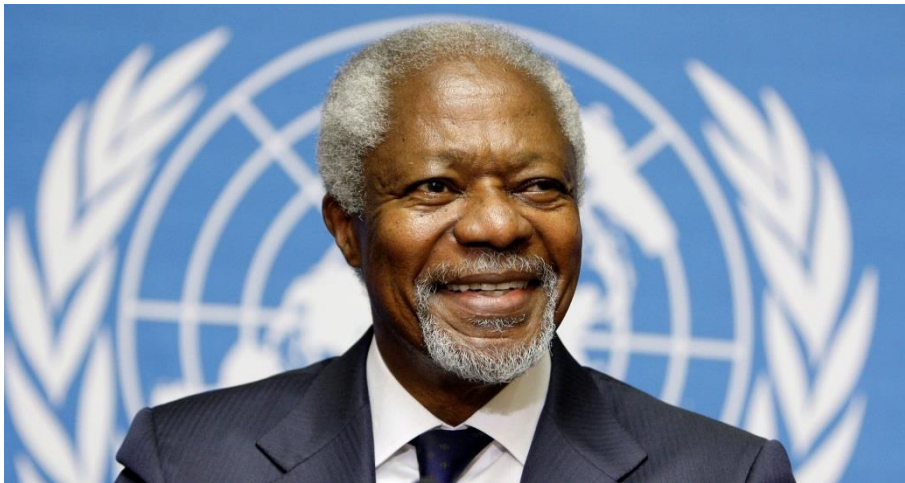


## Year 7 Term 1 Knowledge Organiser Booklet

Name:

Form:



Knowledge is power.  
Information is  
liberating.  
Education is the  
premise of progress, in  
every society, in every  
family.

*Kofi Annan*

# **Year 7 Term 1 Knowledge Organiser Booklet**

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# Year 7 Term 1 Knowledge Organiser Booklet

## How do I use the Knowledge Organiser booklet for independent home learning?

Every day you should be studying from your Knowledge Organiser (KO) booklet for home learning, as a minimum expectation.

The timetable on page 4 in this KO booklet tells you which subjects you should be studying and on which days. It doesn't matter if you don't have that subject on that day, you just follow the timetable.

### Key instructions:

- Produce your home learning in your knowledge organiser exercise book.
- Start a new page for each subject.
- Bring your knowledge organiser booklet and exercise book to school with you every day.
- Your parents/carers should sign completed home learning every evening at the top of each page in your knowledge organiser exercise book.
- Your knowledge organiser exercise book will be checked regularly in form time and in lessons.
- Failure to complete knowledge organiser home learning will result in an after-school detention, where the missed home learning will be caught up.
- You will be regularly quizzed in lessons on knowledge from your knowledge organisers, to support the retention of this key information.

### How does Knowledge Organiser home learning work?

The knowledge organiser for each subject contains the foundation knowledge that is required for that topic for that specific part of the year. Your aim is to make sure that by the end of the topic you are able to retain all of the knowledge from each subject knowledge organiser.

For each subject you should follow one of the two methods, and you should do one page of knowledge organiser home learning per subject. You are self-quizzing and self-assessing your knowledge against that in the KO booklet for each subject. **You are not just taking notes or copying out.**

### Method 1

- Read the knowledge organiser for about 5 minutes
- Cover the knowledge organiser up
- Write down as much as you can remember in black/blue pen
- Add all that you couldn't remember or any corrections in green pen.

### Method 2

- Read the knowledge organiser for about 5 minutes
- Use/write exam style questions
- Answer the questions in black/blue pen
- Correct/improve your answers in green pen

# Year 7 Term 1 Knowledge Organiser Booklet

Each day complete one page of your knowledge organiser exercise book to evidence your home learning

Week 1	Subject 1	Subject 2	Signature
Monday	Cultural Capital	English	
Tuesday	Maths	Science	
Wednesday	Art	LFL	
Thursday	Drama	MFL	
Friday	PE	Geography	

Week 2	Subject 1	Subject 2	Signature
Monday	History	Drama	
Tuesday	Music	ICT	
Wednesday	Spark	Cultural Capital	
Thursday	English	Maths	
Friday	Science	Art	

Week 3	Subject 1	Subject 2	Signature
Monday	LFL	Drama	
Tuesday	MFL	PE	
Wednesday	Geography	History	
Thursday	Drama	Music	
Friday	ICT	Spark	

Week 4	Subject 1	Subject 2	Signature
Monday	Cultural Capital	English	
Tuesday	Maths	Science	
Wednesday	Art	LFL	
Thursday	Drama	MFL	
Friday	PE	Geography	

Week 5	Subject 1	Subject 2	Signature
Monday	History	Drama	
Tuesday	Music	ICT	
Wednesday	Spark	Cultural Capital	
Thursday	English	Maths	
Friday	Science	Art	

Week 6	Subject 1	Subject 2	Signature
Monday	LFL	Drama	
Tuesday	MFL	PE	
Wednesday	Geography	History	
Thursday	Drama	Music	
Friday	ICT	Spark	

Week 7	Subject 1	Subject 2	Signature
Monday	Cultural Capital	English	
Tuesday	Maths	Science	
Wednesday	Art	LFL	
Thursday	Drama	MFL	
Friday	PE	Geography	

Week 8	Subject 1	Subject 2	Signature
Monday	History	Drama	
Tuesday	Music	ICT	
Wednesday	Spark	Cultural Capital	
Thursday	English	Maths	
Friday	Science	Art	

# Year 7 Term 1 Knowledge Organiser Booklet

You are expected to study the subjects shown on your timetable each day.

Each day complete one page of your knowledge organiser exercise book to evidence your home learning

Week 9	Subject 1	Subject 2	Signature
Monday	LFL	Drama	
Tuesday	MFL	PE	
Wednesday	Geography	History	
Thursday	Drama	Music	
Friday	ICT	Spark	

Week 10	Subject 1	Subject 2	Signature
Monday	Cultural Capital	English	
Tuesday	Maths	Science	
Wednesday	Art	LFL	
Thursday	Drama	MFL	
Friday	PE	Geography	

Week 11	Subject 1	Subject 2	Signature
Monday	History	Drama	
Tuesday	Music	ICT	
Wednesday	Spark	Cultural Capital	
Thursday	English	Maths	
Friday	Science	Art	

Week 12	Subject 1	Subject 2	Signature
Monday	LFL	Drama	
Tuesday	MFL	PE	
Wednesday	Geography	History	
Thursday	Drama	Music	
Friday	ICT	Spark	

Week 13	Subject 1	Subject 2	Signature
Monday	Cultural Capital	English	
Tuesday	Maths	Science	
Wednesday	Art	LFL	
Thursday	Drama	MFL	
Friday	PE	Geography	

Week 14	Subject 1	Subject 2	Signature
Monday	History	Drama	
Tuesday	Music	ICT	
Wednesday	Spark	Cultural Capital	
Thursday	English	Maths	
Friday	Science	Art	

Week 15	Subject 1	Subject 2	Signature
Monday	LFL	Drama	
Tuesday	MFL	PE	
Wednesday	Geography	History	
Thursday	Drama	Music	
Friday	ICT	Spark	

## Year 7 Term 1 Knowledge Organiser Booklet

### Reading Log

Use this reading log to record the books that you read and how long you have spent reading them during this term

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Books read (title and author)	Time spent reading	Signature
1										
2										
3										
4										
5										
6										
7										

## Year 7 Term 1 Knowledge Organiser Booklet

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Books read (title and author)	Time spent reading	Signature
8										
9										
10										
11										
12										
13										
14										
15										

# Year 7 Term 1 Knowledge Organiser Booklet

Key Words for Term 1		
sector	established	period
available	authority	context
financial	major	significant
process	issues	similar
individual	labour	
specific	occur	
principle	economic	
estimate	involved	
variables	percent	
method	interpretation	
data	consistent	
research	income	
contract	structure	
environment	legal	
export	concept	
source	formula	
assessment	section	
policy	required	
identified	constitutional	
create	analysis	
derived	distribution	
factors	function	
procedure	area	
definition	approach	
assume	role	
theory	legislation	
benefit	indicate	
evidence	response	

## Key Words

Having a broad vocabulary is very important in helping you to make progress. Each term we will provide you with a bank of words so that you can learn the definition and practice spelling, your subjects teachers will be looking for opportunities for you to use these words within your work. Your form tutor will be working with you during registration time to check your understanding of the words. Over the course of the term it's important for you to;

Establish the definitions for all of the words

Learn how to spell each word

Develop example sentences that use the words and try and use these words in your work across the subjects you study

Key Dates Early Norman History of Britain	
Date	Event
28 <sup>th</sup> September 1066	William of Normandy lands on the South Coast of England
14 <sup>th</sup> October 1066	Battle of Hastings – The invading Normans defeat the Saxons completing the Norman conquest
25 <sup>th</sup> December 1066	William of Normandy is crowned King William I of England
1070	The Normans start to build Canterbury Castle
1077	Bayeux Tapestry is completed, depicting the events at the battle of Hastings
1078	The Normans start to build the Tower of London
1085	The Domesday Book, an inventory of Britain is compiled

## Extended Understanding

Who were the Normans?

Complete some research into the Bayeux Tapestry, what was it and why was it important?

Complete some research into the Domesday book, what was it and why was it important?

# Year 7 Term 1 Knowledge Organiser Booklet

## British Values

**Why do you need to know about British Values?** Understanding British values is an important way to enable you to embrace the key values that you need to be equipped for life in modern British society. Through understanding the British values of Democracy, the Rule of Law, Individual Liberty, Mutual Respect, and Acceptance for those with different faiths and beliefs, you will develop self-knowledge, be better able to make the right choices and make contributions to the school and the wider community.

## Facts about the UK

British Value	Definition
Democracy	A political system based upon the concept of people having the power to decide. The word comes from the Ancient Greek for people and power.
Individual Liberty	The Concept that in a modern democracy people have the freedom to make their own choices and decisions.
The Rule of Law	A basic principle of a democratic society that the law applies equally to all people.
Mutual respect for and tolerance of those with different faiths and beliefs, and for those without faith.	A concept based upon the idea that in a modern society people show understanding of others with differing views and opinions.

1.	The sports football, rugby, golf, and cricket were all invented in the United Kingdom.
2.	England is the largest country in the United Kingdom.
3.	Big Ben in London actually doesn't refer to the clock. Big Ben is the bell that is located in the clock tower.
4.	The United Kingdom includes the following countries: Scotland, Wales, Northern Ireland, and England.
5.	England is the most populous country in the United Kingdom.
6.	London, England was the first city in the world to have an underground subway system.
7.	Queen Elizabeth became the longest-reigning monarch in the United Kingdom in 2015.
8.	165 million cups of tea per day are consumed in the United Kingdom.
9.	After hosting the 2012 Olympics, London became the first city to host the games three times.
10.	Windsor Palace is the oldest and largest occupied castle in the world.

## Year 7 Term 1 Knowledge Organiser Booklet

Context:		Key Texts
William Wordsworth: Major English Romantic poet. Born: April 1870 Died: April 1850. Heavily inspired by Nature and his sister Dorothy.		Daffodils Symbolising rebirth and new beginnings, the daffodil is virtually synonymous with spring. Though their botanic name is narcissus, daffodils are sometimes called jonquils, and in England, because of their long association with Lent, they're known as the "Lent Lily."
Carol Ann Duffy: Poet Laureate of 2009-2019 Best known for writing love poems that often take the forms of monologues. Contrasting traditional poetry, Duffy likes to use a conversational style.		Valentine <i>Valentine</i> is a poem that offers an unconventional approach to the traditional, romantic, commercially driven idea of a sugar coated Valentine's day.
John Cooper Clarke: First became famous during the Punk era of the late 1970's. Performance poet – his poetry is to be performed. The modern band, The Arctic Monkeys lifted some of the lines of his poetry for their own track.		I Wanna be Yours A humorous poem by John Cooper Clarke, which explores the infatuation of the narrator with their romantic interest.
W.H Auden: American-English poet Born: 1907, Died: 1973 Auden's poetry was noted for its stylistic and technical achievement, its engagement with politics, morals, love, and religion, and its variety in tone, form and content.		Funeral Blues The poem is of the narrative type, as it tells the story of the death of somebody and how that has affected the speaker. The narrator talks about how he feels after somebody important has passed.
Derek Walcott: Saint Lucian poet and playwright. He received the 1992 Nobel Prize in Literature. He was the University of Alberta's first distinguished scholar in residence, where he taught undergraduate and graduate writing courses.		Love after Love <i>Love After Love</i> is an unusual love poem which concentrates on loving the self, the inner self, following the breakdown of a relationship. It's main theme is that of becoming whole again through self-recognition.
British writer, dub poet and Rastafarian. He was included in The Times list of Britain's top 50 post-war writers in 2008.		No Problem <i>No Problem</i> is an ideal example of a poem that utilises a voice that comes straight from the poet: Benjamin Zephaniah. The main focus of the poem is stereotypes.
Robert Browning: One of the most famous Victorian poets for his mastery of the dramatic monologue. Much of his education was conducted at home by his father.		My Last Duchess The true significance of the title is only discovered at the end of the poem, when the dramatic monologue is placed into context and the reader realises who the duke is speaking to about his former wife.
Willy Russell: Working class Liverpudlian, he began his working life as a hairdresser in Liverpool.		Blood Brothers <i>Blood Brothers</i> is a musical with book, lyrics, and music by Willy Russell. The story is a contemporary nature versus nurture plot, revolving around fraternal twins Mickey and Eddie, who were separated at birth, one subsequently being raised in a wealthy family, the other in a poor family.
John Steinbeck: Won the Noble Prize in Literature for his keen social perception and sympathetic humour. Born in California, which is the setting of the text. His novels deal with the problems of rural labour.		Of Mice and Men <i>Of Mice and Men</i> tells the story of George Milton and Lennie Small, two displaced migrant ranch workers, who move from place to place in California in search of new job opportunities during the Great Depression in the United States.

## Year 7 Term 1 Knowledge Organiser Booklet

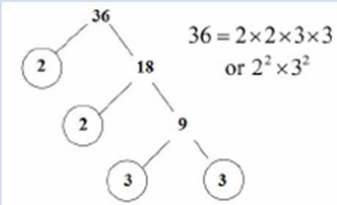
Semantic Field	A set of words grouped by meaning, referring to a specific subject.	Imagery	Visually descriptive or figurative language, especially in a literary work.
Figurative Language	Using words or expressions to convey a meaning that is different from the literal interpretation.	Structure	The way the poet has organised the poem on the page e.g. number of stanzas, lines per stanza, breaks in between lines and stanzas.
Alliteration	The occurrence of the same consonant letter or sound at the beginning of adjacent or closely connected words.	Intertextuality	The relationship between texts, especially literary ones.
Sibilance	A more specific type of alliteration that relies on the repetition of soft consonant sounds in words to create a whooshing or hissing sound in the writing.	Emotive Language	Language that creates emotions in the reader.
Pathetic Fallacy	Pathetic fallacy is a kind of personification that gives human emotions to inanimate objects of nature; for example, referring to weather features reflecting a mood.	Verse	A single line of a poem, arranged rhythmically in metrical feet
Stanza	A stanza is a group of lines that act like sentences. The sentences combine to make stanzas, or paragraphs of poetry.	Rhyme Scheme	The pattern of rhyme in a poem.
Phonetic Spelling	Phonetic Spelling is the representation of vocal sounds which express pronunciations of words. It is a system of spelling in which each letter represents invariably the same spoken sound.	Simile	Comparison using 'like' or 'as'
Allegory	A story, poem, or picture that can be interpreted to reveal a hidden meaning, typically a moral or political one.	Couplet	A two line stanza.
Repetition	When something is said more than once for effect.	Caesura	A break between words within a metrical foot.
Metaphor	A figure of speech that describes an object or action in a way that isn't literally true but helps explain an idea or make a comparison	Hyperbole	Exaggerated statements or claims not meant to be taken literally
Personification	Giving human characteristics to something non-human, or the representation of an abstract quality in human form.		

# Year 7 Term 1 Knowledge Organiser Booklet

## Number

Topic/Skill	Definition/Tips	Example
Integer	A <b>whole number</b> that can be positive, negative or zero.	$-3, 0, 92$
Sum	To find the <b>total</b> , or <b>sum</b> , of two or more numbers means add the numbers together 'add', 'plus', 'sum'	$3 + 2 + 7 = 12$
Difference	To find the <b>difference</b> between two numbers means you subtract one number from the other	$10 - 3 = 7$
Product	To find the product of two numbers means you multiply them.	$3 \times 6 = 6 + 6 + 6 = 18$
BIDMAS	An acronym for the <b>order</b> you should do calculations in. BIDMAS stands for ' <b>Brackets, Indices, Division, Multiplication, Addition and Subtraction</b> '. Indices are also known as 'powers' or 'orders'. With strings of division and multiplication, or strings of addition and subtraction, and no brackets, work from left to right.	$6 + 3 \times 5 = 21, \text{not } 45$ $5^2 = 25$ , where the 2 is the index/power. $12 \div 4 \div 2 = 1.5, \text{not } 6$
Terminating decimal	A decimal number that has <b>that has an end</b> .	$0.78, 12.056$
Recurring Decimal	A decimal number that has <b>digits that repeat forever</b> .  The part that repeats is usually shown by placing a dot above the digit that repeats, or dots over the first and last digit of the repeating pattern.	$\frac{1}{3} = 0.333 \dots = 0.\dot{3}$ $\frac{1}{7} = 0.142857142857 \dots = 0.1\dot{4}285\dot{7}$ $\frac{77}{600} = 0.128333 \dots = 0.128\dot{3}$
Multiple	The result of multiplying a number by an integer. The <b>times tables</b> of a number.	The first five multiples of 7 are: $7, 14, 21, 28, 35$
Factor	A number that <b>divides exactly</b> into another number without a remainder.  It is useful to write factors in pairs	The factors of 18 are: $1, 2, 3, 6, 9, 18$ The factor pairs of 18 are: $1, 18$ $2, 9$ $3, 6$
Lowest Common Multiple (LCM)	The <b>smallest</b> number that is in the <b>times tables</b> of each of the numbers given.	The LCM of 3, 4 and 5 is 60 because it is the smallest number in the 3, 4 and 5 times tables.

# Year 7 Term 1 Knowledge Organiser Booklet

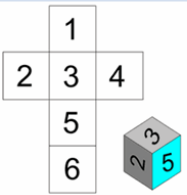
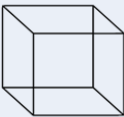
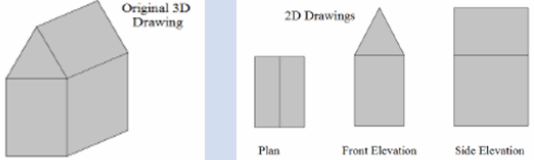
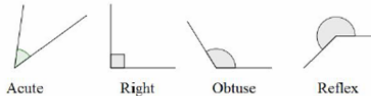
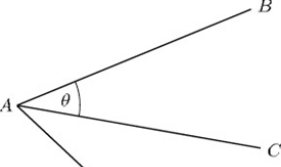
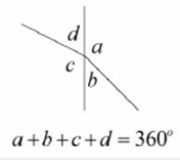
Topic/Skill	Definition/Tips	Example
Highest Common Factor (HCF)	The <b>biggest</b> number that <b>divides exactly</b> into two or more numbers.	The HCF of 6 and 9 is 3 because it is the biggest number that divides into 6 and 9 exactly.
Prime Number	A number with <b>exactly two factors</b> .  A number that can only be divided by itself and one. The number <b>1 is not prime</b> , as it only has one factor, not two.	The first ten prime numbers are:  2, 3, 5, 7, 11, 13, 17, 19, 23, 29
Product of Prime Factors	Finding out which <b>prime numbers multiply</b> together to make the <b>original</b> number.  Use a <b>prime factor tree</b> .  Also known as 'prime factorisation'.	 $36 = 2 \times 2 \times 3 \times 3$ or $2^2 \times 3^2$
Significant Figure	The significant figures of a number are the digits which <b>carry meaning</b> (ie. are significant) to the size of the number.  The <b>first significant figure</b> of a number <b>cannot be zero</b> .  In a number with a decimal, trailing zeros are not significant.	In the number 0.00821, the first significant figure is the 8.  In the number 2.740, the 0 is not a significant figure.  0.00821 rounded to 2 significant figures is 0.0082.  19357 rounded to 3 significant figures is 19400. We need to include the two zeros at the end to keep the digits in the same place value columns.
Truncation	A method of approximating a decimal number by <b>dropping all decimal places</b> past a certain point <b>without rounding</b> .	3.14159265... can be truncated to 3.1415 (note that if it had been rounded, it would become 3.1416)
Error Interval	A <b>range of values</b> that a number could have taken before being rounded or truncated. An error interval is written using inequalities, with a <b>lower bound</b> and an <b>upper bound</b> .  Note that the lower bound inequality can be 'equal to', but the upper bound cannot be 'equal to'.	0.6 has been rounded to 1 decimal place. The error interval is: $0.55 \leq x < 0.65$ The lower bound is 0.55 The upper bound is 0.65
Estimate	To find something <b>close to the correct answer</b> .	An estimate for the height of a man is 1.8 metres.
Approximation	When using approximations to estimate the solution to a calculation, <b>round each number in the calculation to 1 significant figure</b> .  $\approx$ means 'approximately equal to'	$\frac{348 + 692}{0.526} \approx \frac{300 + 700}{0.5} = 2000$  'Note that dividing by 0.5 is the same as multiplying by 2'

## Year 7 Term 1 Knowledge Organiser Booklet

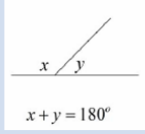
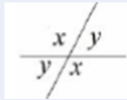
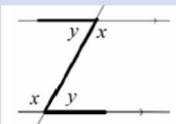
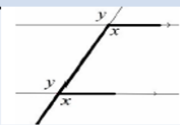
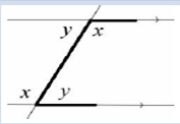
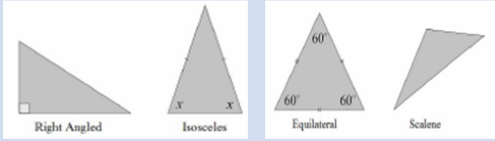
Topic/Skill	Definition/Tips	Example
Square Number	The number you get when you <b>multiply a number by itself</b> .	1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169, 196, 225... $9^2 = 9 \times 9 = 81$
Square Root	The <b>number you multiply by itself</b> to get another number. The reverse process of squaring a number.	$\sqrt{36} = 6$ because $6 \times 6 = 36$
Cube Number	The number you get when you <b>multiply a number by itself and itself again</b> .	1, 8, 27, 64, 125... $2^3 = 2 \times 2 \times 2 = 8$
Cube Root	The <b>number you multiply by itself and itself again</b> to get another number. The reverse process of cubing a number.	$\sqrt[3]{125} = 5$ because $5 \times 5 \times 5 = 125$

# Year 7 Term 1 Knowledge Organiser Booklet

## Shape

Topic/Skill	Definition/Tips	Example
Net	A pattern that you can cut and fold to make a model of a 3D shape.	
Properties of Solids	<b>Faces</b> = flat surfaces <b>Edges</b> = sides/lengths <b>Vertices</b> = corners	A cube has 6 faces, 12 edges and 8 vertices. 
Plans and Elevations	This takes 3D drawings and produces 2D drawings.  <b>Plan View:</b> from above <b>Side Elevation:</b> from the side <b>Front Elevation:</b> from the front	
Types of Angles	<b>Acute angles</b> are less than $90^\circ$ . <b>Right angles</b> are exactly $90^\circ$ . <b>Obtuse angles</b> are greater than $90^\circ$ but less than $180^\circ$ . <b>Reflex angles</b> are greater than $180^\circ$ but less than $360^\circ$ .	
Angle Notation	Can use <b>one lower-case</b> letters, eg. $\theta$ or $x$  Can use <b>three upper-case</b> letters, eg. $BAC$	
Angles at a Point	<b>Angles around a point add up to <math>360^\circ</math>.</b>	

# Year 7 Term 1 Knowledge Organiser Booklet

Topic/Skill	Definition/Tips	Example
Angles on a Straight Line	Angles around a point on a straight line add up to $180^\circ$ .	
Opposite Angles	Vertically opposite angles are equal.	
Alternate Angles	Alternate angles are equal. They look like Z angles, but never say this in the exam.	
Corresponding Angles	Corresponding angles are equal. They look like F angles, but never say this in the exam.	
Co-Interior Angles	Co-Interior angles add up to $180^\circ$ . They look like C angles, but never say this in the exam.	
Angles in a Triangle	Angles in a triangle add up to $180^\circ$ .	
Types of Triangles	<p>Right Angle Triangles have a <math>90^\circ</math> angle in.</p> <p>Isosceles Triangles have 2 equal sides and 2 equal base angles.</p> <p>Equilateral Triangles have 3 equal sides and 3 equal angles (<math>60^\circ</math>).</p> <p>Scalene Triangles have different sides and different angles.</p> <p>Base angles in an isosceles triangle are equal.</p>	
Angles in a Quadrilateral	Angles in a quadrilateral add up to $360^\circ$ .	
Polygon	A 2D shape with only straight edges.	

## Year 7 Term 1 Knowledge Organiser Booklet




Topic/Skill	Definition/Tips	Example
Regular	A shape is regular if all the <b>sides</b> and all the <b>angles</b> are equal.	
Names of Polygons	3-sided = <b>Triangle</b> 4-sided = <b>Quadrilateral</b> 5-sided = <b>Pentagon</b> 6-sided = <b>Hexagon</b> 7-sided = <b>Heptagon/Septagon</b> 8-sided = <b>Octagon</b> 9-sided = <b>Nonagon</b> 10-sided = <b>Decagon</b>	
Sum of Interior Angles	$(n - 2) \times 180$ where n is the number of sides.	Sum of Interior Angles in a Decagon = $(10 - 2) \times 180 = 1440^\circ$
Size of Interior Angle in a Regular Polygon	$\frac{(n - 2) \times 180}{n}$ You can also use the formula: $180 - \text{Size of Exterior Angle}$	Size of Interior Angle in a Regular Pentagon = $\frac{(5 - 2) \times 180}{5} = 108^\circ$
Size of Exterior Angle in a Regular Polygon	$\frac{360}{n}$ You can also use the formula: $180 - \text{Size of Interior Angle}$	Size of Exterior Angle in a Regular Octagon = $\frac{360}{8} = 45^\circ$

# Year 7 Term 1 Knowledge Organiser Booklet

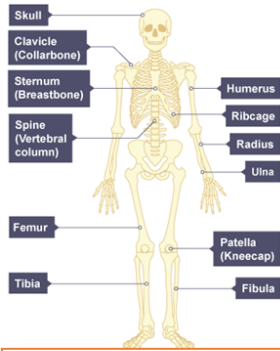
## Algebra

Topic/Skill	Definition/Tips	Example
Expression	A mathematical statement written using <b>symbols, numbers or letters</b> ,	$3x + 2$ or $5y^2$
Equation	A statement showing that <b>two expressions are equal</b>	$2y - 17 = 15$
Identity	An equation that is <b>true for all values</b> of the variables An identity uses the symbol: $\equiv$	$2x \equiv x+x$
Formula	Shows the <b>relationship</b> between <b>two or more variables</b>	Area of a rectangle = length x width or $A = L \times W$
Simplifying Expressions	<b>Collect 'like terms'.</b>  Be careful with negatives. $x^2$ and $x$ are not like terms.	$2x + 3y + 4x - 5y + 3 = 6x - 2y + 3$ $3x + 4 - x^2 + 2x - 1 = 5x - x^2 + 3$
Expand	To expand a bracket, <b>multiply</b> each term in the <b>bracket</b> by the expression <b>outside</b> the bracket.	$3(m + 7) = 3m + 21$
Factorise	The <b>reverse</b> of <b>expanding</b> . Factorising is writing an expression as a product of terms by ' <b>taking out</b> ' a <b>common factor</b> .	$6x - 15 = 3(2x - 5)$ , where 3 is the common factor.
Solve	To find the <b>answer/value</b> of something  <b>Use inverse operations</b> on both sides of the equation (balancing method) until you find the value for the letter.	Solve $2x - 3 = 7$  Add 3 on both sides $2x = 10$  Divide by 2 on both sides $x = 5$
Inverse	<b>Opposite</b>	The inverse of addition is subtraction. The inverse of multiplication is division.
Rearranging Formulae	<b>Use inverse operations</b> on both sides of the formula (balancing method) until you find the expression for the letter.	Make x the subject of $y = \frac{2x-1}{z}$  Multiply both sides by z $yz = 2x - 1$  Add 1 to both sides $yz + 1 = 2x$  Divide by 2 on both sides $\frac{yz + 1}{2} = x$  We now have x as the subject.

# Year 7 Term 1 Knowledge Organiser Booklet

Topic/Skill	Definition/Tips	Example
Writing Formulae	Substitute letters for words in the question.	Bob charges £3 per window and a £5 call out charge. $C = 3N + 5$ Where N=number of windows and C=cost
Substitution	Replace letters with numbers. Be careful of $5x^2$ . You need to square first, then multiply by 5.	$a = 3, b = 2$ and $c = 5$ . Find: 1. $2a = 2 \times 3 = 6$ 2. $3a - 2b = 3 \times 3 - 2 \times 2 = 5$ 3. $7b^2 - 5 = 7 \times 2^2 - 5 = 23$
Inequality	An inequality says that two values are <b>not equal</b> . $a \neq b$ means that a is not equal to b.	$7 \neq 3$ $x \neq 0$
Inequality symbols	$x > 2$ means x is <b>greater than 2</b> $x < 3$ means x is <b>less than 3</b> $x \geq 1$ means x is <b>greater than or equal to 1</b> $x \leq 6$ means x is <b>less than or equal to 6</b>	State the integers that satisfy $-2 < x \leq 4$ . -1, 0, 1, 2, 3, 4
Inequalities on a Number Line	Inequalities can be shown on a number line.  Open circles are used for numbers that are <b>less than or greater than</b> ( $<$ or $>$ )  Closed circles are used for numbers that are <b>less than or equal or greater than or equal</b> ( $\leq$ or $\geq$ )	 $x \geq 0$  $x < 2$  $-5 \leq x < 4$

# Year 7 Term 1 Knowledge Organiser Booklet



Type of joint	Examples	Movement allowed
Hinge joint	Knee, elbow	The same as opening and closing a door, with no rotation (turning)
Ball and socket	Hip, shoulder	Back and forth in all directions, and rotation

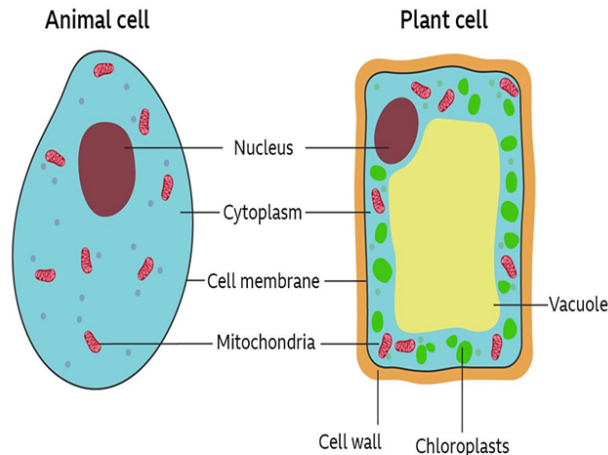
The Skeleton has 4 main functions:

1. Supports the body
2. Allows movement
3. Protects parts of the body
4. Makes red blood cells

- Joints hold bones together
- Joints are held together by ligaments
- Muscles move joints
- Muscles are attached to bones by tendons
- Muscles work in antagonistic pairs

## Year 7 Science Term One Cells and Movement

Unicellular organisms are made up of one cell. They can either be prokaryotes or eukaryotes. Bacteria are prokaryotes (they don't have a nucleus) and eukaryotes such as yeast do have a nucleus.



- **Cell membrane** – this surrounds the cell and allows nutrients to enter and waste to leave it.
- **Nucleus** – this controls what happens in the cell. It contains DNA, the genetic information that cells need to grow and reproduce.
- **Cytoplasm** – this is a jelly-like substance in which chemical reactions happen.
- **Mitochondria** – They are structures where respiration takes place.
- **Cell wall** - this is an outer structure that surrounds the cell and gives it support.
- **Vacuole** - this is a space within the cytoplasm of plant cells that contains sap.
- **Chloroplasts** - these contain chlorophyll and are the site of photosynthesis.

- All living things are made up of cells.
- Most cells are so small that you can only see them with a microscope.
- Cells have different components and each performs its own function within the cell.

Joint	Where two bones meet; allows movement
Ligament	Connects bone to bone
Cartilage	Smooth tissue at the ends of bones, reduces friction
Tendon	Connects muscle to bone
Antagonistic pair	Two muscles that act together to create movement
Muscle	Soft tissue which contract to produce a force
Fracture	Broken bone
Arthritis	Painful disease of the joints
Osteoporosis	Disease where bones become fragile, making them prone to fractures

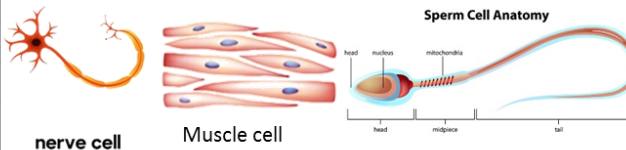
Specialised cells have a **specific role** to perform.

Each specialised cell has a different job to do. They have **special features** that allow them to do these jobs.

Muscle cells, for example, are held together in bundles, which pull together to make muscles contract.

Nerve Cells have long extensions to carry nerve impulses from different parts of the body.

Sperm cells have tails to swim to the egg, lots of mitochondria to release energy for swimming.



### How to use a microscope

1. Move the stage (the flat ledge the slide sits on) down to its lowest position.
2. Place the glass slide onto the stage. Be careful pushing it under the clips that the cover slide doesn't move or crack.
3. Select the lowest power objective lens.
4. Turn the coarse focus knob slowly until you are able to see the cells.
5. Turn the fine focus knob slowly until the cells are in focus and you can see them clearly.
6. Repeat steps 1-5 using the higher power magnification to see the cells in more detail.

# Year 7 Term 1 Knowledge Organiser Booklet

## Solids

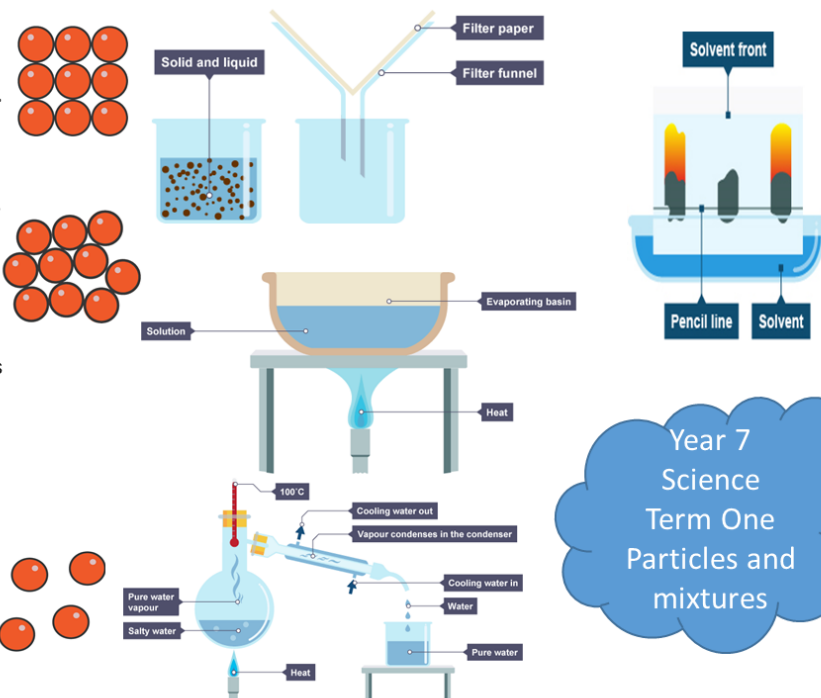
In the solid state the **vibrating** particles form a **regular pattern**. This explains the fixed shape of a solid and why it can't be compressed or poured.

## Liquids

In a liquid the particles still touch their neighbours but they **move around, sliding over each other**. This is why you can pour, but not compress, a liquid.

## Gases

In the gas state, **widely-spaced** particles move around **randomly**. This explains why you can compress gases and why they flow.



Year 7  
Science  
Term One  
Particles and  
mixtures

<u>SOLIDS</u>	
<u>Property</u>	<u>Reason</u>
They have a fixed shape and cannot flow	The particles cannot move from place to place
They cannot be compressed (squashed)	The particles are close together and have no space to move into

<u>LIQUIDS</u>	
<u>Property</u>	<u>Reason</u>
They flow and take the shape of the bottom of their container	The particles can move around each other
They cannot be compressed (squashed)	The particles are close together and have no space to move into

<u>GASES</u>	
<u>Property</u>	<u>Reason</u>
They flow and completely fill their container	The particles can move quickly in all directions
They can be compressed (squashed)	The particles are far apart and have space to move into

Particle	Very small part of a material, such as an atom or molecule
Particle model	A way of explaining the behaviour of solids, liquids and gases
Density	Mass of material per unit of volume
Malleable	Able to be bent without breaking
Brittle	Easily broken
Ductile	Can be stretched into a wire
Dissolve	When a solid mixes with a liquid and it cannot be seen
Insoluble	Will not dissolve in water
Soluble	Can dissolve in water
Solute	Solid that has been dissolved
Solvent	Liquid in which something dissolves
Solution	Mixture formed when a solid dissolves into a liquid
Compression	Force squashing or pushing together
Diffusion	Particles in a liquid or gas move from a high concentration to a low concentration
Pure substance	Contains only one type of particle
Mixture	Two or more elements mixed together but not joined
Vapour	Liquid that has evaporated
Distillation	Separating liquids by evaporating and condensing

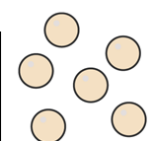
Year 7  
Science  
Term One  
Elements  
and  
compounds

Everything is made from atoms, including you. Atoms are tiny particles that are far too small to see, even with a microscope. If people were the same size as atoms, the entire population of the world would fit into a box about a thousandth of a millimetre across. We usually imagine atoms as being like tiny balls:



**Molecule:** A collection of two or more atoms held together by chemical bonds.

The atoms of some elements do not join together, but instead they stay as separate atoms. Helium is like this. The atoms of other elements, such as hydrogen and oxygen, join together to make molecules



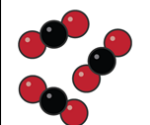
Helium atoms



Oxygen molecules



Water



## Carbon Dioxide

1	2																3	4	5	6	7	0
Li	Be						H										B	C	N	O	F	Ne
Na	Mg																Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr					
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe					
Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn					
Fr	Ra	Ac																				

Metals
 Non-metals

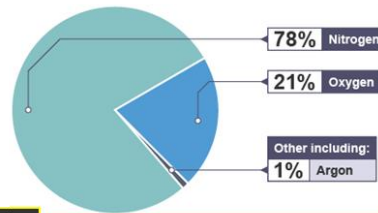
$\text{H}_2\text{O}$  = Water  $\rightarrow$  2 Hydrogen and 1 oxygen

Each element has a symbol, either a single capital letter or a capital letter followed by a lower case letter.

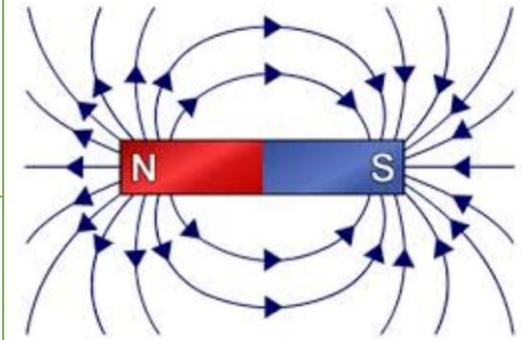
Al = Aluminium

# Year 7 Term 1 Knowledge Organiser Booklet

The Earth is the source of all the resources we need, such as metals, plastics and fuels. Humans are very successful living things. We compete with other organisms for many natural resources. These include:  
land (for farms, buildings and roads)  
water (for drinking, watering fields, and industry)  
The world's human population is increasing, and this means that we are using more resources all the time.



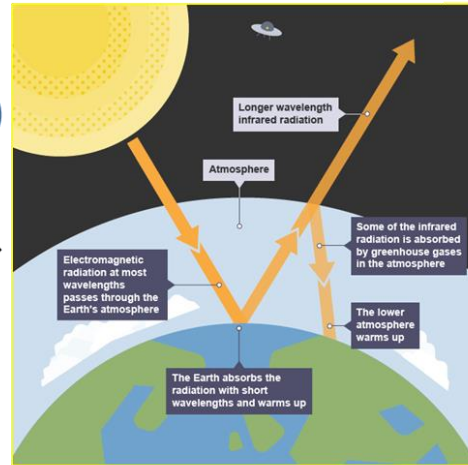
The Earth's atmosphere is the relatively thin layer of gases that surround the planet. It provides us with the oxygen we need to stay alive.



## Year 7 Science Term One Magnetism & Earth

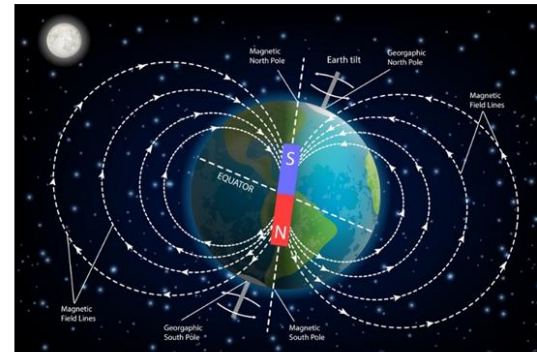
### Global warming

Extra carbon dioxide in the atmosphere increases the greenhouse effect. More thermal energy is trapped by the atmosphere, causing the planet to become warmer than it would be naturally. This increase in the Earth's temperature is called global warming.



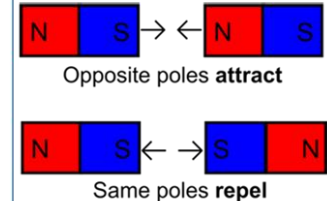
The three most abundant gases (the ones with the highest percentages) are all elements:

- 78% nitrogen, N<sub>2</sub>
- 21% oxygen, O<sub>2</sub>
- 0.9% argon, Ar

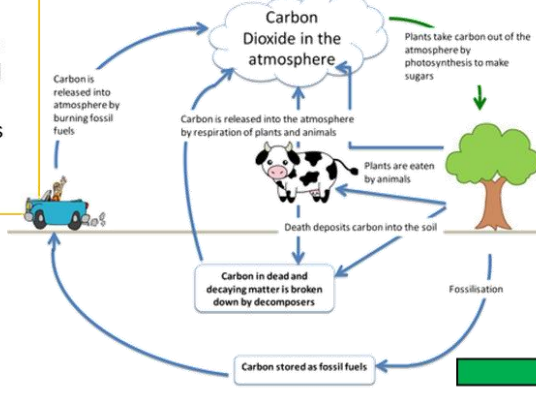


Magnets have a North pole and a South pole.  
The magnetic field is the area in which you can feel the magnetic force.  
The field lines move from North to South.

The Earth has a magnetic field which is why compasses always point to magnetic north. This is slightly different to the north pole



Attract = Pull towards; a magnet will attract any magnetic material that is close enough  
Repel = Push away; eg north pole of a magnet will repel the north pole of another magnet



Carbon is being continually recycled on Earth. The processes that release carbon dioxide to the atmosphere include:

- combustion of fossil fuels
- respiration by plants and animals

Carbon dioxide is taken in from the atmosphere by plants so that they can carry out photosynthesis.

Some processes move carbon compounds from place to place, including:

- feeding by animals
- formation of fossil fuels

# Year 7 Term 1 Knowledge Organiser Booklet

Key terms and definitions		Key terms and definitions	
Contrast	Difference/ Variety i.e. Dark and Light	Depth	Creating 3 dimensions by using graduated shading
Asymmetrical	Means each side is not the same, so one eye may appear bigger than the other and lower down the face than the other.	Form	Creating a drawing of object which has the appearance of length, width & depth i.e. Creating a 3 dimensional effect
Composition	A formal element in art. The placement and arrangement of your artwork and how shapes relate within it. i.e. The layout and positioning of your work	Tone	Is an formal element in art and literally means light and dark
Collage	Derived from the French word “ <b>Coller</b> ” meaning to glue; Where a piece of artwork is made from the assemblage of paper(s)	Shape	Is a formal element in art; it is an enclosed space. Shapes are limited to 2 dimensions which are length and width
Mark- Making	Different patterns, lines, textures and shapes made with a pencil i.e. scribble, cross- hatching	<b>Kimmy Cantrell – Key facts about the artist</b>	
Dry-brushing	Loading your brush with paint, then taking the excess off so it only partially layers over an already prepared surface i.e. A black painted surface peeps through a thin layer of white paint	He was born 22 Oct 1957 in Georgia USA	
Cross-hatching	A series of lines which cross over each other from left to right and right to left creating a shading mark- making technique	He is an African American Artist who is still practising today and makes a living out of selling his vivid abstract artwork via commissions to art lovers and international companies.	
Proportion	Comparison of size. The relative size of parts of a whole i.e. Are the eyes the right size for the face?	He discovered his love of art in high school where he loved working with the expressive media of clay. He continues to work in this media today and is classed as a ceramicist. He sometimes uses mixed media introducing other materials such as copper and stainless steel into his work	
Formal Elements	Formal Elements are parts used to make a piece of art work. The 8 elements are Line, Form, Shape, Tone, Pattern, Texture, Colour and Composition	He is a self- taught artist and after quitting his job in 1999 and initially started making vases which progressed to bowls with faces	
Block colour	Apply one even coat of colour to a surface without any imperfections	Kimmy Cantrell loves masks, he has always loved tribal and primitive art and tries to reflect this in his own artwork. He is also inspired by the art movement, Cubism.	
Texture	Is a formal element which has an actual surface quality i.e. adding sawdust to paint or creating an illusion of a surface i.e. furry, scratchy etcetera	He has a real passion for art and says that “ Creating something from nothing is a magical process”	
Block Colour		He works with recurring themes, faces, nudes, still lives and his other passion fish, he famously said “if you can’t find the answer don’t give up, keep on fishing for it!”	
Graduated Shading	Shading with a pencil/ pencil to create depth. Where dark gradually turns into light without any imperfections	He uses asymmetry in his work to challenge the misconception that society has with perfection equalling beauty. He champions imperfections in faces.	
Guidelines	Creating a series of lines to draw within so everything is the same size i.e. A title in your sketchbook so you can get all your letters the same size	He loves the colour red and uses it in all of his work, he finds the colour luscious as it simulates passion	
Primary Colour	A group of colours which all other colours are made from: Red , Yellow and Blue	He takes 10 days to create a piece of artwork	
Secondary Colour	A colour resulting from mixing two primary colours together i.e. Red and Yellow = Orange	He sees his work as “Breaking the code” a key phrase used by the Abstract Expressionist painter Jackson Pollock. What he is trying to say here is that he is trying to educate people who view his work to love, engage with and accept imperfection.	
Blending	Gently bringing together two or more colours to create the softening of lines i.e. shading blue and yellow together to create blue graduating to green graduating to yellow.	Kimmy Cantrell expresses his work as having Roots. “We all have roots and my roots come out in the Art I create.	
Definition	To make something “Stand out” and become obvious		

# Year 7 Term 1 Knowledge Organiser Booklet

## Welcome to LfL

Key terms and definitions		Key terms and definitions	
<b>Evidence</b>	The available facts or information indicating whether a belief or proposition is true or valid.	<b>Belief</b>	An opinion that something is true often without any real evidence. (Ideas that you accept without question e.g. Jesus is the Son of God).
<b>Enquiry</b>	Asking questions to gain information.	<b>Faith</b>	Faith is when a person believes something to be true and puts their 'trust' in what they believe to be true.
<b>Respect</b>	A feeling of deep admiration for someone or something because of their abilities, qualities, or achievements.	<b>Fact</b>	Something you can prove to be true.
<b>Express</b>	To put a thought, feeling, fact or information into own words.	<b>Identity</b>	Who you are, the qualities you have.
<b>Artefacts</b>	An object made by a human being, typically one of cultural, religious or historical interest	<b>Unique</b>	One of a kind, unlike others.
<b>Rituals</b>	Actions that you perform e.g. Kneeling to pray	<b>Diversity</b>	Many or different.
<b>Symbol</b>	Special Sacred image that mean something e.g. The cross	<b>Community</b>	A group of people that are connected or have shared characteristic in common such as :Meeting to worship e.g. The Congregation of a Church
<b>Experience</b>	Something that you feel e.g. joy or do.	<b>Rules</b>	Laws which say how you should behave or the way in which you should behave.
<b>Atheist</b>	Someone who is certain that God does not exist.	<b>Agnostic</b>	Someone who is uncertain of God's existence.
<b>Theist</b>	Someone who is certain that God does exist.		

# Year 7 Term 1 Knowledge Organiser Booklet

## Faith and You

Key terms and definitions		Key terms and definitions	
<b>Multi Faith</b>	Lots of religions OR different religions, are allowed to co-exist and be followed or practiced.	<b>Belief</b>	An opinion that something is true often without any real evidence.' (Ideas that you accept without question e.g. Jesus is the Son of God).
<b>Cohesion</b>	The act of working together for a course.	<b>Faith</b>	Faith is when a person believes something to be true and puts their 'trust' in what they believe to be true.
<b>Religious Freedom</b>	The right to practise your religion or change religions	<b>Fact</b>	Something you can prove to be true.
<b>Respect</b>	A feeling of deep admiration for someone or something because of their abilities, qualities, or achievements.	<b>10 Commandments</b>	10 rules for Christians to follow, written in the Old Testament of the bible.
<b>Benevolent</b>	All Loving	<b>Omniscient</b>	All knowing
<b>Omnipotent</b>	All powerful	<b>Prayer</b>	An act of communication with God in religion.
<b>Rituals</b>	Actions that you perform e.g. Kneeling to pray	<b>Diversity</b>	Many or different.
<b>Communication</b>	Exchanging of information in written or verbal form.	<b>Community</b>	A group of people that are connected or have shared characteristic in common such as: Meeting to worship e.g. The Congregation of a Church
<b>Trinity</b>	A Christian belief, that there is one God with three elements e.g. The Father, The Son and the Holy Spirit.	<b>Rules</b>	Laws which say how you should behave or the way in which you should behave.
<b>Atheist</b>	Someone who is certain that God does not exist.	<b>Agnostic</b>	Someone who is uncertain of God's existence.
<b>Theist</b>	Someone who is certain that God does exist.	<b>Omnipresent</b>	Always present
<b>Creator</b>	A person or thing that brings something into existence	<b>Eternal</b>	Everlasting, will last forever.
<b>Peace</b>	A state or period of time, where there is freedom from disturbance and everyone can co-exist together without conflict or tension.	<b>Pilgrimage</b>	Religious Journey
<b>Five Pillars of Islam</b>	Fundamental set of beliefs in Islam.	<b>Shahadah</b>	A declaration of faith in Islam
<b>Tawhid</b>	Oneness of Allah (one God).	<b>Hajj</b>	A pilgrimage to Mecca in Islam, it is one of the five pillars.
<b>Mecca/Mekkah</b>	Holy City in Saudi Arabia, where Muslims go on pilgrimage to at least once in their lifetime.	<b>Ramadan</b>	A holy month in Islam, where Muslims fast (go without food or drink), during daylight hours.
<b>Eid</b>	The celebration to mark the end of the month of Ramadan in Islam.	<b>Salah</b>	Prayer in Islam
<b>Zakat</b>	The act of giving to charity for Muslims, (one of the Five Pillars).	<b>Wudu/Wuduh</b>	The washing ceremony which a Muslims must perform before praying.
<b>Charity</b>	The voluntary giving of help or aid to those in need.	<b>Spirituality</b>	The feeling of being concerned with or connected to something greater.
<b>Meditation</b>	The act of giving your attention to one thing, being at peace within yourself.	<b>Festival</b>	A day or period of celebration, which can be religious or non-religious in nature
<b>Celebration</b>	A social gathering or activity, held in recognition of something significant.	<b>Monotheists</b>	Believe in one God.

# Year 7 Term 1 Knowledge Organiser Booklet

## Respect

Key terms and definitions		Key terms and definitions	
<b>Multi Faith</b>	Lots of religions OR different religions, are allowed to co-exist and be followed or practiced.	<b>Belief</b>	An opinion that something is true often without any real evidence.' (Ideas that you accept without question e.g. Jesus is the Son of God).
<b>Cohesion</b>	The act of working together for a course.		
<b>Religious Freedom</b>	The right to practise your religion or change religions		
<b>Respect</b>	A feeling of deep admiration for someone or something because of their abilities, qualities, or achievements.	<b>Faith</b>	Faith is when a person believes something to be true and puts their 'trust' in what they believe to be true.
<b>Communication</b>	Exchanging of information in written or verbal form.	<b>Fact</b>	Something you can prove to be true.
<b>Peace</b>	A state or period of time, where there is freedom from disturbance and everyone can co-exist together with=out conflict or tension.	<b>Diversity</b>	Many or different.
<b>Freedom</b>	The power or right to speak or act or believe as you want.	<b>Community</b>	A group of people that are connected or have shared characteristic in common such as: Meeting to worship e.g. The Congregation of a Church
<b>Protesting</b>	Expressing or showing disapproval or objection to something.	<b>Rules</b>	Laws which say how you should behave or the way in which you should behave.
<b>Authority</b>	The power or right to give orders, make rules, make decisions, require or enforce obedience.	<b>Freedom Fighter</b>	A person or groups who decides to stand up for something they believe in, against authority figures - <b>Freedom fighter</b> is a positive term.
<b>Responsibility</b>	A duty to do something. Something you should do.	<b>Racism</b>	The belief that some ethnic groups are superior to others (criminal offence to be racist).
<b>Prejudice</b>	Belief that some people are superior or inferior without evidence or knowledge of them.	<b>Rights</b>	Something you are allowed to do by law.
<b>Racial Harmony</b>	Different ethnic groups living together peacefully.	<b>Harmony</b>	Agreement, living without conflict.
<b>Human Rights</b>	The rights that all humans have regardless of race, gender, ethnicity, sexual orientation, age....	<b>Discrimination</b>	Treating people differently because of their race/ethnicity/gender/ sexual orientation/social class.
<b>Morality</b>	Principles concerning what is right and wrong, good or bad.	<b>Hate Crime</b>	A crime (usually involving violence), motivated by prejudice usually due to race or religion or sexual orientation or other grounds.
		<b>Monotheistic</b>	Beliefs in one God.

## Year 7 Term 1 Knowledge Organiser Booklet

Key term	Definition	Key term	Definition
<b>Communication</b>	The ability to share ideas and feelings effectively	<b>Vocal Skills</b>	Are the use of voice used to communicate meaning, such as pitch, pace and pause
<b>Confidence</b>	The ability to share ideas and perform ideas effectively and with ease	<b>Pitch</b>	Can be the high or low pitch of your voice, high pitch maybe female, scared or excited.
<b>Co-operation</b>	The willingness to be helpful in developing ideas in your group	<b>Pace</b>	The speed in which words are delivered to communicate a given/ intended meaning to the audience
<b>Still Image</b>	A frozen moment that communicates meaning to the audience	<b>Pause</b>	Can be used to create dramatic tension
<b>Facial Expressions</b>	Where emotions are conveyed to the audience through the use of movement in the face	<b>Choral Speaking</b>	Can be used to create atmosphere or communicate an intended meaning to an audience. It uses layered language of key words and phrases.
<b>Body language</b>	Is a movement position with the body that communicates meaning for the audience	<b>Slow motion</b>	Can be used to highlight a key moment or scene in the drama, it is drama action that takes place in a 'slow' pace.
<b>Gestures</b>	A hand movement that communicates meaning and emotions to the audience	<b>Flashforward</b>	Can be used to take the drama forward in time, giving the audience additional information.
<b>Movement Skills</b>	Can be used by the actor to communicate meaning and emotion, these can be facial expressions, gestures, body language	<b>Flashback</b>	Can be used to take the drama back in time, giving the audience information about what has happened previously.
<b>Forum Theatre</b>	A rehearsal technique where the audience take on the role of the spec-actors to give immediate feedback to the actors. The spec – actor may give verbal feedback or swap places with the actor to model improvement.	<b>Welfare</b>	A service provided in Penketh High School should students feel overwhelmed or presented with issues that are out of their control. Students can seek support from highly qualified and dedicated staff.

## Year 7 Term 1 Knowledge Organiser Booklet

Introducing yourself		Essential words	
Bonjour / Bonsoir	Good morning / good evening	un, deux, trois, quatre, cinq, six, sept, huit, neuf, dix	1-10
Salut / coucou	Hi		
(comment) ça va?	How are you?	onze, douze, treize, quatorze, quinze, seize, dix-sept, dix-huit, dix-neuf, vingt	11-20
Ça va (très) bien / mal	I'm (very) good / not good	vingt-et-un, vingt-deux, vingt-trois, vingt-quatre, vingt-cinq, vingt-six, vingt-sept, vingt-huit, vingt-neuf, trente	21-30
Comment t'appelles-tu?	What's your name?	janvier, février, mars, avril, mai, juin, juillet, août, septembre, octobre, novembre, décembre	Months of the year
Comment ça s'écrit?	How do you spell it?	lundi, mardi, mercredi, jeudi, vendredi, samedi, dimanche	Days of the week
Ça s'écrit	It's spelt		
Quel âge as-tu ?	How old are you ?		
J'ai douze ans	I'm twelve years old		
Quelle est la date de ton anniversaire?	When is your birthday ?		
Mon anniversaire c'est le...	My birthday is...		
Quelle est la date aujourd'hui ?	What's the date today ?		
Où habites-tu ?	Where do you live ?		
J'habite en Angleterre / au Royaume-Uni / en France	I live in England / in the UK / in France		
Queries/Permission		Essential verbs	
Je peux avoir un stylo / un crayon?	Can I have a pen / a pencil ?	J'ai	I have
Je peux enlever ma veste ?	Can I take off my blazer ?	tu as	you have
Je peux ouvrir la fenêtre ?	Can I open the window ?	il a	he has
Je peux avoir un dictionnaire ?	Can I have a dictionary ?	elle a	she has
		Je suis	I am
		tu es	you are
		il est	he is
		elle est	she is
Top tips for pronunciation in French			
Generally, the last consonant isn't pronounced (t, s, z, x, d, p, g)		The letters "oi" make the sound "wa"	
H is always silent		The following combinations make the sound "eh": et / er / ez / é	
The letters "qu" together don't make the sound "kw" but "k only"		The following combinations make the sound "ay": ai / ei / est / ê	
The letters "gn" together make a sound unknown to English		The following combinations are nasal sounds: en, em, an, am, on, om, un, in, im, aim, ain	

## Year 7 Term 1 Knowledge Organiser Booklet

Family members				To be		To have	
Tu as des frères et sœurs?		Have you got any sibling?		Je suis	I am	J'ai	I have
J'ai un frère / une sœur		I have a brother / a sister		Tu es	You are	Tu as	You have
Je n'ai pas de frère et sœur		I don't have any brother or sister		Il est	He is	Il a	He has
Je suis fils / fille unique		I'm only child (son / daughter)		Elle est	She is	Elle a	She has
Dans ma famille, il y a		In my family there are		On est **	One is	On a **	One has
trois / quatre / cinq personnes		Three / four / five people		Nous sommes	We are **	Nous avons	We have **
Mon père / mon oncle / mon cousin / mon grand-père		My dad / my uncle / my cousin / my granddad		Vous êtes	You lot are	Vous avez	You lot have
Mon demi-frère / mon beau-père		My step brother / my stepdad		Ils sont	They are	Ils ont	They have
Ma mère / ma tante / ma cousine / ma grand-mère		My mum / my aunt / my cousin / my grand-mother		Elles sont	They are	Elles ont	They have
Ma demi-sœur / ma belle-mère		My step sister / my step mother		Physical appearance			
Mes parents / mes cousins		My parents / my cousins		J'ai les yeux bleus / verts / marron		I have blue / green / brown eyes	
Mon jumeau / ma jumelle		My twin		J'ai les cheveux blonds / roux / châtain / noirs / gris / blancs		I have blonde / ginger / brown / black / grey / white hair	
Je m'entends bien avec		I get along with		J'ai les cheveux courts / longs / mi- longs / raides / bouclés /frisés		I have short / long / medium lenght / straight / curly / frizzy hair	
Expressing opinions				J'ai des tâches de rousseurs		I have freckles	
Je peux avoir un stylo / un crayon?		Can I have a pen / a pencil ?		Je porte des lunettes		I wear glasses	
Je peux enlever ma veste ?		Can I take off my blazer ?		Je suis grand(e) / de taille moyenne / petit(e)		I am tall / average height / small	
Je peux ouvrir la fenêtre ?		Can I open the window ?		Je suis gros(se) / mince / de taille moyenne / maigre		I am big /slim / average size / skinny	
Je peux avoir un dictionnaire ?		Can I have a dictionary ?		Je ressemble à ma mère		I look like my mum	
Personal description				Little words and expressions			
Je suis marrant(e)/amusant(e)	I'm funny	Je ne suis pas	I am not	très	very	et	and
gourmand(e)	greedy	bavard(e)	chatty	assez	quite	aussi	also
rigolo(tte)	funny	paresseux/euse	lazy	un peu	a bit	cependant	however
sympa / gentil(le)	nice	méchant(e)	nasty	trop	too (much)	mais	but
généreux/euse	generous	énervant(e)	annoying	vraiment	really	avec	with
travailleur/euse	hardworking	sportif/ive	sporty	parce que	because	car	because
sérieux/euse	serious	bavard(e)	chatty				
timide	shy	intelligent(e)	smart				

# Year 7 Term 1 Knowledge Organiser Booklet

## Badminton

### Skills and Techniques

**Forehand-** A forehand shot is when you hit the shuttle on the racket side of your body. For example, if you are right handed you will hit the shuttle on the right side of your body.

**Backhand-** A backhand shot is where you hit the shuttle on from non-racket side. For example, if a right handed player needs to hit a shuttle on the left side of their body they will move their racket arm across their body to play the shot.

**Serve-** The first shot in a rally and must abide by serving laws. A serve can be performed either forehand or backhand. The best serves are either short serves and so land on or just beyond the service line, or long serves and land into the rear tramlines (or just in front of the tramlines in doubles). In full court games serves must travel diagonally.

**Return of serve-** The next shot after a serve and so the second shot in the rally.

**Grip-** There are 2 different grips. Forehand (for playing forehand shots) is like shaking hands with your racket. Backhand (for backhand shots) is where your thumb lies flat along the fat side of the racket handle and your fingers wrap around with your knuckles facing the ceiling.

**Footwork-** Badminton footwork consists mostly of side stepping, chasseeing and running steps. Correct footwork allows you to move around the court faster and more efficiently. Regardless of the direction you are moving in or your position on the court your head should always face the net.

**Square on stance-** Standing square on means both of your shoulders are facing the net. This stance is useful when playing serves and net shots.

**Side on stance-** A side on stance is required when hitting any shots over head or when moving to the rear of the court.

### Why play badminton?

It is an extremely popular competitive, recreational and school sport. It is one of the UK's most gender balanced sports.

Badminton is the fastest racket sport in the world and is brilliant for all round fitness.

### Key words

**Forehand**

**Backhand**

**Serve**

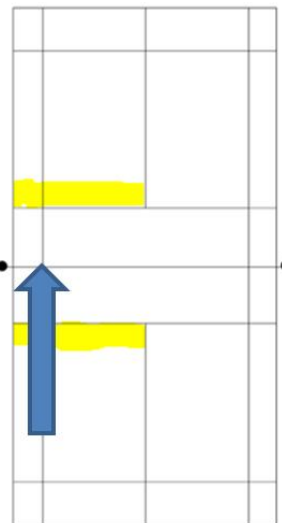
**Service line**

**Opponent**

### Equipment needed for 1 court

- Up to 4 Badminton rackets
- Up to 2 Shuttlecocks
- 2 Badminton posts
- 1 Badminton net

# Year 7 Term 1 Knowledge Organiser Booklet



Ideal area to short serve to

Short backhand low serve



## Shots

**Net shot-** A net shot travels from the net area of the court on your side to the net area of the court on your opponents side. Good net shots travel low over the net and ideally lands in front of the service line. Net shots should be hit gently and the best net shots will hit the top of the net (the tape) and trickle over the net.

**Short serve-** Players stand just behind the service line. Short serves travel low over the net therefore are difficult to attack. The best short serves will skim the tape and land on the service line. A short serve is good as it allows the server to play an attacking shot from the very start of the rally.

**Long serve-** Players can stand wherever they like, but must still be behind the service line. A good long serve will reach the rear tramlines in singles or the rear of the service box in doubles. Although travelling deeper into the court long serves can still be hit flat in order to be attacking. This serve could be useful in pushing your opponent to the rear of the court in order to force them to play a weaker return.

**Clear-** A clear is a powerful shot hit from the rear of the court on one side of the net to the rear of the court on the other side. Clears should be played using a forehand grip with a side on stance and are a similar action to throwing a tennis ball. Hitting a clear will push your opponent deep into the court which makes it difficult for them to return.

## Scoring

A badminton match consists of the best of 3 games to 21 points.

To decide who serves first players perform a coin toss/ racket spin/ shuttle toss.

To score a point you need to land the shuttle on your opponent's floor within the court boundaries without them being able to return it. You can also score a point if your opponent hits the shuttle in the net or outside of the court boundary.

# Year 7 Term 1 Knowledge Organiser Booklet

## Service Laws

Both feet must remain in contact with the floor at all times (you cannot lift or drag your feet)

- You can only make 1 smooth movement towards the shuttle, you cannot fake a serve
- The shuttle must travel in an upwards direction upon leaving your racket
- Your racket head must be lower than your racket handle
- You must strike the shuttle below your lowest rib
- You must stand behind the service line (you cannot be on any part of it!)
- Your serve must travel over your opponents service line to be in
- Serving when it is not your serve
- Serving from the wrong side of the court

## Faults

- Touching the net whilst the shuttle is still in play
- Your racket or body being on your opponents side of the net whilst the shuttle is still in play
- Hitting the shuttle more than once before it travels over the net
- The shuttle touches a player
- Deliberately distracting your opposition

## Tactics

Get the shuttle over the net and in the court

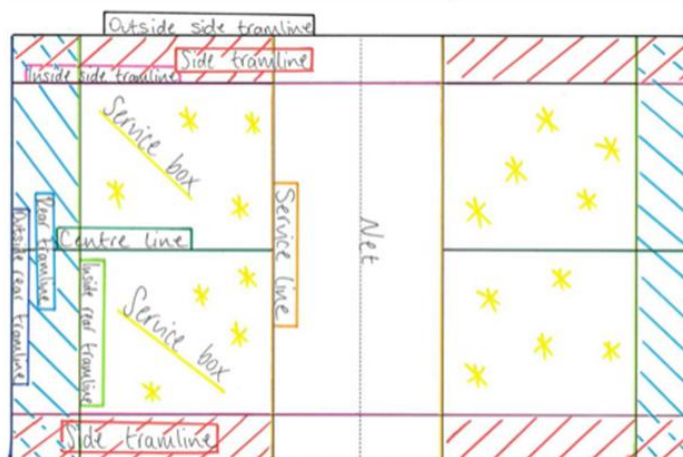
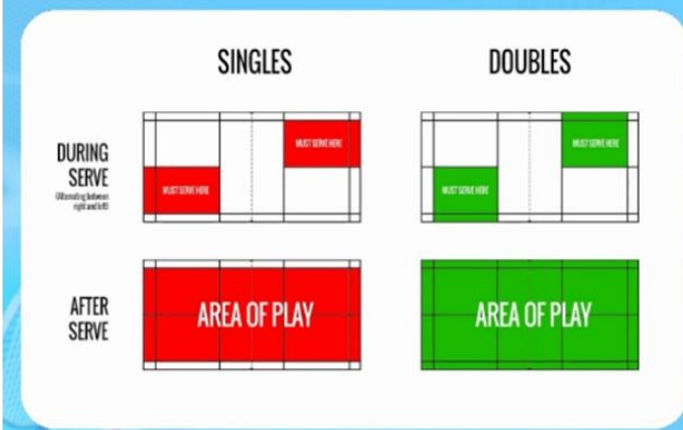
Hit a variety of shots

Play to your strengths

Play on your opponents weaknesses

Hit into space

## Badminton Court



# Year 7 Term 1 Knowledge Organiser Booklet

## Basketball

Key skills
<b>Dribbling</b> Head up/spread fingers and fingertips bounce the ball/waist height  W grip/ Step/Chest to chest/Follow through/ short distance  W grip/ Step/Chest to chest/Follow through/ Bounce before player/ short distance  Knees bent/dominant foot slightly in front of other/strong hand at bottom/supporting hand on side/elbow at 90 degrees  Strong hand at bottom/supporting hand on side/keep it high/ Right hand dribble, step right, jump left aim for top right corner of box/left hand dribble, step left, jump right, aim for top left corner of box
<b>Pivoting/Jump Shot</b> Landing on alternate feet- first foot to land is the static pivoting foot landing on simultaneous feet – either foot can become static pivoting foot/can be used at the end of a dribble or when receiving a pass On the move – release ball before third step.
<b>Triple Threat Position</b> Knees bent/hands positioned on ball so ready to shoot/head up/can dribble, pass or shoot from here
<b>Attacking</b> Dribble into space/screen defenders/dribble out wide and quick inward passes/drive towards ball to receive pass losing defender/overload zone defence.
<b>Defending</b> Man to man/knees bent/back straight/head up/arms out/watch opponents belly-button .Zone marking/team defence around the key/take up positions around key when possession is lost
<b>Rebounding</b> Involves maintaining possession after a shot has been taken. The team who has the most number of rebounds after the game has more shot attempts and chances to score.

Key skills
<b>Offense</b> is the only chance that the team has a shot at the basket and scoring.
<b>Defence</b> This is the prevention of a scoring opportunity or possession intervention.
<b>Assist</b> This is given to a teammate to help him score easily
Pictures

## Year 7 Term 1 Knowledge Organiser Booklet

Techniques/Rules/Tactics	Offensive Alignments
<p><b>Rules</b></p> <p>The games consists of 2 teams with 5 players on court.  Aim to score as many hoops, shooting through the hoop, as you can in the time allocated.  Players cannot travel with the ball or perform a double dribble  Players cannot hold the ball for longer than 5 seconds  If ball goes out of play then a side line ball is taken from the opposite team.  Once the offense (attacking team) has brought the ball across the mid-court line, they cannot go back across the line during possession.  Foul are given for hitting, holding or pushing an opponent.  If a player fouls the shooter, then 1-3 free throws can be awarded (each 1point).</p>	<p><b>Single Post or Four Out alignment</b> - This is used when a team has a good post-up player since it isolates the post One-on-One near the basket.</p>
	<p><b>The Single Stack alignment-</b> This is used against pressure defence. Once the entry pass is successfully made, it isolates the post One-on-One</p>
	<p><b>Double Stack alignment</b> - two posts are used to free up shooters.</p>
	<p><b>High Post alignment-</b> This is used when teams do not have a big post player or when the post player is a good outside shooter, enabling the shooter to dribble.</p>
	<p><b>The Open or Spread-</b> This is sometimes called "Donut." This is a no post alignment whereby teams usually apply this to protect their lead at the end of a game.</p>
<p><b>Scoring System</b></p> <p><b>3 points</b> are awarded if the ball is successfully shot through the hoop from behind the three-point line. <b>2 points</b> are awarded if the ball is successfully shot through</p> <p><b>1 point</b> – If a foul is committed. They have a free player is given one point for every successful foul shot.</p>	<p style="text-align: center;"><b>Key Words/Phrases</b></p>
	<p>Offense</p>
	<p>Defence</p>
	<p>Double Dribble</p>
	<p>Foul</p>
	<p>Triple Threat Position</p>

# Year 7 Term 1 Knowledge Organiser Booklet

## Football

**KPI 1 - Effectively performs a range of actions, skills and techniques with control, combining them appropriately both in isolation and small group settings.**

**KPI 2 - Successfully employs simple tactics or creative processes in practical settings.**

The knowledge organiser will give you key information about the skills you will learn in year 7. It will include the key teaching points, aims of the skills and how it can be applied tactically. You can also look at the rules knowledge organiser for football to help you understand how to play the game.

Football club will be running during the academic year so keep an eye out on the PE OHSL sheet to find out when it is. There are also school fixtures as well so ask your PE teacher for further information if you are interested.

### Passing

**Aim of skill:** To keep possession of the ball for your team

**Tactics:** It is used to move the ball into space, spread the ball wide to use the width of the pitch and create goal scoring opportunities. It prevents the opposition from getting on the ball, meaning they cannot score.

**KTP:** *Place non kicking foot to the side of the ball, move kicking foot back in preparation, swing kicking foot forwards to contact the ball, use your arms for balance, have head up, lean over the ball to keep it down, follow through towards target for accuracy and power. You can use the side of your foot, outside of the foot and laces as techniques to pass.*

### Control

**Aim of skill:** To get the ball out of your feet so you can either pass, shoot or dribble.

**Tactics:** It used to get the ball down on the floor and out of your feet so that you can perform your next skill and keep possession for your team. Depending on height of the pass you can use head, chest, thigh or feet.

**KTP:** Get in line with the ball, Keep your head up and have your eyes on the ball, Present the side of your foot to control the ball, Non control foot should be planted on the ground, Take weight of the pass as it contacts your foot, use your arms for balance, push the ball out of your feet slightly so you are ready to carry out your next skill.



# Year 7 Term 1 Knowledge Organiser Booklet

## Goalkeeping – Basic Handling

**Aim of skill:** To gather the ball in and keep possession so the opposition cannot get a rebound.

**Tactics:** You need to be in the correct position and then select the appropriate technique in order to gather the ball in. Consistency is important to ensure there are no mistakes.

**KTP:** Get in line with the ball so your body is behind it, Have your head up and keep your eyes on the ball, Select the appropriate type of handling based on the height of the ball, ensure you gather the ball in and avoid spilling it, once possession is gained look for a suitable pass.



## Dribbling

**Aim of skill:** To make up positive ground on the pitch and beat an opponent to create attacking opportunities for your team.

**Tactics:** It used to drive into open space on the pitch, beat an opponent to create space and draw other opponents out of position, and create goal scoring opportunities.

**KTP:** Use laces when dribbling at speed and driving into space, use side of foot and outside of foot when changing direction and needing close control, keep your head up, use your arms for balance, keep a low centre of gravity, use skills and body feints to fool opponents.



## Shooting

**Aim of skill:** To score goals for your team so you can win the game.

**Tactics:** It is used to finish off goal scoring opportunities created by your team or force the opposition goalkeeper into a save that could create a rebound. You should aim for corners of the goal to make your shots harder to save.

**KTP:** Place non kicking foot to the side of the ball, move kicking foot back in preparation, swing kicking foot forwards to contact the ball, use your arms for balance, have head up, lean over the ball to keep it down and lean back to lift the ball high, follow through towards target for accuracy and power. You can use the side of your foot for accuracy, and laces for power.



## Tackling – Block Tackle

**Aim of skill:** To win the ball back for your team so you have possession again.

**Tactics:** It is used when an opponent is attempting to dribble past you one on one, when there is a 50/50 tackle and when there is an opponent trying to pass or shoot. It is important to tackle at the right time so you do not get beat.

**KTP:** Stand between your opponent and the goal, stand in a slightly sideways stance so you can easily change direction, keep your body low, keep your eyes on the player and ball, wait for the right time to make the tackle, step into the tackle with non-tackling foot, use the side of the foot to make the tackle, follow through with the tackle to ensure you win the ball.



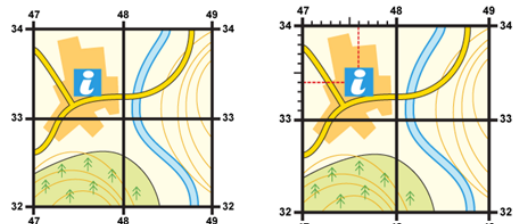
## Year 7 Term 1 Knowledge Organiser Booklet

Key terms and definitions		Warming up - Reasons	
Cardio-Vascular (warm-up)	The part of a warm-up that works the heart.	Prevention	To reduce the chance of injury
Mobilisation (warm-up)	The part of a warm-up that works the joints.	Preparation	To get the body and mind ready for more difficult physical work
Stretch (warm-up)	The part of a warm-up that works the muscles.	performance	To improve practical ability
Joints	The place where bone meets bone, allowing movement to occur.	<b>Warming up – Key facts and effects</b>	
Muscles	Attached to bones allowing the body to apply force.	We intake more oxygen (breathing rate increases)	
Hamstrings	The long muscle down the back of the leg.	Our heart beats faster	
Quadriceps	The large front thigh muscles.	Our blood flows faster around the body	
Abdominals / core	The stomach muscles.	More oxygen is carried to our muscles through increased blood flow	
Balance	The ability to evenly distribute body weight to hold a position (in gymnastics can also include bridge, handstand, headstand)	Our body temperature rises (we may go more pink in colour)	
Control	The ability to move without falling or losing correct position.	Our muscles become more flexible	
Rotation	The ability to turn around an axis (in gymnastics can also include cartwheel, walkover, round-off, somersault, flip)	Our joints become more mobile	
Roll	A rotation on a floor level (in gymnastics can also include pencil, teddy bear, forwards, backwards, sideways)	Our body releases heat through sweat	
Elevation	The ability to rise up off the floor in a jump or leap	We become more mentally and physically alert	
Transition	Moving from one action to another / one section to another. A link that does not break the performance	Endorphins are released	
Extension	The ability to stretch body parts away from body centre.	<b>Warming up - Components</b>	
Body Tension	Giving actions power and energy so that they look strong and clear	Cardio-vascular	Exercises that gradually increase the heart rate. Jogging, skipping, side stepping, star jumps, heel kicks, jumps, grapevines, high knees etc.
Sequence	A series of linked actions that flow	Mobilisation	Exercises that increase freedom of movement in the joints. Usually circular or figure of 8 actions. Hip circles, shoulder rolls, spine twists etc.
Routine	A completed gymnastics performance that includes sequences of action linked with transitions to create flow	Stretching	Exercises that lengthen the muscles to improve flexibility. Usually held actions for 8 – 10 seconds. Hamstring, quad, hip flexors etc.

# Year 7 Term 1 Knowledge Organiser Booklet

Key terms and definitions		Key terms and definitions	
<b>Big Bang</b>	The explosion of energy that led to the formation of the Universe	<b>Geological timescale</b>	It shows the time since Earth began
<b>Universe</b>	The universe is the whole of space and all the stars, planets, and other forms of matter and energy in it.	<b>Eon</b>	The biggest block of time in the geological timescale
<b>Star</b>	A large ball of burning gas in space. Stars appear to us as small points of light in the sky on clear nights.	<b>Era</b>	A timescale used to divide an eon into smaller units of time
<b>Galaxy</b>	A group of billions of stars	<b>Period</b>	A timescale used to divide an era into smaller units of time
<b>Sun</b>	The star round which the earth orbits.	<b>Precambrian eon</b>	From 4.5 billion years ago to 540 million years ago. Covers most of the time since Earth began
<b>Gravity</b>	The force of attraction that holds planets in the solar system, and holds us on Earth	<b>Phanerozoic eon</b>	The eon that we are in now. Started 540 million years ago
<b>Planet</b>	A planet is a large, round object in space that moves around a star. The Earth is a planet.	<b>Quaternary period</b>	The period we are living in today. Started 2.6 million years ago
<b>Earth</b>	Earth or the Earth is the planet on which we live. People usually say Earth when they are referring to the planet as part of the universe, and the Earth when they are talking about the planet as the place where we live.	<b>Key dates and events</b>	
<b>Moon</b>	An object similar to a small planet that travels around a planet.	13.8 billion years ago	A violent explosion of energy that led to the formation of the Universe
<b>Volcano</b>	A place where melted rock erupts	4.6 billion years ago	The Sun is formed in the Milky Way galaxy
<b>Atmosphere</b>	The layer of gas around the Earth	4.5 billion years ago	Dust and gases spinning around the Sun are pulled together by gravity to form planet Earth, made of soft rock.
<b>Ocean</b>	One of the five very large areas of sea on the Earth's surface.	3.9 billion years ago	Earth has evolved into a planet with a soft inside and hard exterior, which is being bombarded by meteorites
<b>Meteorites</b>	A chunk of rock that lands on Earth, from space	3.5 billion years ago	The first living cells appear on Earth, possibly from meteorites that fell into the oceans that contained compounds.
<b>Solar system</b>	Made up of our Sun, the planets, their moons, and asteroids and other floating objects.	550 million years ago	Different types of cells joined up so soft bodied animals appeared.
<b>Cells</b>	A cell is the smallest part of an animal or plant that is able to function independently. Every animal or plant is made up of millions of cells.	475 million years ago	First life moves from water to land. Simple plants had evolved from algae.
<b>Evolution</b>	The process by which new species of living things develop	230 million years ago	Dinosaurs appear on Earth. They evolved from species that remained after a mass extinction due a huge volcanic eruption.
<b>Algae</b>	Algae is a type of plant with no stems or leaves that grows in water or on damp surfaces	200 million years ago	First small mammals appeared on Earth – in a world where dinosaurs ruled.
<b>Mass extinction</b>	When a large number of species die off; for example because an ice age arrives	66 million years ago	A huge asteroid strikes Earth. 75% of living creatures died. Mammals and birds flourished from this point onwards.
<b>Asteroid</b>	Large chunks of rock that orbit the Sun; it is thought that they are material left over when the planets formed.	2 million years ago	In East Africa, a species of human, related to apes, had appeared, walking upright.
<b>Fossils</b>	The hard remains of a prehistoric animal or plant that are found inside a rock.	200,000 years ago	Human species evolved over time to become the species of humans today, homo sapiens.

# Year 7 Term 1 Knowledge Organiser Booklet

Key terms and definitions		Key terms and definitions	
<b>Plan</b>	A map of a small area (such as a school, or a room) drawn to scale	<b>Line of latitude</b>	How far a place is north or south of the Equator; it is measured in degrees
<b>Scale</b>	The ratio of the distance on a map to the real distance	<b>Prime Meridian</b>	An imaginary line that circles Earth from pole to pole; it is at 0° longitude
<b>Ratio</b>	Usually written in the form a:b and can be used on maps to show the scale in relation to real life.	<b>The Equator</b>	An imaginary line around the middle of Earth (at 0° latitude)
<b>Sketch map</b>	A simple map to show what a place is like, or how to get there; it is not drawn to scale	<b>Coordinates</b>	Used to locate places on planet Earth using lines of latitude and longitude
<b>Key</b>	Provides the meaning of symbols and abbreviations used on a map	<b>Degree</b>	Each line of latitude and longitude is divided up into degrees. Latitude goes from 0° to 90°N and 90°S. Longitude goes from 0° to 180° east and west
<b>Aerial photograph</b>	A photograph taken from the air	<b>Minutes</b>	Each degree is divided into minutes. 1 degree = 60 minutes, or 1° = 60'
<b>Grid lines</b>	Horizontal (northings) and vertical (eastings) lines drawn on a map to help locate places on a map	<b>Grid References</b>	
<b>Grid reference</b>	A set of numbers, or numbers and letters, that tells you where to find something on a map	A grid of squares helps the map-reader to locate a place. The vertical lines are called <b>eastings</b> . They are numbered - the numbers increase to the east. The horizontal lines are called <b>northings</b> as the numbers increase in a northerly direction.	
<b>4 figure grid reference</b>	A grid reference to locate a place within a grid square. The two numbers from each grid line make up the 4 figure grid reference	Remember When you give a grid reference, always give the easting first: " <b>Along the corridor and up the stairs</b> ".	
<b>6 figure grid reference</b>	A grid reference to locate a place more precisely within a grid square. The two numbers from each grid line, along with a further number for each line make up the 6 figure grid reference.	<b>Four-figure grid references</b> can be used to pinpoint a location to within a square.	
<b>Compass points</b>	Used to locate direction on a map	<b>Six-figure grid references</b> Sometimes it is necessary to be even more accurate. In this case you can imagine that each grid is divided into 100 tiny squares. The distance between one grid line and the next is divided into tenths.	
<b>Ordnance Survey map</b>	Detailed maps of places drawn by the Ordnance Survey, to scale		
<b>Contour line</b>	Line on a map joining places that are the same height above sea level		
<b>Spot height</b>	The exact height, in metres, at a spot on an OS map (look for a number)		
<b>Line of longitude</b>	How far a place is east or west of the Prime Meridian; it is measured in degrees		

## Year 7 Term 1 Knowledge Organiser Booklet

Topic: About the UK			
Key words and definitions			
<b>Asylum seeker</b>	A person who flees to another country for safety and asks for permission to stay there	<b>Multicultural</b>	Has different ethnic groups
<b>Climate</b>	What the weather in a place is usually like, over the year	<b>National</b>	To do with the whole country
<b>Continent</b>	One of Earth's great land masses; there are seven continents	<b>North Atlantic Drift</b>	A warm current in the Atlantic Ocean; it keeps the weather on the west coast of Britain mild in the winter
<b>Country</b>	Humans have divided continents into political units called countries	<b>Population</b>	The number of people living in a place
<b>Economic migrants</b>	People who move to a new place to find work and to improve their standard of living	<b>Population density</b>	The average number of people living in a place, per square kilometre
<b>Emigrant</b>	A person who leaves his or her own country to settle in another country	<b>Prevailing winds</b>	The ones that blow most often; in the UK they are south west
<b>Immigrant</b>	A person who moves here from another country, to live	<b>Rural area</b>	An area that is mainly countryside but may have villages and small towns
<b>Invader</b>	Enters a country to attack it	<b>Urban area</b>	A built-up area (town or city)
<b>Leeward</b>	Sheltered from the wind	<b>Weather</b>	The state of the atmosphere
<b>Local</b>	To do with the area around you	<b>Windward</b>	Facing into the wind
<b>Migrant</b>	A person who moves to another part of the country or another country, often just to work for a while		

## Year 7 Term 1 Knowledge Organiser Booklet

Key Vocabulary	Definition
<b>How has Warrington changed over time?</b>	
Historian	A person who studies the events of the past, usually by working with written sources, paintings and objects left behind.
Evidence	Material that can be used to learn about an event or individual to help decide if something is true.
Interpretation	A modern view of a historical event.
Chronology	Putting things into the order that they happened.
Timeline	A record of events marked in chronological order.
Change	When something becomes different
Continuity	When something stays the same
Sources	Usually pictures and texts from the time of the event.
Provenance	Where something comes from (i.e. its origin).
Inference	To use information and reach a conclusion on its meaning.
Judgement	To make a decision on something, or to reach an overall conclusion.
Significance	How important an event or individual is/was.
<b>What was England like before 1066?</b>	
Hunter-gatherers	People who survive by hunting, fishing, and gathering wild food.
Celts	A group of people who lived in England, they arrived around 500 BC.
Romans	A group of people who had a well-established Empire invaded Britain in AD 43.
Conquer	To take control of a place using military force.
Anglo-Saxon	Someone born in Britain after the Romans left. They originally came from Germany and Belgium.
Invade	The use of armed force to enter a country.
Raid	A surprise attack on an enemy.
Archaeology	Studying the past usually by excavating (digging) for the remains that have left behind.
Farming	The activity or business of growing crops and raising livestock
Lords	A man of noble rank or high office; a nobleman.
Peasants	The bottom of the social system. They were given small pieces of land to farm on. In return they had to work on the land and provide taxes and food.
Invaders	People who come to try and take over a country.
Danelaw	The part of England where Danish (Viking) power had been strongest and which had kept some of its Danish laws instead of Anglo-Saxon ones. This limited the king's power.
Settlers	People who move to live in a new area.
Military	Use of soldiers or an army.

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Why was England a battlefield in 1066?	
Succession	Who should be the next King or Queen.
Heir	The person who inherits (take over) after a King or Queen dies.
Claimants	Person who claimed that they should be King.
Witan	Group of men from the Church and Earls who advised the King. They had the final decision on who would be King after Edward died.
Battle of Fulford	On 20 Sep 1066, Tostig and Hardrada attacked York. The Anglo-Saxon army led by Edwin and Morcar was defeated, although Edwin and Morcar did survive the battle.
Stamford Bridge	A complete success for Harold. A surprise attack which resulted in Hardrada and Tostig's death.
Viking	A group of people from Norway who invaded countries including England.
Shield Wall	Anglo Saxon tactic (way of fighting a battle.) The soldiers would stand close together and put their shields up; making a wall that was hard to break.
Housecarls	Godwinson's best soldiers. They were well trained and very loyal to him. Heavy axes could take down horses.
Fyrd	The ordinary men of the Saxon army. Each 5 hides provided one man.
Knights	Soldiers who had devastating charge potential, height advantage from riding their horse which meant they were able to strike downwards in combat.
Archers	A soldier who was skilled at battling with a bow and arrows
Foot soldiers	A mixture of Normans and soldiers-for-hire from all over Europe. Most were probably not trained to fight in co-ordination with the Norman knights.
Battle of Hastings	Battle fought between Godwinson and William of Normandy. The battle lasted all day. William wins because of his skills as a leader, his tactics and luck.
Bayeux Tapestry	An embroidered cloth, about 70 metres (230 feet) long, illustrating events leading up to the Norman Conquest and made between 1066 and 1077 for the bishop of Bayeux in Normandy
Tactics	An action or strategy carefully planned to achieve a specific result
How did William take control after 1066?	
Coronation	When somebody is officially made King or Queen.
Terror	To put fear into somebody to gain control of them.
Harrying of the North	William punished the North of England for rebelling against him by sending soldiers to burn crops and houses, which caused starvation.
Motte and Bailey Castles	Castles built by William to keep watch on the English. They were made up of a tall hill (motte) with a lookout tower (keep) on top to keep watch. Below there was a small village (a Bailey)
Palisade	A wooden fence that protects the Motte and Bailey.

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Keep	A strong wooden tower that provided a look out.
Feudal system	A system that showed how important people were depending on how much land they had. William gave land to his barons, who gave smaller amounts to their knights, who gave strips of land to peasants.
Domesday Survey	A survey of England that how much land there was in England, as well as what was on the land, such as animals and houses. This was used to decide how much tax was owed.
Tax	Money that must be paid usually to the government or the king.
Loyalty	To show your support for someone or something.
Barons	Below the King. They were mostly Normans and William gave them land in return for loyalty.
Land ownership	A person who owns the land.
Church	A place of religious worship.
Forest Laws	English forests owned by William to go hunting on. If anyone else hunted on them they were punished.
Murdrum Fine	A fine that the Normans would use if one of their men was killed by an Anglo-Saxon.

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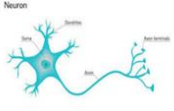
Key terms and definitions		Key terms and definitions	
<b>Primary research</b>	Primary research is research you conduct yourself It involves going directly to a source, usually customers and prospective customers in your target market, to ask questions and gather information	<b>File</b>	A file is a tool used to remove fine amounts of material from a work piece. It is common in woodworking, metalworking, and other similar trades
<b>Secondary research</b>	Secondary Research is a common research method; it involves using information that others have gathered through primary research.	<b>Import</b>	Bring one document/image into another, import an image from the internet.
<b>Final design</b>	Finished/ final design, that has been developed or selected from previous designs.	<b>Contour</b>	an outline representing or bounding the shape or form of something
<b>CAD</b>	Computer aided design	<b>Annotation</b>	a note by way of explanation or comment added to a text or diagram
<b>CAM</b>	Computer aided manufacture	<b>Tensol glue</b>	A strong glue used to fuse plastics together.
<b>Hardware</b>	the machines, wiring, and other physical components of a computer or other electronic system, i.e. laser cutter	<b>Laser cutter</b>	Laser Cutting is a non-contact process which utilizes a laser to cut materials, resulting in high quality, dimensionally accurate cuts. The process works by directing the laser beam through a nozzle to the work piece. A combination of heat and pressure creates the cutting action
<b>Software</b>	the programs and other operating information used by a computer, i.e. 2D Design		
<b>Vice</b>	vice is a mechanical apparatus used to secure an object to allow work to be performed on it. Vices have two parallel jaws, one fixed and the other movable, threaded in and out by a screw and lever	<b>Complex</b>	consisting of many different and connected parts
<b>client</b>	a person or organization using the services of a professional person or company	<b>Design Brief</b>	The design brief was a useful tool or document to reference throughout the project's life as we had measurable goals. All key-personnel worked together on creating a design brief
<b>Development</b>	Concept development is a process of developing ideas to solve specified design problems	<b>Product analysis</b>	Product analysis involves examining product features, costs, availability, quality and other aspects. Product analysis is conducted by potential buyers
<b>Scale</b>	drawing which has been reduced or enlarged from its original size, to a specified scale	<b>Pillar drill</b>	A pillar drill is a free standing machine that uses a motor to rotate a drill bit. This drill bit then can be used to cut holes of different diameters in different types of material
<b>Wet and dry</b>	A flexible latex impregnated waterproof backing paper coated with abrasive. Used wet or dry for sanding paint, primer and body filler. Coarser grades are ideal for removing major imperfections	<b>Acrylic</b>	Acrylic is a kind of plastic, fabric, fibre, or paint that's made from acrylic acid
<b>Glass paper</b>	paper covered with powdered glass, used for smoothing and polishing	<b>2d design</b>	A software package that allows users to draw basic to complex shapes on the computer to size and scale, will also link up to a laser.
		<b>Process</b>	a series of actions or steps taken in order to achieve a particular end

# Year 7 Term 1 Knowledge Organiser Booklet

## ***Musical Elements- Key terms and definitions***

<b>Tempo</b>	<b><i>The speed of a piece of music.</i></b>	<b>Texture</b>	<b><i>The layers used in a piece of music.</i></b>
Vivace	<i>Lively and fast</i>	Monophonic	<i>One single layer</i>
Andante	<i>Walking pace</i>	Homophonic	<i>Thick layers following the same pattern</i>
Moderato	<i>Medium pace</i>	Polyphonic	<i>Lots of layers moving on their own</i>
Largo	<i>Slow</i>	Unison	<i>All doing the same</i>
Accellerando	<i>Getting faster</i>	<b>Harmony</b>	<b><i>The feel of the music.</i></b>
Rallentando	<i>Getting slower</i>	Major	<i>Happy sounding</i>
<b>Dynamics</b>	<b><i>The volume of a piece of music.</i></b>	Minor	<i>Sad Sounding</i>
Piano	<i>Quiet</i>	<b>Rhythm/Metre</b>	<b><i>The rhythmic patterns and timing in a piece of music.</i></b>
Forte	<i>Loud</i>	Beats in a bar	<i>How many beats are counted in the bar.</i>
Mezzo Piano	<i>Medium Quiet</i>	Time signature/Metre	<i>4/4, 3/4, 6/8, 2/4</i>
Mezzo Forte	<i>Medium Loud</i>	Polyrhythm	<i>Lots of rhythms played at once</i>
Crescendo	<i>Getting Louder</i>	Cross rhythm	<i>Rhythms crossing over each other</i>
Diminuendo	<i>Getting quieter</i>	Syncopation	<i>Rhythms off the main beat</i>
<b>Sonority</b>	<b><i>The instruments heard in a piece of music.</i></b>	<b>Melody</b>	<b><i>The main tune in a piece of music.</i></b>
Strings	<i>Violin, Cello, Viola, Double Bass, Harp</i>	Steps/Conjunct	<i>Notes in a tune close together</i>
Brass	<i>Trumpet, French Horn, Trombone, Tuba</i>	Leaps/Disjunct	<i>Notes in a tune far apart</i>
Woodwind	<i>Flute, Clarinet, Oboe, Bassoon, Saxophone</i>	Scales	<i>A pattern of notes to create a melody from</i>
Percussion	<i>Drums, Cymbal, Maracas, Things You Hit</i>	<b>Structure</b>	<b><i>The sections of a piece of music.</i></b>
Band Instruments	<i>Electric/Acoustic Guitar, Bass Guitar, Keyboard, Synthesiser</i>	Binary	<i>Section Order: A, B</i>
Voices	<i>Male/female voice, soprano, alto, tenor, bass</i>	Ternary	<i>Section Order: A, B, A</i>
		Rondo	<i>Section Order: A, B, A, C, A</i>
		Arch	<i>Section Order: A, B, C, B, A</i>
		Popular structure	<i>Intro, Verse, Chorus, Bridge, Outro</i>

# Year 7 Term 1 Knowledge Organiser Booklet

Idea Citizen Award Bronze Key Terms		    	
<b>Neuron</b> 	Cells of the nervous system, called nerve cells or neurons, are specialized to carry "messages" through an electrochemical process	<b>Keeping safe online</b>	
<b>Axon</b>	A long and single nerve-cell process that usually conducts impulses away from the cell body	<b>Cyber Bullying</b>	The use of electronic communication to bully a person, typically by sending messages of an intimidating or threatening nature.
<b>DDoS</b>	This stands for "Distributed Denial-of-Service Attack" and is when multiple systems flood the resources of a target system (usually a website) in order to crash it.	<b>Netiquette</b>	A term referring to good behaviour while connected to the Internet
<b>Trojan</b>	This is a virus that disguises itself as something else within code to avoid detection.	<b>CEOP [Child Exploitation &amp; Online Protection]</b>	CEOP is a law enforcement agency and is here to help keep children and young people safe from sexual abuse and grooming online.
<b>Encryption</b>	The process of protecting data by converting it into a scrambled or unreadable format.	<b>Digital Citizen</b>	A digital citizen refers to a person utilizing information technology (IT) in order to engage in society
<b>Pomodoro Technique</b>	A time management method. The technique uses a timer to break down work into intervals, traditionally 25 minutes in length, separated by short breaks.	<b>OFCOM</b>	Is the communications regulator in the UK. The monitor all TV, radio and online activity
<b>Network</b>	Connect a computer to another computer, you create a "network of computers"	<b>Internet History</b>	
<b>Ethical hacking</b>	evaluate the security of and identify vulnerabilities in computer systems, networks for them to be improved .	<b>1962</b>	A global interconnection of computers was first proposed and described by J.C.R Licklider.
<b>Password</b>	A password is a string of characters used for authenticating a user on a computer system.	<b>1965</b>	The first Wide Area Network [WAN] expand more American computer scientists established the first <b>WAN</b> by connecting the TX-2 computer in Massachusetts to the Q-32 computer in California.
<b>Local Area Network [LAN]</b>	A group of computers and other devices that are connected together over a network and are all in the same location—typically within a single building like an office or home	<b>1969</b>	ARPANET is switched on and expand more In September 1969, the budding internet was off the ground.
<b>Server</b>	computer or computer program which manages access to a centralized resource or service in a network.	<b>1983</b>	Researchers began to assemble the "network of networks" that became the modern Internet. The online world then took on a more recognizable form in 1990, when computer scientist Tim Berners-Lee invented the World Wide Web.

# Year 7 Term 1 Knowledge Organiser Booklet

Spark Key terms and definitions		Design thinking key Stages	
CSS	Cascading Style Sheets is a style sheet language used for describing the presentation of a document e.g. the style	Empathise	Gain an empathic understanding of the problem you are trying to solve
HTML	Hypertext Mark-up Language, a standardized system for tagging text files to achieve font, colour and graphics	Define	You should seek to define the problem using the information you gained in empathise
MIRCOBIT	A small computer board designed by the BBC to be used for coding	Ideate	Start generating ideas
LOW RES PROTOTYPING	A simple prototype of an idea, normally low cost and takes little time	Prototype	produce a number of inexpensive, scaled down versions of the solution
IDEATION	Forming an idea	Test	Test the solution then use the information gained in the test to empathise again.
CONCEPTUAL MODEL	model constructed by the users in their mind to understand the working or the structure of objects	HTLM / CSS	
EMPATHY	the ability to understand and share the feelings of another.	<title>	Defines a title for the document
DESIGN THINKING	Design thinking is a process for creative problem solving	<body>	Defines the document's body or content
CO-DESIGNING	When several different people for different fields design a product or object	<p>	Defines a paragraph
EXPERIENCE DESIGN	Designing based on the experience of the user	background-color	Defines the background colour in CSS
HOW MIGHT WE (HMW) QUESTIONS	questions are short questions that launch brainstorm.	font-family	Defines the font in CSS
HUMAN-CENTERED DESIGN	involving the human perspective in all steps of the problem-solving process	3D DESIGN	
CODING	the process of assigning a code to something for classification or identification.	CAD	Computer Aided Design. The use of computer-based models of objects
DATA	facts and statistics collected together for reference or analysis	3D	Three-dimensional. Descriptive of a region of space that has width, height and depth.
		Fabricate	to construct or manufacture. To "make" your design. You can make almost anything through 3D printing or laser cutting.