



KS3 Knowledge Organiser

Year 7 Term 1

Knowledge Organisers will be given out by English, Maths, Science, MFL, History and Geography on a termly basis. Each Knowledge Organiser will have three sections of information linked to the lesson content for that fortnight. Once every two weeks, students will be directed to revise one of the three topics ahead of a quiz during a lesson. These will be available to see on our school website.

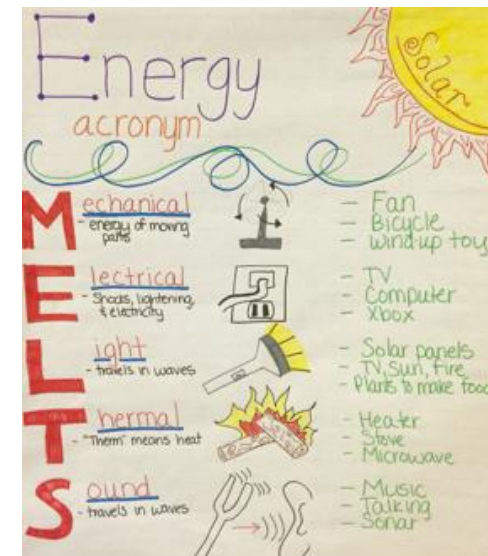
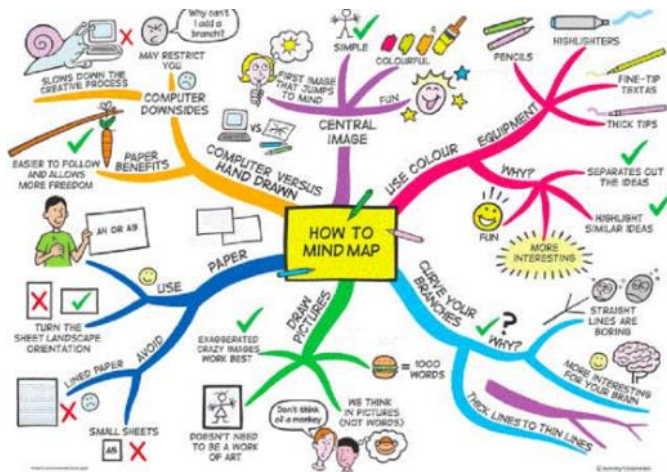
Homework club is every Tuesday, Wednesday and Thursday from 3pm to 4pm in the library.

Email address for any queries:

English:	Miss Epsley	eps1m001@g-a-t.co.uk
Maths:	Mr Goe	goem003@g-a-t.co.uk
Science:	Mrs Bennett	bailc197@g-a-t.co.uk
MFL:	Mrs Turke	turka041@g-a-t.co.uk
History:	Mr Uddin	uddis462@g-a-t.co.uk
Geography:	Mr Razzell	gowec018@g-a-t.co.uk

Here are some strategies that might help you:

- Be ACTIVE!
- Take notes - use highlighter pens, colour coding, or diagrams.
- Click on the links which will take you to the relevant websites or videos.
- Try converting the information into a mind map
- Make a glossary of keywords, with definitions or a list of formulas.
- Get someone to test you.
- Make key word posters.
- Write notes again and again and again!
- Look cover say write check
- Mnemonics – **N**aughty **E**lephants **S**quirt **W**ater (for learning North, East, South and West)
- Write postcards to summarise a topic.
- 15 minute revision sessions, any longer could be counter productive





Topic 1 – Language techniques and punctuation	Topic 2 – Structural Techniques	Topic 3 – Literary Devices
<p>Learn the definitions of these language techniques, and punctuation:</p> <p>Simile → Comparison. Using like, or as. Metaphor → Comparison. Saying something is something else. Connotation → What a word makes you think of, or feel. A positive, or a negative word. Personification → Making an object come to life. Adjectives → Describing words. Description → Words used to help the audience understand more about a character/setting. Imagery → Phrases used to create a picture in the audiences mind. Comma → Adds detail to a sentence. Tells the reader where to take a breath. Semi-colon → Joins two sentences together. Replaces a connective. Full stop → Used to mark the end of a sentence.</p>	<p>Learn the definitions of these structural techniques:</p> <p>Simple sentence → One idea about the same topic. Compound sentence → 2 simple sentences joined by a conjunction (FANBOYS) Complex sentence → More than one idea, more than one piece of punctuation. Minor sentence → One word sentence. Direct speech → What a character says. Marked by inverted commas. Beginning → The introduction of character, setting and atmosphere in a piece of text. Middle → The plot/action of a piece of text. Where plot points are introduced. End → Resolution of the plot. Usually where the character/audience have learnt a lesson, or problems have been resolved. Shift → A change in mood/atmosphere/setting/character. Focus → Looking closely at a part of the story in detail.</p>	<p>Learn the definitions of these literary devices:</p> <p>Character → A person in a play/novel/film Setting → Where a text is set Foreshadows → Hints at the future Theme → A recoccurring image in a text Dialogue → Speech Symbolism → the use of an object to represent a bigger idea Imagery → A vivid description that paints a picture for the reader Suspense → feeling of excited or anxious uncertainty about what may happen. Tension → Phrases that create fear, or worry in a text. Hightened dramatic effect. Drama → an exciting, emotional, or unexpected event or circumstance Structure → The way the text is set out. Beginning, middle and end. Author’s Intentions → 5 W’s for the author. Why they wrote the text, what influenced them to write, and when the text was written.</p>
<p>https://www.bbc.com/bitesize/subjects/z3kw2hv</p>	<p>https://www.bbc.com/bitesize/subjects/z3kw2hv</p>	<p>https://www.bbc.com/bitesize/subjects/z3kw2hv</p>



Topic 1 – Working with Negative Numbers

RULES FOR INTEGERS (SIGNED NUMBERS)	
<p>ADDITION</p> <p>+ and + = +</p> <p>- and - = -</p> <p>+ and - = +</p> <p>+ and - = -</p>	<p>SUBTRACTION</p> <p>ADD THE OPPOSITE!</p> <p>(Change the subtraction sign to an addition sign. Change the sign of the second number. Now follow the Addition rules!)</p>
<p>MULTIPLICATION AND DIVISION</p> <p>+ and + = + + and - = -</p> <p>- and - = + - and + = -</p>	
<p>Compliments of Lois Terms www.loisterms.com</p>	

Correct Example:

-2 + 4 = 2
4 - - 4 = 8
6 + - 8 = -2

Incorrect Example:

5 - - 2 = 3
8 + - 4 = 12

<https://www.mathsgenie.co.uk/negativenumbers.html>

Topic 2 – Algebraic Sequences

Algebraic Sequence

- A sequence which has a constant difference between terms.

• Examples:

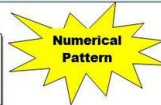
- 1, 5, 9, 13, 17
- -7, -1, 5, 11, 17
- 21, 20, 19, 18, 17

Arithmetic Sequence



Numbers arranged according to some pattern, **ADDING** the same amount to the previous number to get the next number.

5, 7, 9, 11, 13
+2 +2 +2 +2



71, 65, 59, 53, 47
-6 -6 -6 -6

Fibonacci sequence – 1, 1, 2, 3, 5, 8, 13

<https://www.mathsgenie.co.uk/types-of-sequence.html>

Topic 3 – Working with Decimals

Working with Decimals (cont.)

Table 1-3 Decimal Place Values

The number 1,542.567 can be represented as follows:

Whole Number				Decimal Point	Decimal Fraction		
Thousands	Hundreds	Tens	Ones	.	Tenths	Hundredths	Thousandths
1,	5	4	2	.	5	6	7

Common error when adding and subtracting decimals

Not lining up the decimal points (and using the multiplication rule to place the decimal point in the answer)

Doing this

$$\begin{array}{r} 23.6 \\ + 1.73 \\ \hline .409 \end{array}$$

Instead of this

$$\begin{array}{r} 23.60 \\ + 1.73 \\ \hline 25.33 \end{array}$$

It helps if I add a zero on the right

<https://www.mathsgenie.co.uk/FDP.html>



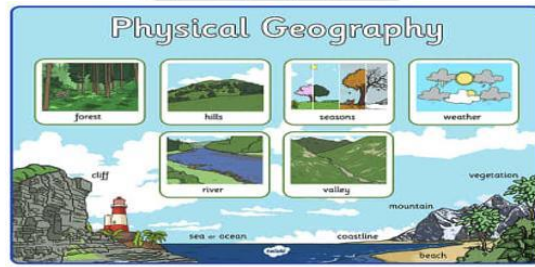
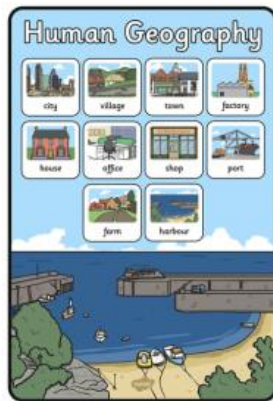
Topic 1 - Cells	Topic 2 - Properties of Solids, Liquids and Gases	Topic 3 - Types of Energy																																				
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Animal Cell</p> </div> <div style="text-align: center;"> <p>Plant Cell</p> </div> </div> <p style="text-align: center; font-size: small;">Plant and Animal Cells share these common features</p> <p style="text-align: center; font-size: small;">Plant Cells contain these extra features</p> <p style="font-size: x-small;">Plant and animal cells Copyright © 2009 science-resources.co.uk</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Key Terms</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>Cell wall</td> <td>Made of cellulose, which supports the cell</td> </tr> <tr> <td>Cell membrane</td> <td>Controls movement of substances into and out of the cell</td> </tr> <tr> <td>Cytoplasm</td> <td>Jelly-like substance, where chemical reactions happen</td> </tr> <tr> <td>Nucleus</td> <td>Contains genetic information and controls what happens inside the cell</td> </tr> <tr> <td>Vacuole</td> <td>Contains a liquid called cell sap, which keeps the cell firm</td> </tr> <tr> <td>Mitochondria</td> <td>Where most respiration reactions happen</td> </tr> <tr> <td>Chloroplast</td> <td>Where photosynthesis happens</td> </tr> </tbody> </table>	Key Terms	Definition	Cell wall	Made of cellulose, which supports the cell	Cell membrane	Controls movement of substances into and out of the cell	Cytoplasm	Jelly-like substance, where chemical reactions happen	Nucleus	Contains genetic information and controls what happens inside the cell	Vacuole	Contains a liquid called cell sap, which keeps the cell firm	Mitochondria	Where most respiration reactions happen	Chloroplast	Where photosynthesis happens	<p>Due to their arrangement and movement, the three states each have different properties.</p> <div style="display: flex; justify-content: space-around; text-align: center;"> <div style="width: 30%;"> <p>solid</p> <p>● rigid ● fixed shape ● fixed volume</p> <p>cannot be squashed</p> </div> <div style="width: 30%;"> <p>liquid</p> <p>● not rigid ● no fixed shape ● fixed volume</p> <p>cannot be squashed</p> </div> <div style="width: 30%;"> <p>gas</p> <p>● not rigid ● no fixed shape ● no fixed volume</p> <p>can be squashed</p> </div> </div> <p>Solids are rigid, have a fixed shape and fixed volume because particles are held together by strong bonds and arranged regularly.</p> <p>Liquids are not rigid and have no fixed shape, meaning they can flow to fill their container. This is because the bonds are weaker, so the particles can move. However, there is a fixed volume because the particles are still close together.</p> <p>Gases are not rigid, have no fixed shape or fixed volume because there is so much space between particles and the bonds holding them together are broken.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Key Terms</th> <th>Definitions</th> </tr> </thead> <tbody> <tr> <td>Energy</td> <td>Energy is a quantity that is stored in many objects and situations. Anything storing energy can do work.</td> </tr> <tr> <td>Work</td> <td>Work is done when energy changes from one store to another.</td> </tr> <tr> <td>Potential energy</td> <td>Potential energy is energy stored in objects that don't seem to be doing anything. See the examples.</td> </tr> <tr> <td>Chemical potential energy</td> <td>Energy stored in fuels (like wood, or the gas we run Bunsen burners on) is called chemical potential energy.</td> </tr> <tr> <td>Elastic potential energy</td> <td>Elastic objects, like springs or rubber bands, store elastic potential energy when they are stretched.</td> </tr> <tr> <td>Gravitational potential energy</td> <td>Any object that is not on the ground has gravitational potential energy. This is because they are lifted up in a gravitational field, and could fall down!</td> </tr> <tr> <td>Kinetic energy</td> <td>Movement energy. Any moving object stores kinetic energy.</td> </tr> <tr> <td>Thermal energy</td> <td>Also known as heat energy. All objects store some thermal energy, because the particles are moving. The higher the temperature of an object, the more thermal energy it stores.</td> </tr> <tr> <td>Conservation of energy</td> <td>The law that says energy cannot be created or destroyed. 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Topic 1: World aspects

There are three different aspects of the world. These are:

- **Human** (Things humans add to the world).
- **Physical** (The things the world creates).
- **Environmental** (This could be related to pollution, climate change or global warming).



Topic 2: Locational knowledge

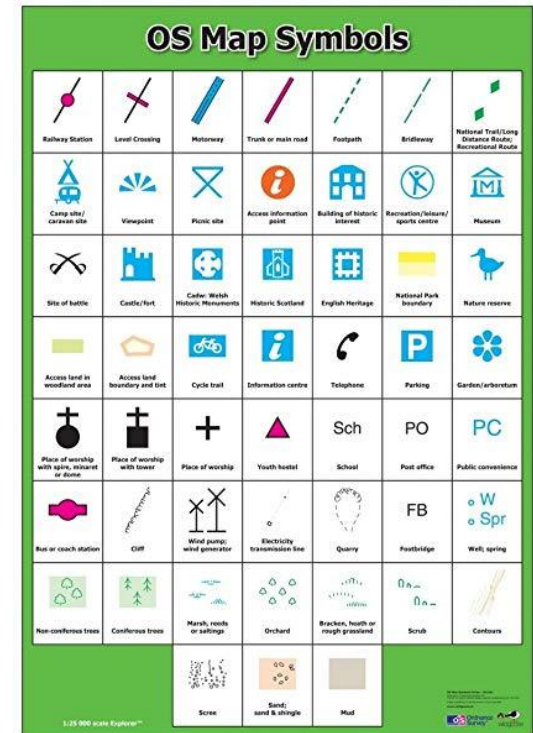
There are many different places around the world. These are categorised on maps into the following:

- **Continents** (the land countries sit on- E.g. Europe).
- **Countries** (where populations live- E.g. The United Kingdom).
- **Counties** (These are large areas within a country that include different villages, towns and cities- E.g. Kent)
- **Regions** (These are smaller areas, similar to counties but much smaller like Medway, Thanet or Swale).



Topic 3: OS Maps

OS Maps are read by using symbols. Examples of these are:

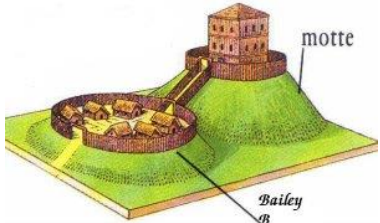


<https://www.bbc.com/bitesize/subjects/zrw76sg>

<https://www.youtube.com/watch?v=LZFF8EuaGjM>

<https://osmaps.ordnancesurvey.co.uk/52.48621,-2.21548,7>



Topic 1: What was England like before 1066?	Topic 2: Battle of Hastings	Topic 3: Norman England
<p>Key words Normandy – one of the 18th regions of France Agriculture– society based on farming and raising livestock.</p> <p>Before 1066, the King of England was called Edward the Confessor. King Edward was helped by lots of different people e.g. earls (important families) and friends from France called Normandy.</p> <p>The population of England was about 1.5 million people. Nearly everybody worked as farmers on land. People lived in small villages and there were a few towns.</p> <p>Many people wanted to invade England because there were lots of raw products such as wool (used for cloth making), iron (used to make weapons) and honey (used for medicine). There were also precious materials such as silver (mining in England, jewels in churches and monasteries, copper and tin.</p>	<p>Key words Fyrd – farmers who became fighters Housecarls – King Harold’s army Senlac Hill – location of the battle of Hastings Cavalry – soldiers on horses</p> <p>Key Individuals Harold Godwinson Harald Hardrada William of Normandy</p> <p>King Harold of England waited for 9 months for someone to make their first move. 1066 Hardrada King of Norway landed near York, launched a massive invasion of England. This was known as the Battle of Stamford Bridge. Godwinson’s army defeated the Vikings. Although Godwinson had defeated the most feared warrior of age, William of Normandy had landed with an army in the south of England in Pevensy Bay, Hastings. Godwinson ad to quickly march his army down south.</p> <p>On the 14th of October at 9:30 the Battle began. The battle took place on Senlac hill. Harold’s men formed a tight shield-wall at the top. William’s troops sent knights and foot soldiers to destroy the wall. A rumour started to spread that William had been killed and William’s troops began to retreat. Harold’s troops chased after breaking the shield-wall. William was not dead and this was just a trick. Harold was killed and William was named William the Conqueror King of England.</p>	<p>William the Conqueror was crowned king of England on Christmas Day 1066. However, it took him a longer time to enforce his power over England. Many Lords did not support him.</p> <p>William built Motte and Bailey castles to defend their strong positions from the Saxons and to control areas where they had already taken power. They were originally made out of wood and later stones. The ‘motte’ was a hill and the ‘bailey’ was a fenced courtyard where people would live. William wanted to get the money from everyone living in England. He sent men all over to 13000 villages. They founded out how many animals and tools everyone had. All the answers were put in a book called the ‘Domesday Book’.</p> <p>William was King but he could not run the entire country on his own. He created a system called the ‘Feudal System’. William would give land to Barons in return for loyalty and protection.</p> 
<p>https://www.bbc.com/bitesize/topics/zp6xsbk/resources/1</p>	<p>https://www.bbc.com/bitesize/guides/zsjnb9q/revision/3 https://www.youtube.com/watch?v=oLy1LskT6Y8</p>	<p>https://www.bbc.com/bitesize/guides/zsjnb9q/revision/6</p>



FRENCH

Key Vocabulary

Year 7
Term 1

Topic 1: Greetings and things in my bag		Topic 2: Age and birthdays		Topic 3: In the classroom	
Bonjour!	Hello!	Un , deux, trois	One, two, three	La chaise	The chair
Salut!	Hi!	Quatre, cinq, six	Four, five, six	Les crayons	The pencils
Comment) ça va?	How are you?	Sept, huit, neuf	Seven, eight, nine	La fenêtre	The window
Oui, ça va bien.	Yes, I am fine.	Dix, onze, douze	Ten, eleven, twelve	Les livres	The books
Bof, pas mal.	So-so.	Treize, quatorze, quinze	Thirteen, fourteen, fifteen	Le magnétophone	The tape recorder
Non, ça ne va pas.	No, I am not ok.	Seize, dix-sept, dix-huit	Sixteen, seventeen, eighteen	La porte	The door
Au-revoir.	Goodbye.	Dix-neuf, vingt	Nineteen, twenty	Le professeur	The teacher
Un sac	A bag	Lundi, mardi	Monday, Tuesday	Les règles	The rulers
Un cahier	An exercise book	Mercredi, jeudi	Wednesday, Thursday	Le rétroprojecteur	The overhead projector
Une calculatrice	A calculator	Vendredi, samedi	Friday, Saturday	La table	The table
Un livre	A book	Dimanche	Sunday	Le tableau blanc	The whiteboard
Une gomme	A rubber	Janvier, février	January, February	Des crayons	Some pencils
Un carnet de textes	A homework diary	Mars, avril	March, April	Huit crayons	Eight pencils
Un crayon	A pencil	Mai, juin	May, June	Écoutez, regardez...	Listen to..., look at...
Une règle	A ruler	Juillet, août	July, August	Fermez, ouvrez...	Close, open...
Un porte-monnaie	A purse	Septembre, octobre	September, October	Prenez, travaillez à deux	Take, work in pairs...
Un potable	A mobile	Novembre, décembre	November, December	Blanc(he), bleu(e), gris(e)	White, blue, grey
Un stylo	A pen	Mon anniversaire	My birthday	Jaune, marron, noir(e)	Yellow, brown, black
Une trousse	A pencil case	C'est le...	It is on the...	Orange, rose, rouge	Orange, pink, red
Dans mon sac	In my bag	Le premier	The first	Vert(e)	Green
Comment t'appelles-tu?	What is your name?	J'ai...ans	I am...years old	Dans la classe...	In the classroom...
Je m'appelle...	My name is	Quel âge as-tu?	How old are you?	Il y a...	There is...
Qu'est-ce que c'est?	What is it?	C'est quand ton anniversaire?	Mon anniversaire, c'est le...	Il n'y a pas de...	There is no...
J'ai	I have	Comment t'appelles-tu?	What is your name?	Écoutez le professeur!	Listen to the teacher!
Je n'ai pas de...	I have no...	Comment ça s'écrit?	How do you spell it?	Travaillez à deux!	Work in pairs!
https://www.bbc.com/bitesize/topics/zw8xpv4/resources/1		https://www.bbc.com/bitesize/topics/zk476sg/resources/1		https://www.bbc.com/bitesize/topics/zdkmhyc/resources/1	