	Base	A base is a substance that neutralises an acid.
4:4	Salt	A salt is a compound in which the hydrogen atoms of an acid are replaced by atoms of a metal element.
		Many salts exist naturally but they can be made through a few different types of reactions Acid + Metal → Metal salt + Hydrogen Acid + Base → Metal salt + Water

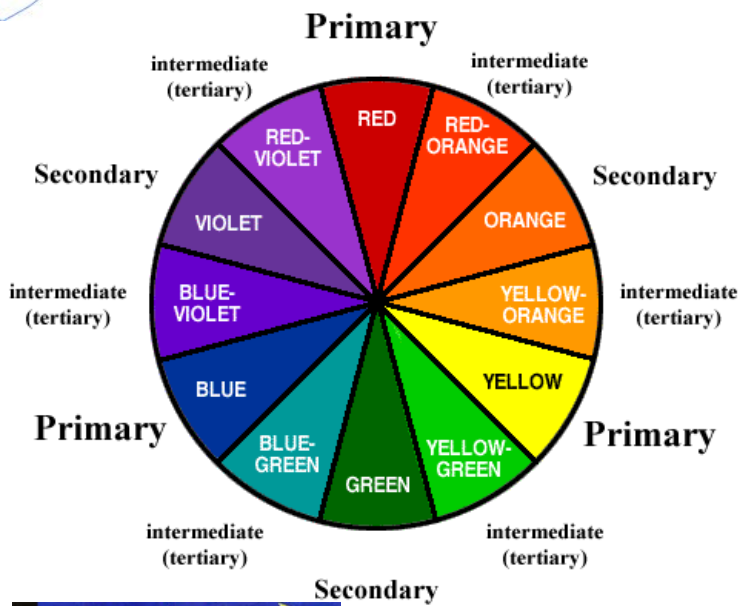
P1 1:1	Contact force	(friction and air resistance)
	Non-contact force	A magnetic, electrostatic, or gravitational force that acts between objects not in contact. (e.g. gravity)
	Newton (N)	The unit of force, symbol N.
1:2	Deform	To change shape. (compress and stretch)
	Reaction force	The support force provided by a solid surface like a floor.
	Tension	A stretching force.
1:3	Friction	The force that resists movement because of contact between surfaces.
	Drag forces	The force acting on an object moving through air or water that causes it to slow down.
1:4	Magnetic force	The force between two magnets, or a magnet and a magnetic material.
	Electrostatic force	The force acting between two charged objects.
		If you were to go in a space craft away for the earth, the further away you get, the gravitational

		field gets weaker. This means that you would not be able to stay standing on the ground. The amount of 'you', your mass, stays the same it's the gravitational force exerted on you that is less, affecting your weight.
1:5	Balanced forces	Forces acting on an object that are the same size but act in opposite directions.
	Unbalanced forces	Forces acting on an object that are different sizes, acting in opposite directions. This leads to movement of an object in the direction of the strongest force.
	Equilibrium	Balanced.
2:1	Oscillation	Something that moves backwards and forwards.
		The key features of a wave include: the amplitude, which is the distance between the middle to the top or bottom of the wave; the frequency which is the number of waves that go past a point per second and wavelength which is the distance from one point on the wave to the same point on the next wave.
	Transverse	The vibrations are at right angles to the direction the wave moves.
	Longitudinal	A wave where the vibrations are in the same direction as the direction the wave moves.
2:2	Vibration	Backwards and forwards motion of the parts of a liquid or solid.
	Vacuum	A space in which there is no matter.
		Sound travels at 340 m/s in air, 1500 m/s in water and 5000 m/s in solids
2:3	Pitch	A property of sound determined by its frequency.
	Hertz	The unit of frequency (Hz).
	Ultrasound	Sound at a frequency greater than 20 000 Hz, beyond the range of human hearing.
	Infrasound	Sound below a frequency of 20 Hz.
2:4	Amplify	To increase the amplitude of a sound so that it sounds louder.
	Decibel	A commonly used unit of sound intensity or loudness (dB).
		Your ear detects sound waves by directing the sound wave into the auditory canal to your eardrum, causing it to vibrate. These vibrations are eventually passed to the cochlea which sends an electrical message along the auditory nerve to the brain which allows us to hear.
2:5	Echo	A reflection of a sound wave by an object.
	Reverberation	The persistence of a sound for a longer period than normal.
		Bats use ultrasound to find their way around and to find their food. Ultra sound can also be used by



		doctors to see unborn babies, used in physiotherapy and to look for some cancers. A special type of ultrasound used on ships is sonar, allowing boats to determine how close they are from the seabed.
3:1	Emit	To give out.
	Reflect	Bounce off.
	Absorb	Taken into a material.
		The speed of light is about 300 000 km/s. The distance that light from the sun travels in a minute is a light-minute. The distance that light from the sun travels in a year is a light-year. Astronomers use these units to measure distance in space.
3:2	Reflection	When a ray hits and bounces off an object.
	Incident ray	The ray coming from a source of light.
	Reflected ray	The ray that is reflected from a surface.
3:3	Refraction	The change in direction of a ray or wave as a result of its change in speed.
	Convex	A lens that produces converging rays of light.
		Light travels through different mediums at different speeds, this leads to refraction, as light travels through different mediums it appears to bend objects due to the difference in speed that the light is travelling.
3:4		When you look at an object, an image of that object is formed on the retina of your eye. Light reflected from the object enters your eye through the whole of the pupil. The image that is projected onto your retina is inverted; your brain turns the image the correct way around.
		The retina is photosensitive, containing cells that respond to light. These photo receptor cells are called rods and cones. Rods are sensitive to movement in dim light. Cones are sensitive to bright light and colour.
3:5	Spectrum	A band of colours produced when light is spread out by a prism.
	Dispersion	The splitting up of a ray of light of mixed wavelengths by refraction into its components.
		Prisms can be used to split white light into a spectrum, this is known as dispersion.
4:1	Solar system	The Sun and the planets and other bodies in orbit around it.
	Orbit	The path taken by one body in space around another.
	Galaxy	A number of stars and the solar systems around them grouped together.
4:2		There are a total of 8 planets that orbit the sun within our solar system. These are Mercury, Venus,

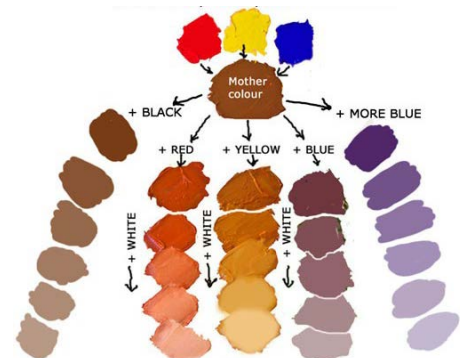
		Earth, Mars, Jupiter, Saturn, Uranus and Neptune. There is also one dwarf planet within our solar system called Pluto.
4:3		Earth is the only planet that is known to contain life.
		Day and night on the earth are results of the fact that the earth is constantly spinning on an axis. This means that at certain times, the face of the earth is facing the sun (day) and at other times it faces away from the sun (night).
	Constellations	A collection of stars that make a pattern in the sky.
4:4	Phases of the moon	Shape of the Moon as we see it from the Earth.
	Solar eclipse	An eclipse where the Moon comes between the Sun and the Earth.
	Lunar eclipse	An eclipse that happens when the Earth comes between the Sun and the Moon.



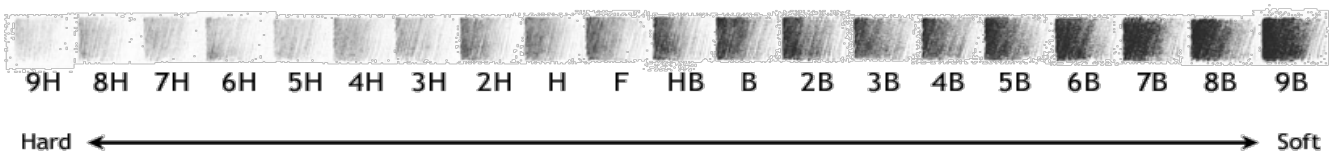
Artwork by Henri Matisse

Key Facts about the Colour Wheel

- Complementary colours are opposite each other on the colour wheel, they have a strong contrast.
- Harmonious colours are sections of colours that are next to each other on the colour wheel, these can be blended together.
- If you mix the primary colours together with the addition of white, you can create skin tones:



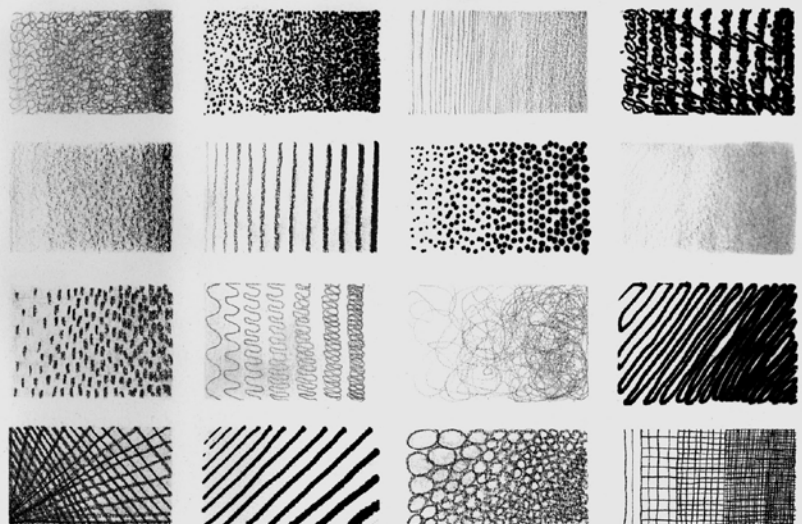
Pencil Grades



Examples of Mark-Making:



Pencil Sketch by David Hockney



*Line, Stippling, Cross-hatch, dashes, stripes, scribble, squares, dots, zigzags...*



Drawing the Proportions of the face:

To begin drawing a portrait you will first need to draw an egg shape. Remember that the narrow part of the egg points down as this will become the chin.

Draw a line vertically right through the centre of the egg. This line will make sure that you line up the nose, mouth and eyes correctly.

Draw a horizontal line half way down the egg. This is where the eyes and top of the ears will go.

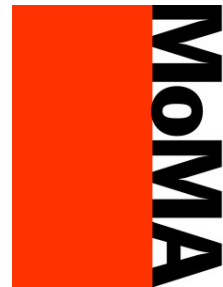
Half way between the eye line and the chin draw a second horizontal line. This is where the bottom of the nose and ears will go.

A third of the way down from the nose line draw a third horizontal line. This is where the mouth will go.

Artwork by  
Frida Kahlo

Gallery Websites are always useful to start selecting artists for your projects:

- <https://www.nationalgallery.org.uk/>
- <http://www.tate.org.uk/visit/tate-modern>
- <http://www.npg.org.uk/>
- <http://manchesterartgallery.org/>
- <http://www.moma.org/>
- <http://www.tate.org.uk/visit/tate-britain>
- <http://www.britishmuseum.org/>



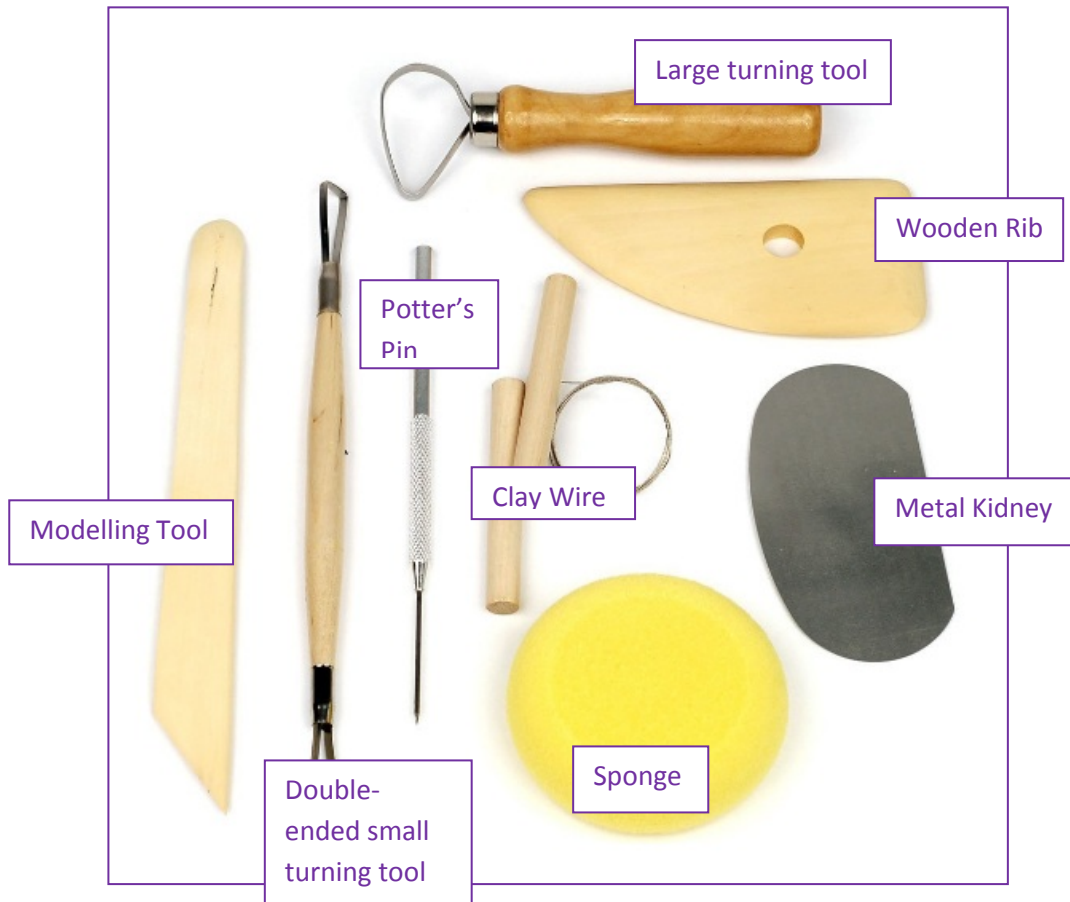
Art Vocabulary

The list of words below can be used to describe different elements of artwork.

Line and direction	Shape, form and composition	Colour and tone	Painting technique	Style and effect
Vertical	Silhouette	Bleached	Instinctive	Grandiose
Horizontal	Organic	Bold	Gestural	Evocative
Jagged	biomorphic	Brush	Painterly	Sublime
Broken	monumental	Clean	Impasto	Daring/bold
Straight	non-objective	Glowing	Fluid	Joyful
Continuous	Geometric	Harsh	Energetic	Emotive
hatching	Abstract	Warm	Dynamic	Intimate
Merged	Distorted	Cool	Rough	Improvised
Contours	Open	Complimentary	Smooth	Rousing
Crooked	Closed	Limited	Linear	Exhilarating
Fluid	Symmetrical	Dull	Strokes	Dominant
Expressive	Asymmetrical	Muted	Aggressive	Iconic
Thick	Flat	Harmonious	Brush	Luminescent
Thin	Block	Vibrant	Dripped	Unconventional
Congested	Exaggerated	Discordant	Soaked	Dynamic
Minimal	Plane	Chiaroscuro	Blended	Pure
	2D / 3D/Relief			Expression

**Chiaroscuro** in art is the use of strong contrasts between light and dark, usually bold contrasts affecting a whole composition

Basic Clay Equipment:



## Clay Vocabulary

The stages of clay:

1. Slip
2. Plastic
3. Leather-hard
4. Greenware or bone dry
5. Bisqueware
6. Glazeware

Other terms:

- Clay
- Ceramic
- Reclaiming
- Wedging
- Kiln
- Firing
- Score
- Glaze
- Underglaze



Key Tips for Using Clay:

- When joining two pieces of clay, always cross-hatch and apply slip to each piece.
- Never allow air bubbles in your clay, these will expand and crack your work when it goes in the kiln!

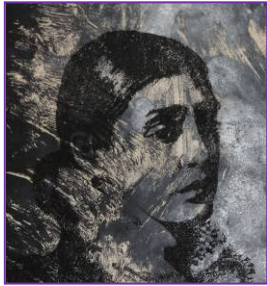


Artwork by Kate Malone

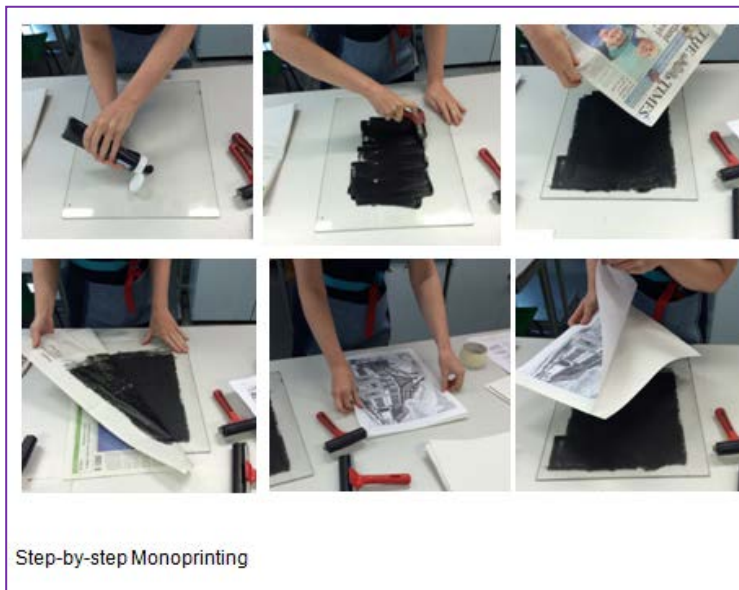
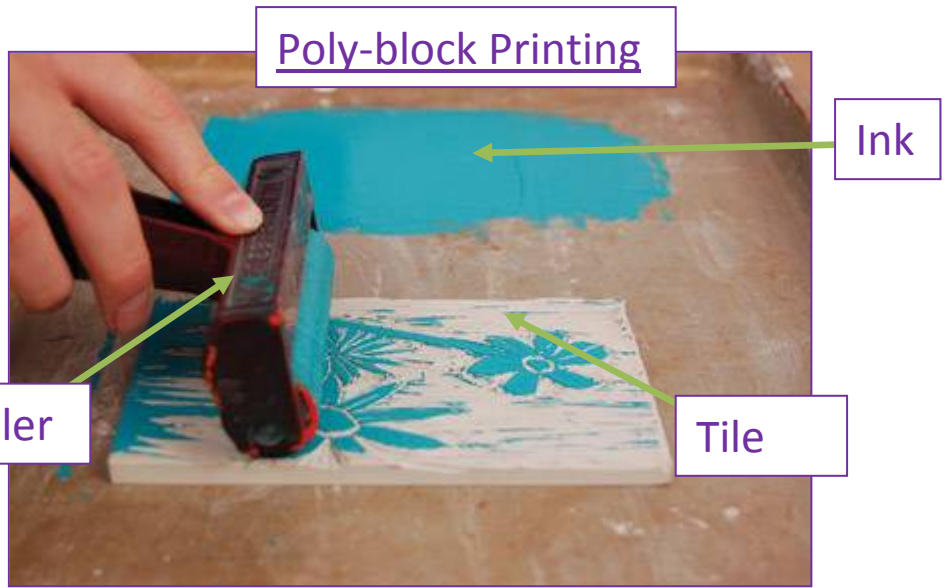
Printmaking



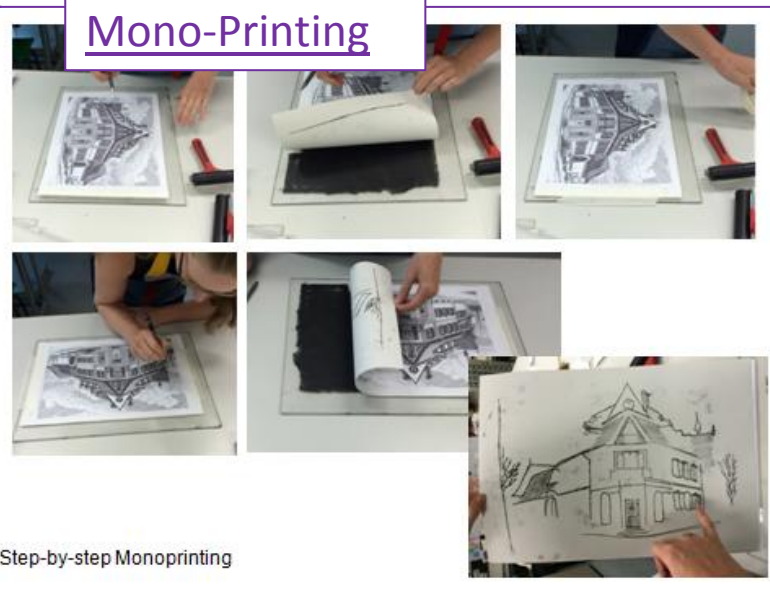
Print by Angie Lewin



Mono-print by Rachel Hames



Step-by-step Monotyping



Step-by-step Monotyping

Drawing is an important criterion for the GCSE Art and Design course; practice your skills by using the following types of drawings:

1. Line Drawing
2. Continuous Drawing
3. Blind Drawing
4. Tonal Drawing
5. Mark-Making Drawing



## Algorithm facts. Computing.

An algorithm is a step-by-step set of instructions for solving problems. It is something that can be followed by humans and computers. An algorithm shows the order in which tasks are to be carried out. This is known as sequence. Often a task is repeated until there is a required outcome. This is known as iteration. When a question is asked, and depending on the answer, a program can take one of two courses of action. This is known as selection. Sequence, iteration and Selection are the building blocks of algorithms. You could even write an algorithm for making a cup of tea or making the perfect meringue. Remember an algorithm is something that can be followed by humans and computers.

## Spreadsheet facts

- Spreadsheets are used for storing data and working on data.
- They are especially good when working with numbers, as you can do all of your maths sums in a spreadsheet.
- All formula in a spreadsheet must begin with an = sign.
- You can also format a spreadsheet to make it look nice.
- Graphs are very useful and can be easily created in a spreadsheet to display your results.
- Spreadsheet modelling involves creating different What-if scenarios. So you can use the model to make predictions. For example, if the price of my chocolate bar went up by 2 pence, how much extra profit could I make, assuming I sold the same amount of chocolate bars.
- Spreadsheets are used in a number of subjects, not just Computing and IT. You will use spreadsheets in Science, Maths and Business Studies for example.

## Database facts

- Databases are used by most organisations to store large amounts of data.
- A database is like an electronic filing cabinet. All important data can be filed and organised neatly in a computer database.
- Data held in databases is stored in files. In Microsoft Access these files are known as tables.
- Tables can be joined together. This is known as a relational database.
- All of the data held on one person or thing is known as a record. For example a criminal record will hold all the details of a criminal, their name, date-of-birth, height etc. A patient record holds all the data on a doctor's patient. A student record contains all the data that a school holds on you! What data do you think they have?
- All of these headings, e.g. surname, first name, date-of-birth, are known as fields.
- The data entered in each field will be a certain data type. For example it could be text data type, numeric data type, currency data type or image data type.

## ICT Facts. E-Safety. What you need to know about cyber safety

<b>Virus</b>	A program designed to cause other programs on a computer to malfunction or stop working altogether.
<b>Trojan</b>	A program that appears legitimate but which performs some harmful activity when it is run. It may be used to locate password information, or make the systems vulnerable to future entry, or simply destroy programs or data on the hard disk drive. A Trojan is similar to a virus except that it does not replicate itself. It stays in the computer doing its damage or allowing somebody from a remote site to take control of the computer. Trojans often sneak in attached to a free game.
<b>Phishing</b>	A form of Internet fraud that aims to steal valuable information such as credit card details, usernames and passwords. The fraudster will often send an email pretending to be someone they are not, and try to trick the customer into giving away personal details, often bank details.
<b>Spyware</b>	Software that can be installed on your computer without your knowledge, which collects information about your logins and Passwords and sends details to another computer on the Internet.
<b>Hacker</b>	Someone who gains unauthorized access to a computer in order to obtain data stored on it. Hackers can be teenagers who are trying to prove that they can break into the most secure website servers. Hackers can also be state-sponsored, aiming to gain access to other state's sensitive data.
<b>Firewall</b>	Asystem designed to prevent unauthorized access to your computer when connected to a network such as the Internet.
<b>Fraud</b>	Tricking someone for personal gain or to damage them.
<b>Identity theft</b>	A crime that involves someone pretending to be another person in order to steal money or obtain other benefits.
<b>Encryption</b>	For security, data is translated into a secret code according to a set of rules in a special 'key'. To convert the data back into plain text, the receiver must also have the key.
<b>Copyright</b>	Gives the creator of an original work exclusive rights regarding that work for a certain period of time, including its publication, distribution and adaptation
<b>Copyright, Designs and Patents Act</b>	This law protects people's original work from being used without their permission.
<b>Computer Misuse Act</b>	This law restricts people from accessing or modifying data without permission.
<b>Data Protection Act</b>	This law regulates how personal information is used and protects against misuse of personal details.
<b>Online grooming</b>	When users on social networking sites will pretend to be someone they're not in order to make friends with a younger person. This can then lead to further serious harm to the young person.
<b>Cyber-bullying</b>	when people use modern technology, for example their smart phones and computers to bully or threaten others. This includes sending text messages or social media posts.

### Top Tips when social networking:

- 1) Keep your profile private and not public.
- 2) Do you really want a stranger to see your address? keep these details private.



## Literacy in Engineering

Gear Ratios  
Drive systems  
Accuracy  
Square  
Smooth / Rough

Tolerance  
Safety  
PPE  
Abrafile  
Front or Rear Wheel Drive

Polypropylene  
Axle  
Screwdriver  
Self Tapping Screws

Wheel Drive

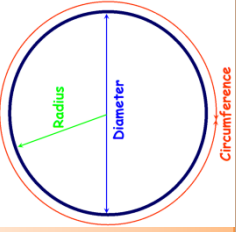


**YEAR 7  
ENGINEERING**

Key Project Word  
**Accuracy**



## Numeracy in Engineering



Units of measurement

1mm = 1cm  
100cm = 1m  
1000m = 1km

## EQUIPMENT



Plywood



Coping Saw



Pillar Drill



Steel Rule



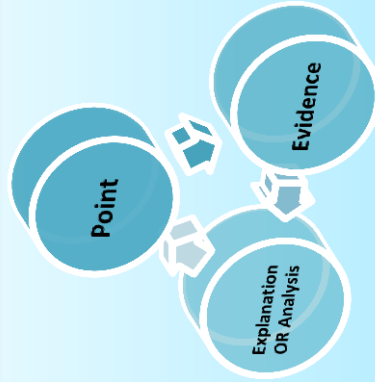
File



Engineers Square



Drill Bit



Using PEE or PEA gives you the framework to explain concepts clearly – Use this for research H/W

# MATERIALS



Denim

Felt



Calico & Cotton



Sequins



Machine Embroidery



Applique



Running Stitch



Cross Stitch



## The Importance of NUMERACY

The standard seam allowance is 15mm. Usually this measurement is already added onto a dress-making pattern but occasionally you may have to add it yourself. Maintaining a **standard seam allowance** is one of the most important ways in which we use **Quality Control** to produce accurate and symmetrical products. All our sewing machines have markings on the needle bed to help your accuracy in measuring and maintaining this seam width.

## YEAR 7 TEXTILES TECHNOLOGY Junky Monster Pencil Case

Incorporating:

**ELECTRONICS**  
Natural Materials

**Woven & Bonded fabrics**  
**DECORATIVE TECHNIQUES**  
**CONSTRUCTION TECHNIQUES**

*Embroidery*

### Word Bank:

*Embellish* Bondaweb Construct Hand Embroidery  
Material *Button Stitching*  
**Recycle** Machine Seams Sustainability  
Conductive Thread LEDs *Sequins* Applique  
**Pencil Case** Pocket Running Stitch **Blanket**  
**stitch** *Back stitch* Whipped Stitch

## Electronics:

Want Lights on your Pencil Case? Create a Circuit using LEDs (Light Emitting Diodes; Conductive Thread; Battery Holders and a Battery!



## TOOLS & EQUIPMENT

Pinking shears

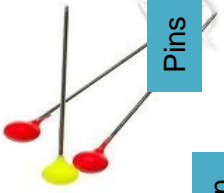


Needle



Fabric Scissors

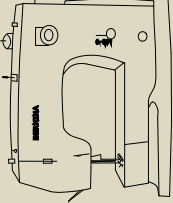
Pins



Bobbin Case



Sewing Machine



Stitch Unpicker



Bobbin Spools



Thread

Iron



**A**  
Aesthetics  
How does it look?  
What does it look like?  
Theme  
Colourway?  
Style?  
Techniques?



why?

**C**  
Cost  
How much will it sell for?  
How much will it cost to make/manufacture it?  
Transport costs?  
Energy Bills?



why?

**C**  
Customer/Client  
Who will buy my Product?  
What are their interests?  
Where do they shop?  
How much money will they spend?  
Is it in demand?



why?

**E**  
Environment  
How friendly is the product?  
Will you use any toxic dyes that contribute to water systems?  
How much energy will you use when making the product?  
How will people care for the product?  
Where are the raw materials from?



why?

**S**  
Sit  
How big is it?  
What are its features?  
Is it easy to carry?  
Can you store it?  
Is it adjustable?



why?

**S**  
Does the product have an interesting story?  
Will young children be able to use it?  
Could it cause any harm?  
How long will it last?  
How long is the warranty?  
When manufacturing the product...



why?

**F**  
Function  
What is it made of?  
When will it be used?  
Entertainment?  
Education?  
Decorative?  
Storage?  
Maintenance?  
Smart?  
Customisable?



why?

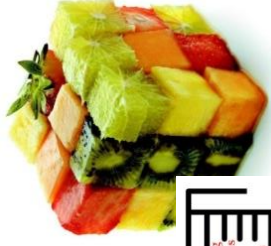
**M**  
Material  
What is it made of?  
What are the properties of these materials?  
Why will it be made from this material?  
Is it easy to use?  
Is it safe?  
Is it the best material?  
Can you recycle this material?  
Is it ethical?  
Affordable? Durable? How long will it last?

why?

# Superfoods



## Knife Skills



## Understand Food Safety



Bacillus Cereus

## Hygiene:

- ❖ Tie your hair back
- ❖ Wash your hands
- ❖ Wear an apron

## Careful with homophones:

- Flour not Flower
- Sauce not source
- Dough not doh!
- Weigh not way
- Roll not role
- Knead not need

Material  
What is it made from?  
Why will it be used?  
When will it be used?  
Entertainment?  
Learning tool?  
Decoration?



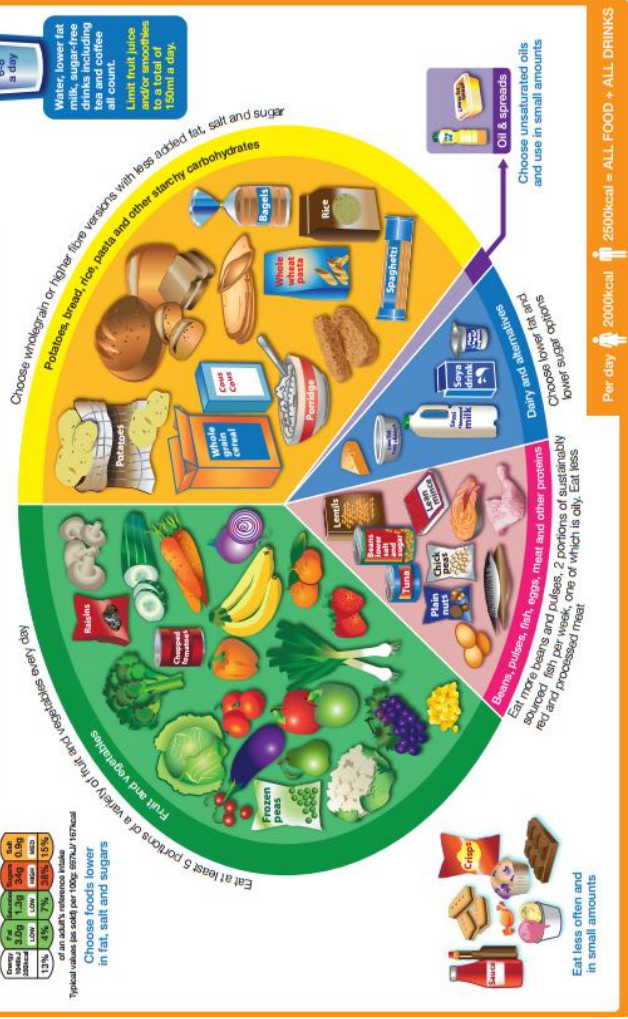
Appearance	Aroma	Texture	Taste
What it looks like	What it smells like	What it feels like in your mouth	What the flavour is
<ul style="list-style-type: none"> <li>Appetising</li> <li>Attractive</li> <li>Clear</li> <li>Cold</li> <li>Colourful</li> <li>Crumbly</li> <li>Dry</li> <li>Fattening</li> <li>Firm</li> <li>Fresh</li> <li>Fruity</li> <li>Healthy</li> <li>Hot</li> <li>Moist</li> <li>Runny</li> <li>Slimy</li> <li>Smooth</li> <li>Tasty</li> <li>Tough</li> </ul>	<ul style="list-style-type: none"> <li>Burnt</li> <li>Fragrant</li> <li>Fruity</li> <li>Garlicky</li> <li>Spicy</li> <li>Sour</li> <li>Stale</li> </ul>	<ul style="list-style-type: none"> <li>Slippery</li> <li>Sticky</li> <li>Stringy</li> <li>Tender</li> <li>Thick</li> <li>Tough</li> <li>Wet</li> </ul>	<ul style="list-style-type: none"> <li>Acidic</li> <li>Bitter</li> <li>Bland</li> <li>Chewy</li> <li>Creamy</li> <li>Dry</li> <li>Fruity</li> <li>Herby</li> <li>Hot</li> <li>Salty</li> <li>Sharp</li> <li>Sour</li> <li>Sour</li> <li>Spicy</li> <li>Sweet</li> <li>Tangy</li> <li>Tasteless</li> <li>Tasty</li> <li>Undercooked</li> <li>Watery</li> </ul>

Converting Tablespoons to Milliliters

- 1 TB = 15 ml
- 2 TB = 30 ml
- 3 TB = 45 ml
- 4 TB = 60 ml
- 5 TB = 75 ml
- 6 TB = 90 ml
- 7 TB = 105 ml
- 8 TB = 120 ml
- 9 TB = 135 ml
- 10 TB = 150 ml

## Eatwell Guide

Use the Eatwell Guide to help you get a balance of healthier and more sustainable food. It shows how much of what you eat overall should come from each food group.



Check the label on packaged foods  
Each serving (100g) contains:  
Energy 1700kJ (400kcal)  
Total fat 10g (20%)  
Saturated fat 6g (12%)  
Total carbohydrate 15g (30%)  
Sugars 10g (20%)  
Salt 1.5g (30%)

Typical values for adults per 100g (other % values of an adult's reference intake)  
Choose foods lower in fat, salt and sugars

## Safety in the Kitchen:

- Put bags & stools away
- Tie aprons at the back
- Ensure shoe laces are tied
- Clear up spillages immediately
- Carry a knife with the blade pointing downwards



Function  
What does it do?  
When will it be used?  
Entertainment?  
Learning tool?  
Decoration?

Size  
How big is it?  
What are the dimensions?  
Is it easy to carry?

Environment  
How friendly is it to the environment?  
Where will it be kept?

Customer  
Who will buy my Designer Clock?  
How old are they?  
What are their interests?  
Why would they pick mine?

Cost  
How much will I sell my clock for?  
How much do they cost in the shops?

Aesthetics  
How something looks.  
What will it look like?  
What colour will it be?  
What shape will it be?



**Point Evidence Explain**



**Point Evidence Analysis**




**Tools and Equipment**

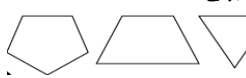
Vinyl  
 Tensol  
 cement, Acrylic,  
 Flat file, Oxide  
 paper, decoration,  
 pop art,  
 Onomatopoeia  
 Thermo Plastic  
 inspiration,

**Key Words**

Vinyl, Tensol  
 cement, Acrylic,  
 Flat file, Oxide  
 paper, decoration,  
 pop art,  
 Onomatopoeia  
 Thermo Plastic  
 inspiration,


**Scale:**

1:1 = same size as actual item.  
 1:2 = 1/2 the size of the item.  
 1:3 = 1/3 the size of the item.  
 1:4 = 1/4 of the size of the item.





1cm = 10 mm

Numeracy  
 Angle  
 Symmetry  
 Geometric  
 Coping saw  
 Vinyl  
 Flat File  
 Abra File  
 Clock Mechanism  
 Tensol Cement  
 Wet and Dry Paper



**LITERACY**

I researched into...  
 I have produced...  
 My design is suitable for...  
 I have learnt how to...  
 design is based upon...

**Materials**

Acrylic  
 Vinyl  
 Clock  
 Mechanism




**Key Terms**

Specification  
 Evaluation  
 Annotate

**YEAR 7 PRODUCT DESIGN**



**LITERACY**

I researched into...  
 I have produced...  
 My design is suitable for...  
 I have learnt how to...  
 design is based upon...




**LITERACY**

I researched into...  
 I have produced...  
 My design is suitable for...  
 I have learnt how to...  
 design is based upon...

**Aesthetics**

Tone  
 Design Brief  
 Product Analysis

**YEAR 7 PRODUCT DESIGN**

**Materials**

Acrylic  
 Vinyl  
 Clock  
 Mechanism





**Tools and Equipment**

Scroll Saw  
 Coping saw  
 Vinyl  
 Flat File  
 Abra File  
 Clock Mechanism  
 Tensol Cement  
 Wet and Dry Paper




**Numeracy**

Angle  
 Symmetry  
 Geometric  
 1cm = 10 mm



**SCALE:**

1:1 = same size as actual item.  
 1:2 = 1/2 the size of the item.  
 1:3 = 1/3 the size of the item.  
 1:4 = 1/4 of the size of the item.

**Point Evidence Analysis**

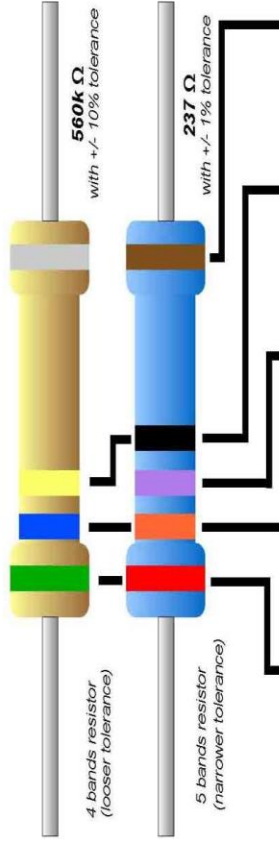


**P Evidence Explain**

# Cube Project -

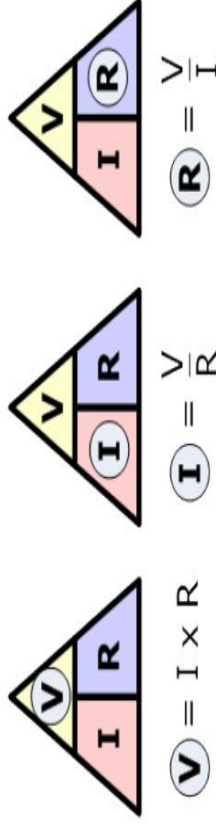
# Electronics

## Resistor Color Code



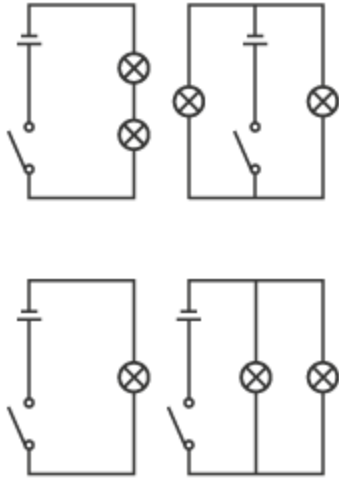
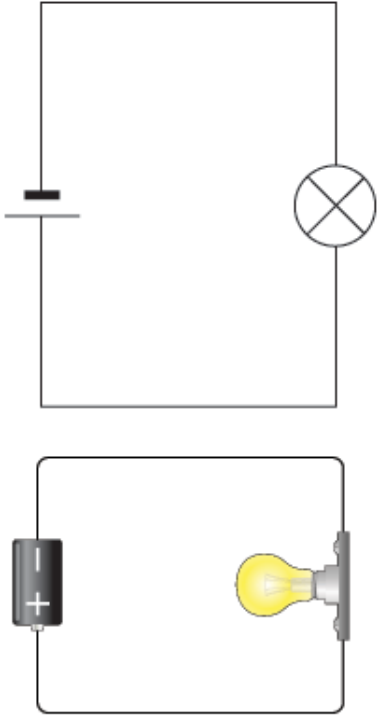
Color	1 <sup>st</sup> Band	2 <sup>nd</sup> Band	3 <sup>rd</sup> Band	Multiplier	Tolerance
Black	0	0	0	x 1 Ω	
Brown	1	1	1	x 10 Ω	+/- 1%
Red	2	2	2	x 100 Ω	+/- 2%
Orange	3	3	3	x 1K Ω	
Yellow	4	4	4	x 10K Ω	
Green	5	5	5	x 100K Ω	+/- 5%
Blue	6	6	6	x 1M Ω	+/- 25%
Violet	7	7	7	x 10M Ω	+/- .1%
Grey	8	8	8		+/- .05%
Gold	9	9	9	x .1 Ω	+/- 5%
Silver				x .01 Ω	+/- 10%

## Ohm's Law Triangle



Electronic circuit diagram components (symbols)					
Symbol	Component	Symbol	Component	Symbol	Component
	Joined conductors		Crossing conductors -no connection		Single-Pole-Single-Throw switch (SPST) (normally open)
	Fixed resistor		Diode		Single-Pole-Single-Throw switch (SPST) (normally closed)
	Potentiometer		Light-Emitting Diode (LED)		Single-Pole-Double-Throw switch (SPDT)
	Preset potentiometer		NPN transistor		Double-Pole-Double-Throw switch (DPDT)
	Thermistor		Amplifier		Push-To-Make switch (PTM)
	Light-dependent resistor		Fuse		Push-To-Break switch (PTB)
	Polarised capacitor		Resonator		Dry-reed switch
	Non polarised capacitor		Resonator		Opto switch
	Power supply		Primary or secondary cell		Relay (with double-throw contacts - contact symbol varies with type used)
	Power supply		Battery (of cells)		

Note: Relay Symbol - The symbol consists of a relay coil and contacts. Contacts are usually drawn separate from the coil at convenient points on the circuit diagram and are always shown in the unoperated position.



Flow-sheet1\* - Logicator for PIC® and PICAXE® Registered to: REVOLUTION EDUCATION

File Edit View Simulate PIC Options Help

Command List

- Common
  - Start
  - Stop
  - Outputs
  - High
  - Low
  - Motor
  - Wait
  - Decision
- Variables
- Procedures
- Sound Output
- Serial In/Out
- Other In/Out
- Advanced

Digital Panel

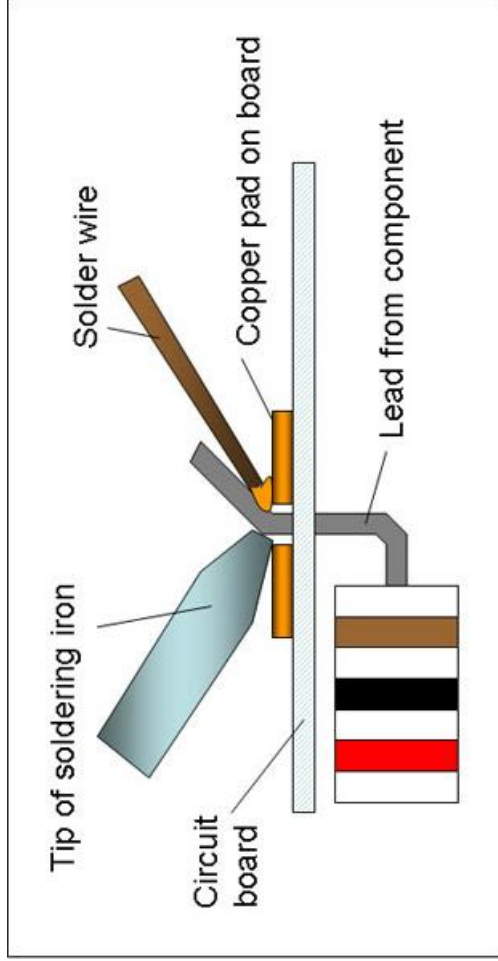
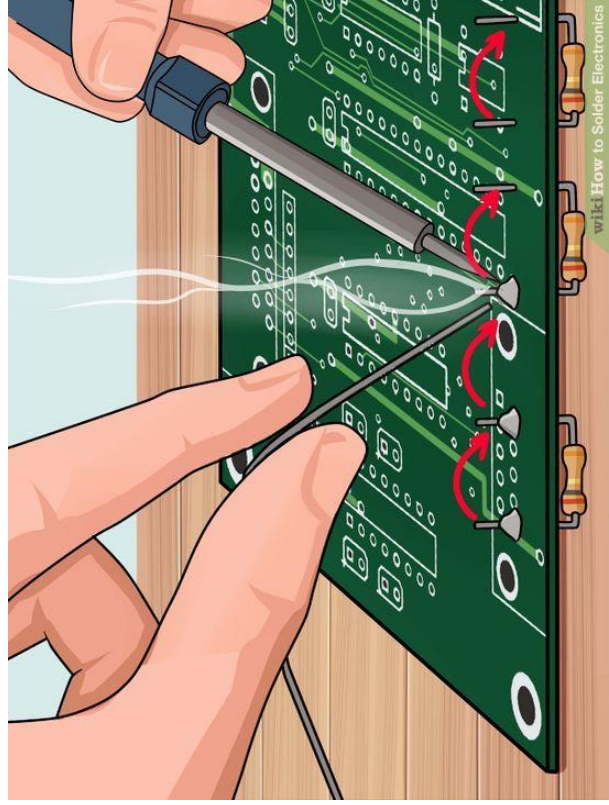
8	0	1	0	0	0	0	0	0	V+
7	0	0	0	0	0	0	0	0	6
6	0	0	0	0	0	0	0	0	5
5	0	0	0	0	0	0	0	0	4
4	0	0	0	0	0	0	0	0	3
3	0	0	0	0	0	0	0	0	2
2	0	0	0	0	0	0	0	0	1
1	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
TXD	0	0	0	0	0	0	0	0	0
RXD	0	0	0	0	0	0	0	0	0

PICAXE-18M2

```

graph TD
    Start([Start]) --> High1[High 1]
    High1 --> Wait1_1[wait 1 second]
    Wait1_1 --> Low1[Low 1]
    Low1 --> Wait1_2[wait 1 second]
    Wait1_2 --> High1
  
```

PICAXE18M2 - COM1



# French

## Grammar section

### Nouns

Nouns refer to a person, place, thing or concept. They are listed in the dictionary together with their gender (**masculine** or **feminine**) – collège **MASC** (school) and maison **FEM** (house).

*Hint!* Whenever you learn a new noun, remember to learn the gender of this noun too:

**un frère** – a brother **une sœur** – a sister

**Remember: Make sure that your nouns, adjectives and verbs agree with each other!**  
(See the adjectives section below)

### Adjectives

Adjectives describe **nouns** and can refer to condition, colour, emotions etc. Remember to check your **agreement** – adjectives always agree with nouns in gender (masculine or feminine) and **number** (singular and plural) – for example: les chemises **vertes**.

### Qualifiers

Qualifiers explain or further describe adjectives or how an action (verb) occurs. They come **before the adjective** that they describe or **after the verb** that they describe. **Eg:**

**très** – very (with adjectives)      **beaucoup** – a lot (with verbs)      **un peu** – a bit      **assez** – quite  
**trop** – too      **vraiment** – really

### Verbs

Verbs are doing words and can be found in the dictionary in their **infinitive** form (e.g. **habiter, vendre, finir**). In French, they can end in three ways - **-er, -re** and **-ir**.

*Hint!* If you are expressing an opinion, the verb which follows is an infinitive e.g. j'aime jouer au foot.

To make a verb **negative** – just put '**ne**' in front of the conjugated verb followed by '**pas**'. You can also add on the following words after the verb instead of using '**pas**':

**personne** – nobody      **jamais** – never      **rien** – nothing      **ne...plus** = not anymore

### Opinions

Introducing your opinions:

**À mon avis / Pour ma part / Selon moi** – In my opinion...

**J'estime que** – I consider that...

**Je pense que / Je crois que / Il me semble que / Il paraît que** – I think / It seems that...

**Concernant / En ce qui concerne** – Regarding...



## Opinions you can express (followed by verb infinitives):

<b>J'adore</b>	– I love	<b>J'aime beaucoup</b>	– I really like
<b>J'aime</b>	– I like	<b>Je n'aime pas du tout</b>	– I really don't like
<b>Je déteste</b>	– I hate	<b>Je préfère</b>	– I prefer

**Hint!** To score a higher level, justify your opinions with **parce que + c'est + adjective**

## Connectives

Connectives (also known as conjunctions) can be divided into two main categories in French – words that we use to start new sentences and words that we use to join sentences:

### To start sentences:

<b>D'abord / Premièrement</b>	– Firstly
<b>Deuxièmement</b>	– Secondly
<b>Néanmoins</b>	– Nevertheless
<b>Pourtant / Cependant</b>	– However
<b>De plus / En addition</b>	– Moreover
<b>Donc</b>	– Therefore
<b>D'une part</b>	– On one hand
<b>Par contre</b>	– On the other hand
<b>Étant donné que</b>	– Given that
<b>Puisque</b>	– Then / Since
<b>Par conséquent</b>	– As a result

### To join sentences:

<b>et</b>	– and
<b>parce que / car</b>	– because
<b>aussi</b>	– also or as well
<b>ainsi</b>	– thus
<b>ou (→ ou bien)</b>	– or (→ rather)
<b>mais</b>	– but
<b>puis</b>	– then
<b>après</b>	– afterwards
<b>avant</b>	– before
<b>quand</b>	– when
<b>avec</b>	– with



## Time phrases

These can be used to express when or how often you do a particular activity:

### 1. Referring to the past:

<b>Hier</b>	– yesterday
<b>Hier soir</b>	– last night
<b>Le weekend dernier</b>	– last weekend
<b>La semaine dernière</b>	– last week
<b>Le mois dernier</b>	– last month
<b>L'année dernière</b>	– last year
<b>Il y a deux / trois jours / semaines / mois</b>	– Two / three days / weeks / months ago

### 2. Referring to the present:

<b>Tous les jours</b>	– every day
<b>Les weekends</b>	– at weekends
<b>Chaque ...</b>	– every ...
<b>Une fois / deux fois par</b>	– once / twice a ...

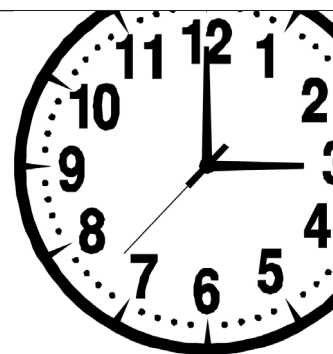
### 3. Referring to the future:

<b>Demain</b>	– tomorrow
<b>Après-demain</b>	– the day after tomorrow
<b>La semaine prochaine</b>	– next week
<b>Pendant les vacances</b>	– in the holidays
<b>L'année prochaine</b>	– next year

### 4. Referring to frequency:

<b>Toujours / tout le temps</b>	– always
<b>Normalement</b>	– normally
<b>Généralment</b>	– generally
<b>Régulièrement</b>	– regularly
<b>Souvent</b>	– often

**Hint!** You need to include your time phrases **next to the verb** you're using – before or after!





## The Near Future Tense

The near future tense is used to say something that you are going to do. You should use a future time phrase with this tense.

To form the future tense:

1. Take the present tense of the verb 'aller'
2. Add the infinitive

<i>I am going</i>	aller
<i>you (s) are going</i>	je vais
<i>he/she is going</i>	tu vas
<i>we are going</i>	il /elle va
<i>you (pl) are going</i>	nous allons
<i>they are going</i>	vous allez
	ils/elles vont

### Examples:

- 1) I am going to play football  
→ Je vais jouer au foot.
- 2) We are going to watch TV Nous  
→ allons regarder la télé.

## ***Glossary of Linguistic Terms Used in MFL Lessons***

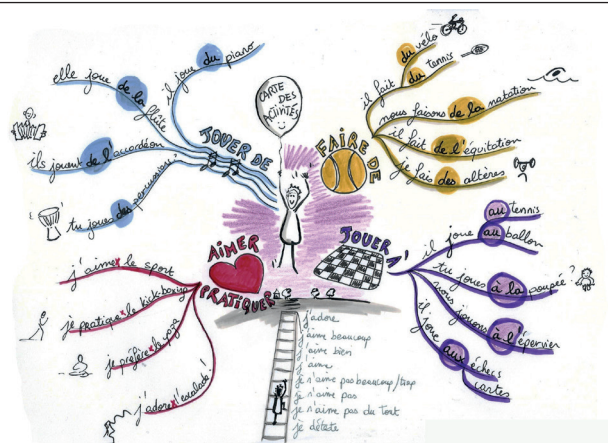
Word	Definition
accent	mark/sign on a letter to change the sound that it makes
adjective	a word that describes a noun
adverb	used to give additional information about verbs or adjectives (see <u>qualifier</u> ; <u>time phrase</u> )
agreement	when <u>nouns</u> , <u>adjectives</u> and verbs match each other in <u>number</u> and in <u>gender</u>
cognate	a word/part of word that looks, sounds and means the same (or similar) in two languages
conjugation (conjugate)	when a verb infinitive is written in its six different parts (see <u>subject</u> ; <u>verb</u> ; <u>infinitive</u> )
connective	words used to link sentences to each other
feminine	one option for <u>gender</u>
gender	either <u>masculine</u> or <u>feminine</u> (and also <u>neuter</u> in German)
infinitive	basic verb form meaning 'to do' an action, identified by its ending and found in a dictionary (see <u>verb</u> )
masculine	one option for <u>gender</u>
noun	a person, place or thing (including a concept)
number	the quantity of a noun present
plural	when there is more than one of a <u>noun</u> present
qualifier	adverbs used to give more information about adjectives e.g. 'very' (see <u>adverb</u> )
singular	when there is only one of a noun present
subject	person (referring to the six parts of the <u>verb conjugation</u> ) doing the action
tense	the time when a verb takes place – past, present or future
time phrase	an adverb which refers specifically to time
verb	an action or 'doing word' (see <u>infinitive</u> ; <u>conjugation</u> )

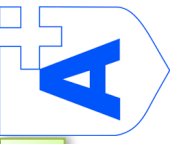
## High-frequency vocabulary

Les mots essentiels	High-frequency words
assez	quite
aussi	also
car	because
comme	as
et	and
mais	but
très	very
un peu	a bit
parce que	because
par exemple	for example
surtout	above all
à quelle heure?	at what time?
quand?	when?
combien?	how much/how many?
combien de temps?	how long?
comment?	how?
où?	where?
qui?	who?
avec qui?	who with?
Expressions de temps	Time sequencers
d'habitude	usually
de temps en temps	from time to time
en ce moment	at the moment
quelquefois	sometimes
souvent	often
tous les jours	every day
une ou deux fois par mois	once or twice a month
Conjonctions	Connectives
après (le dîner)	after (dinner)
avant (de me coucher)	before (I go to bed)
d'abord	first
ensuite	next
puis	then
un peu plus tard	a bit later

# High-frequency vocabulary

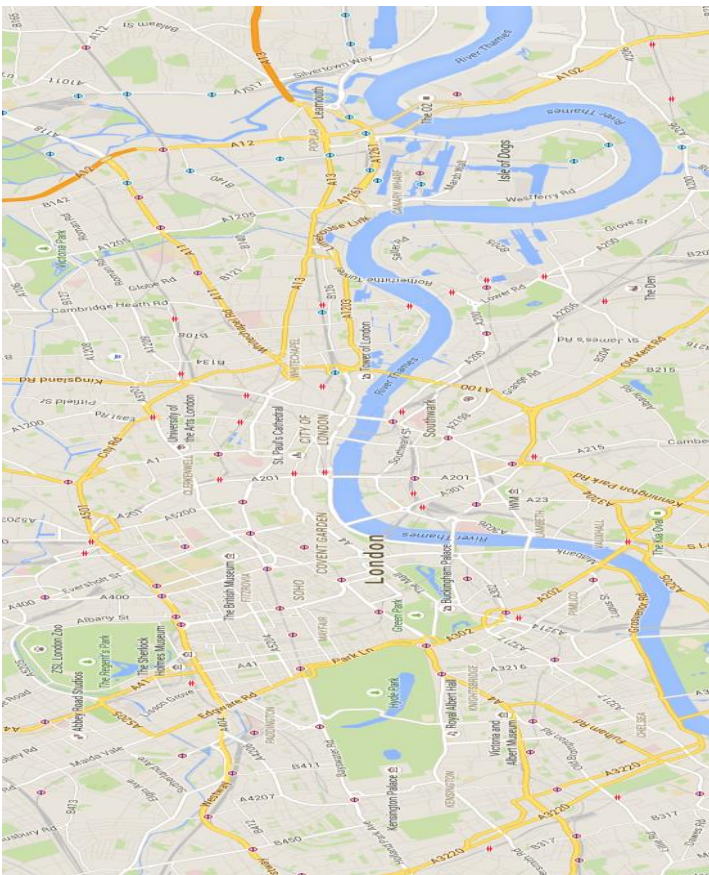
Les opinions	Opinions
à mon avis, c'est ...	in my opinion, it's ...
je pense que c'est ...	I think it's ...
je trouve ça ...	I find it ...
amusant	funny
assez bien	quite good
barbant	boring
chouette	excellent
effrayant	frightening
émouvant	moving
ennuyeux	boring
génial	great
intéressant	interesting
nul	rubbish
passionnant	exciting
pratique	practical
stupide	stupid
formidable	great
idiot	stupid
Les prépositions	Prepositions
dans/devant	in/in front of
derrière	behind
entre	between
sous	under(neath)
sur	on
à côté de	next to
à droite de/à gauche de	on the right of/on the left of
en face de	opposite





## Geography: Key Definitions

Human Geography	Human geography is the branch of Geography that deals with the study of people and their communities, cultures, economies and interaction with the environment.
Physical Geography	Physical geography is that branch of Geography which deals with the study of processes and patterns in the <b>natural</b> environment like the atmosphere, oceans, ecosystems.
Long- term	Occurring/ Lasting for a long period of time.
Short- term	Occurring/ Lasting for short period of time.
Economic	Relates to the economy: business, jobs, finance.
Environmental	Relates to the natural world and the general environment: animals, plants etc.
Social	Relates to people: relationships and everyday life.
Impacts	An effect/ influence/ consequence
Responses	A reaction to something that has happened.



Maps are 2-D drawings of our world from above or a 'bird's eye view'. They help us find our way around and show where different places are in relation to each other (**distance and direction**). Maps can show small or large areas: from room plans to world maps.

### OS Map Symbols


Great Britain: This is the official collective name of **England, Scotland and Wales and their associated islands.**

It does not include Northern Ireland



United Kingdom

The United Kingdom includes England, Northern Ireland, Scotland and Wales.



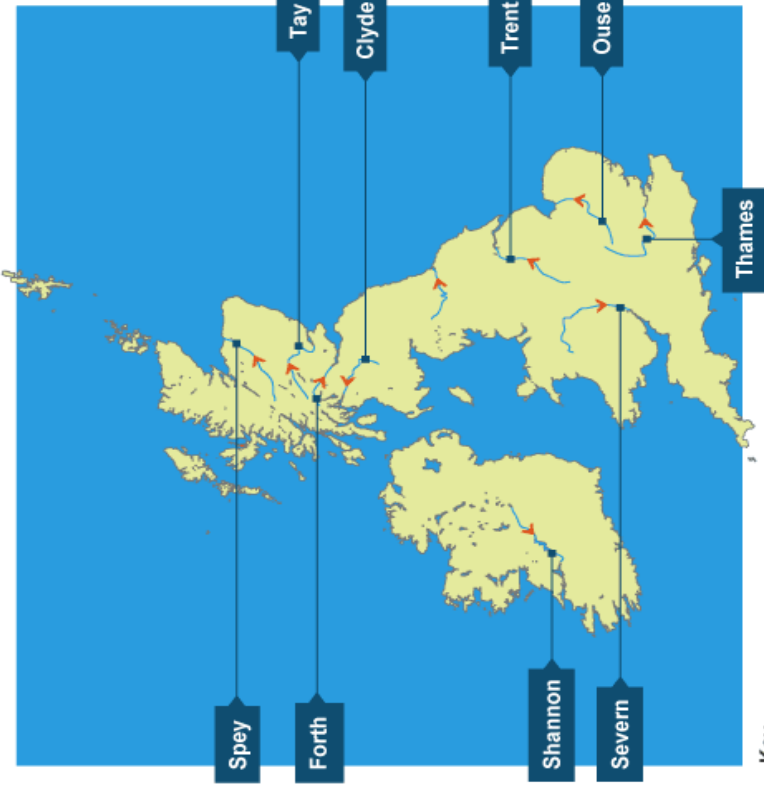
British Isles: This term refers to the **islands** of Great Britain and Ireland – including the Republic of Ireland – and the 5000 or so smaller islands scattered around our coasts, such as the **Channel Isles and Isle of Man**



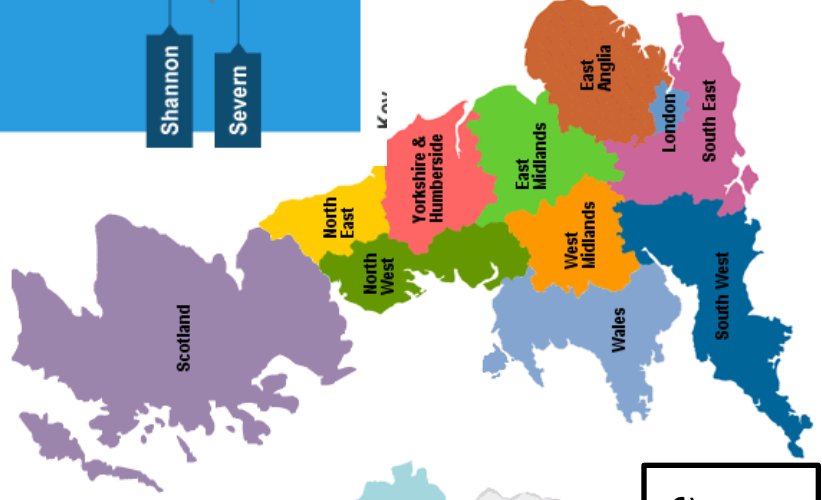
British Isles



Major cities of the British Isles.



The major rivers of the British Isles.



Regions of the United Kingdom.

Periods in early to early modern British History

43 AD — 410 AD = The Romans  
 410 AD — 1066 AD = The Vikings and Anglo Saxons  
 1066 AD — 1154 AD = The Normans  
 1154 AD — 1485 AD = The Middle Ages  
 1485 AD — 1603 AD = The Tudors  
 1603 AD — 1714 AD = The Stuarts and Civil War

Key words:

**Source** – a piece of evidence.  
**AD**- stands for Anno Domini which means ‘in the year of the Lord’. It is used for the dates after the birth of Christ  
**Feudal system**- a system of dividing up the land; men received land in return for offering to fight for their lord or king.

Template for an inference question

1) What can you infer from the source about ....

*From the source I can infer that ..... [insert what you can tell from the source]  
 Details from the source that tell me this are .....  
 [insert evidence from the source]*

Template for an explanation question

2) Can you explain how/why .....  
 [Use a PEE paragraph]

P = The point you are making.

E = Evidence — an example of why you are right (historical knowledge, quotations)

E = Explanation — what your evidence actually means and why it explains the point you are making.

Do this X3.

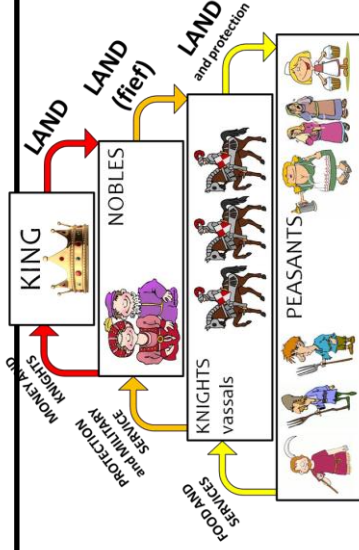
Make sure you focus on the question and only focus on one point per paragraph.



## The Normans and the Tudors – some key questions and information

### Normans: How did William the Conqueror control England?

**1. Why build castles?** They helped to control England. The **castles** were required so that the Normans could remain safe and in control. Major **castles** were **built** in or near large centres of population. On the edge of London William the Conqueror had a massive square keep constructed as a reminder to the Londoners that he was their king.



Feudal Pyramid of Power

### 2. The Feudal System - sharing land for money and power

**3. The Domesday Book:** Along with a string of castles throughout England, the Domesday Book was to give William huge authority in England. To further extend his grip on England, William I ordered that a book be made containing information on who owned what throughout the country. This book would also tell him who owed him what in tax and because the information was on record, nobody could dispute or argue against a tax demand.

### Tudors: Why did Henry VIII break away from the Catholic Church?

Henry VIII broke away from the Catholic Church in Rome and closed the monasteries.

- He split away from Rome because he wanted to divorce Catherine of Aragon and marry Anne Boleyn. He was in desperate need of a **son to be his male heir** (future King)
- The Act of Supremacy made him head of the Church in England. This gave him more **power** over England.
- Henry's main advisers were **Protestants** (against Catholics and the Pope)
- He closed the monasteries to get their **wealth** to fight his expensive wars in Europe. Monasteries were very rich and strongly linked with the Catholic Church.



### HOUSE OF TUDOR

KING HENRY VII  
(Reign: 1485-1509)

KING HENRY VIII  
(Reign: 1509-1547)

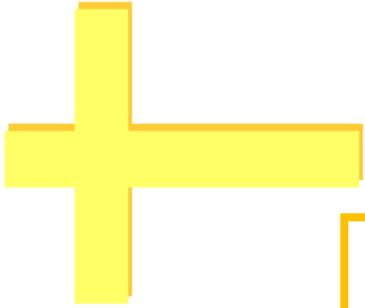
QUEEN MARY I  
(Reign: 1553-1558)

QUEEN ELIZABETH I  
(Reign: 1558-1603)

KING EDWARD VI  
(Reign: 1547-1553)

## Major World religions and symbols

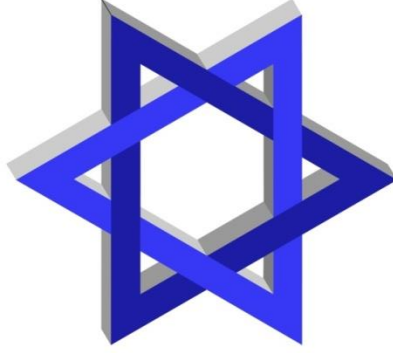
Christianity



Buddhism



Judaism



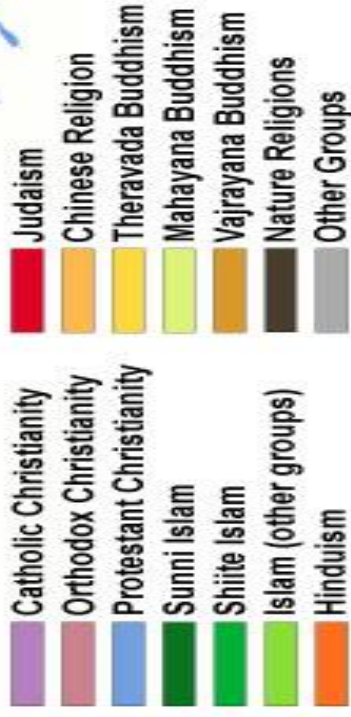
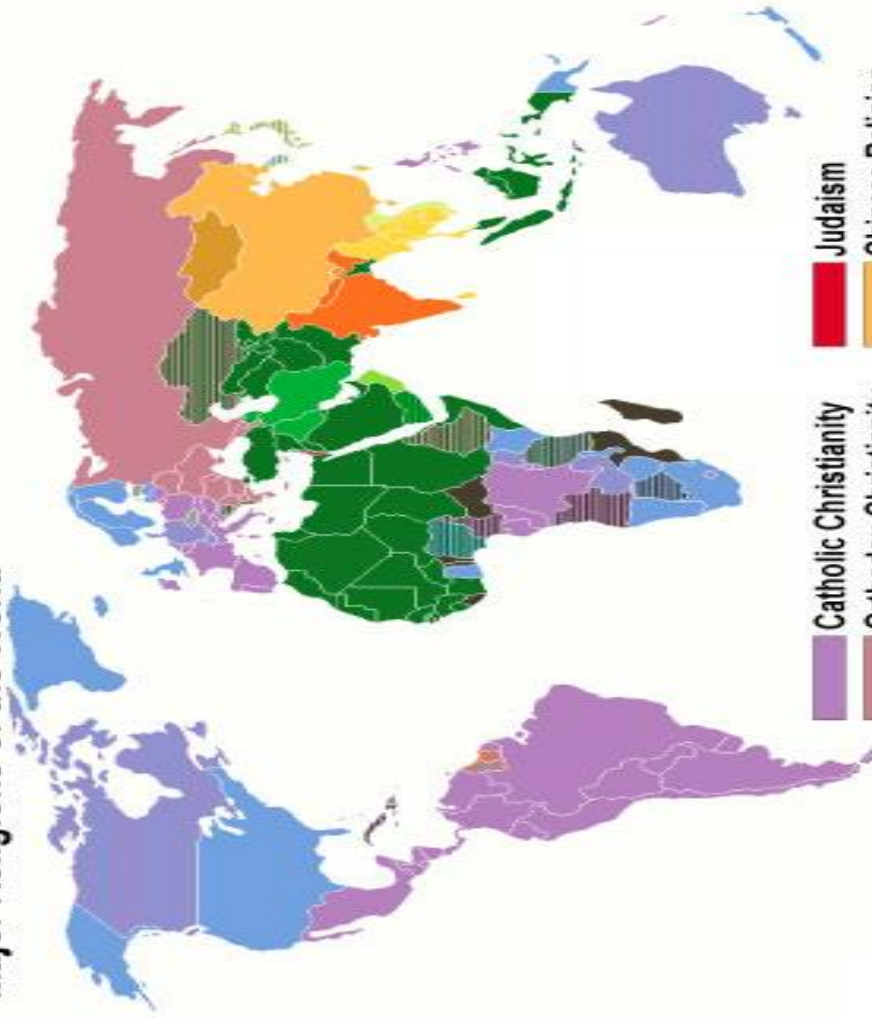
Islam



Hinduism



### Major Religions of the World



## Religious Studies: Key Definitions

Christianity	the religion based on the person and teachings of Jesus Christ, or its beliefs and practices.
Islam	The name of the religion followed by Muslims; to surrender to the will of God; peace.
Buddhism	A widespread Asian religion or philosophy, founded by Siddhartha Gautama in NE India in the 5th century BC.
Hinduism	A major religious and cultural tradition of South Asia, which developed from Vedic religion. The God of Hinduism is Brahman.
Judaism	the monotheistic religion of the Jews,. The foundation of their beliefs derive from the Old Testament and in the teachings and commentaries of the rabbis as found chiefly in the Talmud.

<u>Christianity</u>	Christians	followers of Christ (Greek <i>christos</i> , Messiah)	Arabic, "submission"
Followers Called			
Name Means			
Date Founded	c. 30 CE		622 CE
Place Founded	Palestine		Arabian Peninsula
Original Languages		Aramaic and Greek	Arabic
Founders & Early Leaders		Jesus, Peter, Paul	Muhammad



COMPONENT OF FITNESS	DEFINITION
Muscular Endurance	When one or more muscles contract repeatedly when lifting or moving, for a certain length of time.
Body Composition	The amount of body fat compared to muscle in the body.
Muscular Strength	When the body has to exert a force against resistance.
Speed	How fast the body can move from A to B or perform an action until it's complete.
Flexibility	The amount/range of movement around a joint.
Reaction Time	The time it takes for the body to respond to a stimulus.
Coordination	When a sequence of movements are performed smoothly and accurately together.
Power	The rate at which work is performed often strength x speed = this
Balance	The ability to maintain your centre of gravity when standing still or moving.
Agility	Being able to change direction whilst keeping the body under control.
Anaerobic	When the body is working at a level that demands the need for more oxygen.

Fitness tests	Example
Strength	Hand Grip Dynamometer test
Speed	30 metre sprint test
Aerobic endurance	20 metre multi-stage fitness test
Flexibility	Sit and reach test
Agility	Illinois Agility Test
Balance	The Standing Stork test
Reaction time	Ruler test

### SMART goal setting

This is used widely in sport, work and leisure to help make people's goals easier to achieve.

**S - Specific** means knowing exactly what the goal is.

**M - Measurable** means that it will be easy to know when a goal has been achieved.

**A - Achievable.** Running an extra 100m in the Cooper's run test after six weeks' training may well be achievable, however, running a marathon after four weeks of running 2 miles probably will not.

**R - Realistic.** A goal may well be achievable in theory, but if it is to be achievable in practice it is necessary to have the time and resources to complete it.

**T - Time-bound.** Does the goal have an end point? If not, it is easy to put off achieving it indefinitely.

# Year 7 - Music

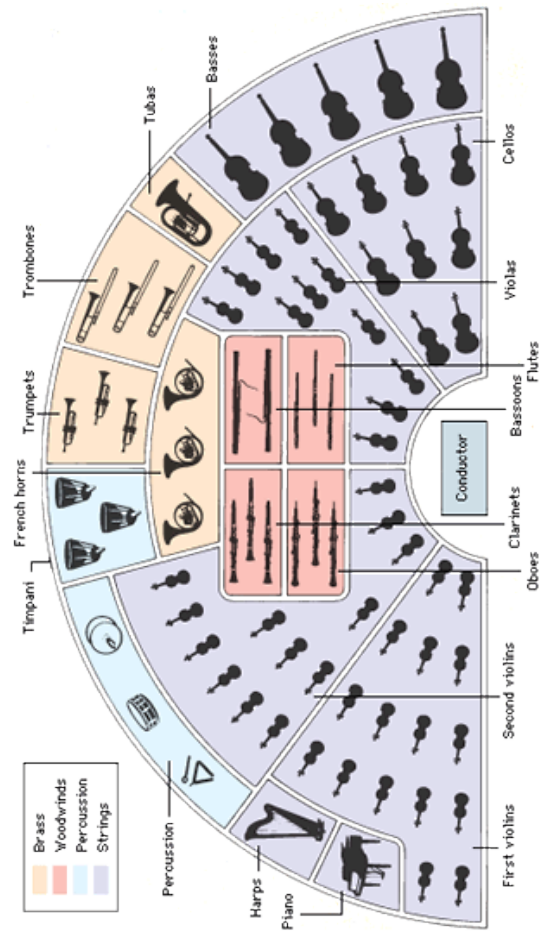
The Elements of Music	
<b>Pitch</b>	High or low notes.
<b>Dynamics</b>	The volume of music.
<b>Tempo</b>	The speed of music.
<b>Rhythm</b>	A pattern made up of different note lengths.
<b>Pulse</b>	A regular beat.
<b>Timbre</b>	The quality or character of an instrument's sound.
<b>Mood</b>	The feeling that music evokes.
<b>Structure</b>	The way in which music is organised.

Keyboard Skills	
<b>Ternary form</b>	Music organised using an ABA structure.
<b>Harpichord</b>	Keyboard instrument from the Baroque era.
<b>123,12345</b>	Order of fingers for right hand scale on the keyboard.
<b>Melody</b>	A tune/pattern of single notes.
<b>Chord</b>	Two or more notes played at the same time.
<b>Triad</b>	A three note chord.
<b>Extended chord</b>	A triad with additional notes (often 7 <sup>th</sup> and 9 <sup>th</sup> notes).

Sign	Name	Relative Length	In 4/4 Time
○	Semibreve	Whole note	4 beats
♩	Minim	Half note	2 beats
♪	Crotchet	Quarter note	1 beat
♫	Quaver	Eighth note	1/2 beat

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

Instruments of the Orchestra	
<b>String</b>	Violin, viola, cello, bass, harp.
<b>Brass</b>	Trumpet, French horn, trombone, tuba.
<b>Woodwind</b>	Flute, piccolo, clarinet, oboe, bassoon, saxophone.
<b>Percussion</b>	Timpani, snare, drum-kit, cymbals, bass drum.



## Year 7 - Music

### African Music

<b>Oral tradition</b>	A tradition passed down through generations by word of mouth.
<b>Call &amp; response</b>	Soloist followed by a group of musicians playing/singing a fixed response.
<b>Master Drummer</b>	The leader of an Africa drumming ensemble.
<b>Ensemble</b>	A group of musicians playing together.
<b>Polyrhythm</b>	More than one different rhythm played at the same time.
<b>Slap, tone &amp; bass</b>	Three main hand techniques for djembe drumming.
<b>Texture</b>	The way in which musical parts are 'layered'.
<b>Monophonic</b>	One single layer of music.
<b>Homophonic</b>	Melody accompanied by chords or parts moving in harmony.
<b>Polyphonic</b>	Two or more different musical lines performed at the same time.



### Folk Music

<b>Folk Music</b>	A 'community' focused style of music. Every country and culture has its own kind of folk music.
<b>Oral tradition</b>	A tradition passed down through generations by word of mouth.
<b>Pentatonic scale</b>	A five note scale. Folk melodies are often based on pentatonic scales.
<b>British Isles</b>	The British Isles are a group of islands that consist of Great Britain, Ireland and over six thousand smaller isles.
<b>Simple time</b>	Time signatures/metre that use crotchet beats (e.g. 4/4 and 3/4). These time signatures usually have a '4' as the bottom number.
<b>Compound time</b>	Time signatures/metre that use quaver beats (e.g. 6/8 and 12/8). These time signatures usually have an '8' as the bottom number.
<b>Harmony</b>	More than one different note playing at the same time.

### Impressionism

<b>Impressionist music</b>	An expressive style of music that came about in the 19/20 <sup>th</sup> Centuries. Impressionist music evokes emotions and moods and sometimes uses art as a stimulus.
<b>Tonality</b>	The key of a piece of music (major/minor/atonal).
<b>5/4 time signature</b>	A time signature whereby each bar should add up to five crotchet beats per bar.
<b>Sharp</b>	Raising a note by a semitone (#).
<b>Flat</b>	Lowering a note by a semitone (b).

## Year 7 - Drama

### Drama skills, techniques and themes (T1-4)

<b>Facial expression</b>	Using your face to communicate meaning to your audience (e.g. raising your eyebrows to show surprise).
<b>Body language</b>	Using your body to communicate meaning to your audience (e.g. Shrugging your shoulders to show that your character is unsure about something).
<b>Voice</b>	Using your voice to communicate meaning to your audience.
<b>Movement</b>	Using movement to communicate meaning to your audience (e.g. moving slowly, with confidence and with an upright posture to show clearly that your character is a confident King).
<b>Gesture</b>	Using gesture to ensure that your character is clearly defined and to ensure the audience knows what your character means (e.g. using a 'thumbs up' to show that your character agrees with another).
<b>Pitch</b>	Changing the pitch (high or low) of your voice to communicate meaning (e.g. using a high pitch to indicate that your character is scared or a low voice to show that your character is serious or sad).
<b>Pace</b>	Changing the speed with which you deliver your lines to communicate meaning to your audience (e.g. speaking in a rushed, fast pace to indicate that your character is panicked or worried).
<b>Projection</b>	Ensuring that your lines can be heard clearly by your audience.
<b>Duologue</b>	A script comprising two characters.
<b>Proxemics</b>	The space between characters which communicates meaning and makes it clear to the audience how the characters feel about one another (e.g. characters standing far away from one another and back to back could suggest that they are angry with one another).

<b>Status</b>	Indicating clearly through the use of FBVM/levels, the status of your characters (this could be your character's social class or his/her status in relation to others in your scene).
<b>Still image</b>	A 'snapshot' that clearly communicates a story. An effective still image should make creative use of levels
<b>Thought Track</b>	When a character addressing the audience directly, breaking the 'fourth wall' and reveals new information about the story/how he/she is feeling.
<b>Greek Theatre</b>	Ancient theatre from Greece, 700 BC.
<b>Choral speech</b>	A group of actors speaking at the same time.
<b>Choral movement</b>	A group of actors moving at the same time.
<b>Tragedy</b>	A style of drama that is based on suffering or sad events.
<b>Comedy</b>	A style of drama that is based on funny and light-hearted events and exaggerated characters.
<b>Greek Chorus</b>	A group of actors performing together in a piece of Greek theatre.
<b>Exaggeration</b>	Making your use of FBVM 'larger than life'.
<b>Ensemble</b>	A group of actors performing together.
<b>Empathy</b>	'Putting yourself in someone else's shoes' and recognising how they might feel in a certain situation.
<b>Monologue</b>	A speech delivered by one character in first person perspective, to the audience.
<b>Stimulus</b>	Something that inspires us/gives us ideas in drama (music/story/a photograph/a feeling etc).
<b>Role on the Wall</b>	A process which helps us understand our characters more fully and how they feel/are perceived by other characters.