# Knowledge Organiser Booklet Year 8 Term 1



Our working memories can only store a limited amount of information, whereas our long term memories can store limitless information. To learn successfully, we need to store core knowledge into our long term memories, so we can retrieve it when we need it.

For instance if you are at work or in the shops and need to work out a 25% discount, you cant memorise 25% of every number, so you need to be able to quickly recall the method for calculating a percentage. Committing core knowledge to our long-term memories is a life-hack. It makes thinking about difficult things easier.

Using a knowledge organiser with regular retrieval activities is a way for you to store core knowledge & subject specific words, into your long term memory so it is there when you need it.



### Contents

Clicking on the subjects below will take you directly to the knowledge organisers for each subject. These are to support learning that has taken place this past term. Use these to help reinforce the key knowledge. Use some of the strategies explained in the introduction to help you retain this important information.

Blending Learning expectations	Page 3
How to use a Knowledge Organiser	Page 4
Art	Page 11
Computing	Page 15
Design and Technology	Page 18
Drama	Page 23
English	Page 25
Literacy	Page 29
Geography	Page 33
History	Page 36
Maths	Page 39
Numeracy	Page 46
MFL – French	Page 51
Music	Page 53
PE	Page 55
PSHE	Page 57
RS	Page 59
RSE	Page 62
Science	Page 64

# Blended Learning Expectations

Make sure you have <u>access to a computer at home (</u>If you don't please make pastoral staff aware or email <u>langley.homelearning@taw.org.uk</u>)

**Download Microsoft Teams** on both your phone and computer. (If you don't know how to do this please ask a member of staff or do this in your next computing lesson)

**Spend at least 2 hours a week using teams** <u>**EVERY</u></u> <u><b>WEEK.** (Engagement in teams can be tracked and monitored). You need to be accessing each of your class teams and recapping on the previous learning or completing additional tasks set by your class teacher.</u></u>

If you have any issues with teams (e.g. login problems or missing classes etc then please email <u>lang-</u> <u>ley.homelearning@taw.org.uk</u>)

Teams is a tool to support ongoing learning and should **only be used for educational purposes.** 



	LOOK, COVER, WRITE, CHECK	DEFINITIONS TO KEY WORDS	FLASHCARDS	DUAL CODING	
AGE 1	Look at & study an area of your knowledge organiser	Write down the key words & definitions	Write key words, dates/formulae, equations/quotes on one side & answers on the other	Draw pictures/diagrams/ cartoon strips	
STI				<u>AN</u>	set
AGE 2	Cover up your knowledge organiser and write everything you remember	Cover up the definitions. How many can you remember? Repeat.	Include pictures or diagrams if it helps. Read through them.	Label your pictures/diagrams/ cartoon strips	er has
ST			10 AM	1 AM	ache
AGE 3	Check. Correct mistakes in green and add anything you missed. Repeat	Check. Correct mistakes in green pen. Which ones do you find hard to remember?	Test yourself and get someone to test you.	Explain out loud to yourself or family/friend what your images show	your te
ST	9       	×	0Q		ork
	SELF QUIZZING	MINDMAPS	PAIRED	SPEAK, COVER,	mew
			RETRIEVAL	WRITE, CHECK	IOL
AGE 1	Use your knowledge organiser to create quiz questions.	Create a mindmap of everything you can remember from your knowledge organiser	Give a family member/friend the knowledge organiser to hold	Read out loud the information from the knowledge organiser several times.	plete
STI		000	<u>d</u>		com
AGE 2	Write down the answers to your quiz	Check your knowledge organiser & use a green pen to make any	Get them to test you using the knowledge organiser	Cover up your knowledge organiser and write everything you remember	ow to
ST		corrections.			I
		XV			

# **Retrieval Placemat**

Look at your knowledge organiser. Now cover it up and write down Key vocabulary & definitons from memory:

First time: Look. Cover. State 3 facts Second time: Look. Cover. State 3 facts

Third time: Look. Cover. State 3 facts

Check & green pen your answers

Look at the knowledge organiser again. Now cover it up and without looking, explain a concept or idea in your own words

Re-read your answer above. Look at the knowledge organiser again. Now cover it up and improve on your previous explanation in green pen.

# **Retrieval Relay**

Look at your knowledge organiser. Now cover it up.

First time: Write down everything you can remember

Second time: Look. Cover. Write down everything you can remember Third time: Look. Cover. Write down everything you can remember

Write down everything here that you didn't remember:

# Vocabulary focus 1

Look at your knowledge organiser. Select a key word and write it here:

Write a definition of the key word in your own words - not the same as the one on the knowledge organiser: Write a sentence with the key word in it:

Create a question where the key word is the answer:

What other words are connected to this key word?

Draw a picture or diagram to help you remember this key word:

# Vocabulary focus 2

Definition:

Characteristics:

Key word:

Examples:

Non-examples:

# What should my knowledge organiser homework look like?

Homework activity written Topic clear and underlined Date Topic : Eartiguakes 13/07/21 Defrictions to key words Epicentre: Directry above une form, mere the version waves hit kint Stage 1 Service waves : Energy waves from form Fours : The point mere pressure is release Stage 2 Epicentre : Where the Unismic waves hit List (drecky above the forms) Sevence wares: Energy waves (from the for +311 Forme The point mere it starts - much green pressure is released must remember hus Stages of homework Key words in a different Green pen colour or underlined activity in margin corrections

# What should my knowledge organiser homework look like?



Stages of homework activity as subtitles

### Art





### Year 8: Unit 1: Drawing Skills



Draw edges not outlines!

Line

outline first is crucial before

adding tone and texture.



### Year 8: Unit 2: Beautiful Bugs Recording

#### **Beautiful Bugs Recording**

Threshold Concept TC14 - Understand how symmetry, simple geometric shapes and measuring techniques can help with accuracy when drawing.

Threshold Concept TC15 - Understand how to mix and create tonal values with colouring pencil.

Threshold Concept TC16 - Understand how to use different colouring pencil techniques.

**Threshold Concept TC17** - Understand that art does not always have to have a blank background on which to work. **Threshold Concept TC18** - Understand how to use different art techniques to produce a recording (drawing) page.

#### <u>Bronze</u>

... understand what a 'bug' is.

- ... understand how to draw simple geometric shapes to help plan a drawing.
- ... understand what 'background' means.
- ... understand there is an order in which the work needs to be done.

Basic Shapes

Texture

feels

Texture is to do with the surface quality of something, the way something feels or looks like it

Actual texture really exists, so you can feel it or touch it. You can create actual texture in an artwork

techniques can create interesting textures.

by changing the surface, such as sticking different

Visual texture is created using marks to represent

actual texture. It gives the illusion of a texture or

surface but if you touched it, it would be smooth.

fabrics onto a canvas. Combining different material

### Order of Drawing

Shape, Tone, Detail/Texture





SCAN ME

Colouring Pencil Techniques You can create visual texture by using different tetters, numbers, shapes, colours or tones. Think about how different marks can be used to show texture.



#### Shading techniques.



#### The outline is drawn in the lightest colour and then a base colour is applied which is then developed.

#### A **bug** is

Insect Parts



 an insect or other creeping or crawling invertebrate (as a spider or centipede).
 Definitions

Insect: a <u>small animal</u> that has six <u>legs</u> and often has <u>wings</u>.

Invertebrate: a <u>small animal</u> without a <u>backbone</u>, for <u>example</u> an <u>insect</u>.



#### **Colouring Pencil**



Formal Elements of Art Colour, Line, Shape Form, Tone, Texture Pattern

Key words Tonal Scale. Hatching Cross Hatching, Ellipse **Symmetrical Geometric Shapes** Parallel, Still Life Mandible, Thorax Abdomen. Antenna Antennae, **Symmetrical** Proportion - the size relationship between different parts, Eg. height compared to width

Graphite Pencil Drawing Using shading techniques





### Year 8: Unit 2: Beautiful Bugs Recording

#### **Beautiful Bugs Recording**

Threshold Concept TC14 - Understand how symmetry, simple geometric shapes and measuring techniques can help with accuracy when drawing.

**Threshold Concept TC15** - Understand how to mix and create tonal values with colouring pencil.

Threshold Concept TC16 - Understand how to use different colouring pencil techniques.

Threshold Concept TC17 - Understand that art does not always have to have a blank background on which to work.

**Threshold Concept TC18** - Understand how to use different art techniques to produce a recording (drawing) page.

#### Bronze

- ... understand what a 'bug' is.
- ... understand how to draw simple geometric shapes to help plan a drawing.
- ... understand what 'background' means.
- ... understand there is an order in which the work needs to be done.

### Basic ink and stick drawing techniques







Chalk. Ink and Stick

**Collage** describes both the technique and the resulting work of art in which pieces of paper, photographs, and fabric etc are arranged and stuck down onto a surface

A background is what's behind something like a play's scenery, or a person's life story or the past facts of a current situation

**Order of Collage** pastels tissue and sugar paper bug drawings

Basic

Shapes

### Pastel drawing techniques





Tearing tissue paper strips

for long leaves and grass.

**Beautiful Bugs** 



Henri Rousseau



**Formal Elements** of Art Colour, Line, Shape Form, Tone, Texture Pattern

Key words

Tonal Scale,

Hatching

Cross Hatching,

Ellipse, Symmetrical

Geometric Shapes Parallel, Still Life

Mandible, Thorax Abdomen.

> Antenna Antennae,

Symmetrical Proportion - the size relationship between different parts,

e.g height compared to width

### Computing



Read through your knowledge organiser. Next, cover it up or put it away and try tho write down as many of the key facts that you can remember. Use your knowledge organiser to check the fact you have written down. Correct any you may have got wrong.

	Computing Year 8 Unit: Computing systems		<ul> <li>Threshold concept—</li> <li>Understand the purpose of Boolean logic</li> <li>Understand the definition of hardware and software and the differences between them</li> <li>Understand what an instruction is</li> <li>Understand what execute means in computing terms</li> </ul>
Keyword	Definition	Hardware can be internal (	(inside the Software can be placed into two categories: system software and application software based on the task(s) it performs.
Logic program- ming	A type of computer pro- gramming that is based on formal logic rules	<ul> <li>PC/laptop/mobile phone case/ external (outside the case).</li> <li>External hardware example</li> <li>Mouse</li> <li>Keyboard</li> </ul>	ISE) OF       Application software is designed to perform tasks that the user wants to complete.         ES:       Word processors, Spreadsheet software, Presentation software, Web browsers, Games         System software is designed to control the hardware of the computer. It provides an interface between the hardware and the application software.
Hardware	Physical items in computing	Internal hardware example: CPU (Central procest / Processor	es: essing unit) Windows, MacOs, iOS
Software	Non-physical items e.g. pro- grams	Motherboard	
Artificial Intel- ligence	Any machine that performs tasks that typically require intelligence in humans	Artificial intelligence (AI) today	Al today mostly focuses on individual aspects of intelligent behaviour. Examples include: • Game playing (Chess, Go) • Deep Fakes • Image recognition
Machine learn- ing	A type of AI in which a range of techniques are used to attempt to imitate the way that humans learn	A picture "painted" by an Al	<ul> <li>Facial recognition</li> <li>Natural language processing</li> <li>Targeted advertising</li> <li>Spam filtering</li> </ul> Tesla engineers have made use of machine learning in the development of their self driving cars Another approach is "reinforcement learning". This is where the machine is provided with feedback on its attempts to perform a task and it then uses this feedback to improve.
Boolean	AND OR NOT		
Logical opera- tors	+ - = > < >= <= !=	Gate B	NOT AND Gate Gate A - D - Q B - D - Q B - D - Q

	Computing Year 8 Unit: Developing for the web	<ul> <li>Describe what HTML is</li> <li>Describe what CSS is</li> <li>Describe what the WWW</li> <li>Create a basic website</li> </ul>	and the Internet are
Keyword	Definition	HTML Tags HTML tags help the browser to know how to display a web page to t	he user.
HTML	HyperText Markup Language. The lan- guage used to write and display web	HTML tags within the <body></body> tags define how the content should be rendered by the browser.	of a page
HTML Tag	Used to define a HTML element (part of a page) such as a paragraph or heading	<ul> <li>HTML tags elsewhere, particularly those within the <head></head><!--</td--><td>tags are class detailed to be one of the contract of the co</td></li></ul>	tags are class detailed to be one of the contract of the co
Modify	To change	Headings Heading tags tell the browser to format the text within them in bold and a larger font size. This means that the text can then be used as a paragraph	Untitled - Notepad - = ×
Head	The head of a HTML page is a container for metadata (data about data)	heading. <h1></h1> tags produce the heading with the largest font size. <h6></h6> tags produce the heading with the smallest font size.	<100CTVPE html> <html> <body> <ht>My First Heading</ht> My first paragraph.</body></html>
Body	The body of a HTML web page is the part where the visible content goes	h2, h3, h4 and h5 tags produce headings with font sizes in between h1 and h6. <b>Example:</b> The code <h1>Learning HTML</h1> produces this result in the browser.	 
CSS	Cascading style sheets (CSS) is the lan- guage that is used to format and style	Paragraphs The  tag tells the browser that the text in between the tags should be formatted as one paragraph.	C file///C/Users/myuser/Desktop/indeulton =
Hyperlink	A link in a document or webpage that	Bold text	My first paragraph.
Browser	A program (such as Google Chrome, Mozilla Firefox or Microsoft Edge) which can understand HTML, CSS and JavaScript code and display a website	Adding images Images can be added to HTML pages using the img tag. This is an of a self-closing tag. This is because, unlike the majority of HTML ta closing tag is not required.	example igs, a
Search term	A word that the user types into a search engine as part of a search query	Example: <img alt="The Telford Langley S&lt;br&gt;logo" src="TLSLogo.webp"/>	School

### **Design and Technology**



You can make your own questions. This process takes a lot of time, but if you create a study group you can each create a few questions and trade. However it is important that you write what Key facts or knowledge you expect to see in any answer. Unit guiding question: What is the purpose of a mechanism?

**Reciprocating motion** 

weights up and lowers them.

He does work in both directions.

eightlifter

Oscillating motion

swings back and forth: Only the first hull of the

action performs work

footballer kicking

1.9

The fooltailer's leg

The weicht/Ber life the

The threshold concept that is truly essential to enable you to access future learning is ...



#### There are 4 types of motion

Linear motion The walker goes along in a straight line



Rotary motion A person carehooling



Some mechanisms are combinations of levers linked together. These are called linkages. They convert one type of motion into another.





Levers are simple machines. There are 3 classes of lever determined by where the load, effort and fulcrum are positioned.



Fixed pivot

Moving-pivet

<u>Cam mechanisms</u> have two main parts: a <u>cam</u> - attached to a crankshaft, which rotates.

a <u>follower</u> - touches the cam and follows the shape, moving up and down

Systems diagram for a bike as a mechanism.

**Pulley and belt systems** use the belt to transmit motion and power from the driver shaft to the driven shaft. The pulley wheels have grooves to keep the band or belt in place.



### Eatwell Guide **Threshold Concept:** A variety of food is needed in the diet because different food contains different nutrients. Different types of food provide different amounts of energy and to be healthy, energy balance should be achieved. he Eatwell Guide is the UK healthy eating model. Healthy eating is all about balance, meaning that there are no good or bad foods and all foods can be included in a healthy diet as long as the overall balance of foods is right. Choosing a variety of different foods from the 5 main food groups helps us eat a wide range of nutrients. **Threshold Concept:** To maintain body weight it is necessary to balance energy intake (from Different types of food provide different amounts of food and drink) with energy expenditure (from activity). This is called Energy in Energy ou energy and to be healthy, energy balance should be energy balance. When energy intake is higher than energy output, over Energy balance state time this will lead to weight gain (positive energy balance). When energy achieved. intake is lower than energy output, over time this will lead to weight loss (negative energy balance). **Threshold Concept:** Plants are grown for food and might be grown on farms, allotments, in gardens or on windowsills. Animals are reared for food on farms in Different types of food are grown, reared or caught. fields and sheds. Some animals, like fish, are caught for food. Fishing usually takes place in the sea, rivers or lakes. **Threshold Concept:** A use-by date on food is about safety. You can eat food until and on the use-by date

Food can spoil and decay due to the action of micro-organisms (microbes), insects and other pests and that food needs to be stored properly and within its date mark. A use-by date on food is about safety. You can eat food until and on the use-by date but not after. For the use-by date to be a valid guide, you must carefully follow storage instructions. After the use-by date, don't eat, cook or freeze your food. The food could be unsafe to eat or drink, even if it has been stored correctly and looks and smells fine.

#### **Threshold Concept:**

Plant-based alternatives to meat and dairy products and locally grown, seasonal foods have a lower impact on the environment. Meat and dairy (farmed livestock) accounts for 14.5% of all manmade greenhouse gas emissions. That's roughly equivalent to the exhaust emissions of every car, train, ship and aircraft on the planet! If we all plant-based alternatives to meat and dairy products, the world's food-related emissions would drop 70% by 2050. Food transport, packaging and processing make up 6% of CO2e emissions from rich countries. Local, seasonal food means lower emissions



#### Year 8 Knowledge Organiser – Design and Technology - Resistant Materials

To understand metal is an important and key material used in everyday life To recognise metals impact on the environment through its mining and processing

Subject Area	Required Knowledge		Links
MEDU	<ul> <li>Materials knowledge:</li> <li>Know the difference between Ferrous and Non-ferrous metals</li> <li>Name a Ferrous metal and a Non-Ferrous metal</li> <li>Know the source of metals and Iron Ore</li> <li>Describe 2 common properties of Iron (magnetic and it rusts)</li> <li>To know that Iron (Fe) rusts when exposed to moisture and air</li> </ul>	Ferrous (contains Iron)       Non Ferrous         Iron       -Copper         • Cast Iron       -Copper         • Stainless steel       Image: Contains Iron)         • Mild steel       Image: Contains Iron)         • Mild steel       Image: Contains Iron)         • Mild steel       Image: Contains Iron)         • Machine steel       Image: Containsteel	SCAN ME
DESIGN BESIGN	<ul> <li>Design process:</li> <li>Understand a design brief is a list of customer requirements</li> <li>Understand how research material comes from many sources</li> <li>Understand how evaluation helps the design process.</li> </ul>	BRIEF:Research:ExampleIt must be metalGoogle, library, customer survey, teachers, items which are currently availableLis 	raluate: t all the 'strengths', t all the 'weaknesses, rn the weaknesses to a list of provements
	<ul> <li>Practical skills:</li> <li>Understand the importance of and demonstrate safe workshop practice and use of PPE</li> <li>Understand how to cut and manipulate metal using hand tools, 'formers' and Templates</li> <li>Understand how to join metal using 'Brazing'</li> <li>Understand why and how to apply a 'finish' to some metals</li> </ul>	Metal forming: Force metal into a new shape	SCAN ME
	<ul> <li>Environmental.</li> <li>State Iron Ore is not a sustainable material</li> <li>understand the impact mining and the processing of ores into metals has on the environment</li> </ul>	There is limited 'Ore' in the ground. It can only be mined once; the	e supply is not endless!

### Eatwell Guide **Threshold Concept:** A variety of food is needed in the diet because different food contains different nutrients. Different types of food provide different amounts of energy and to be healthy, energy balance should be achieved. he Eatwell Guide is the UK healthy eating model. Healthy eating is all about balance, meaning that there are no good or bad foods and all foods can be included in a healthy diet as long as the overall balance of foods is right. Choosing a variety of different foods from the 5 main food groups helps us eat a wide range of nutrients. **Threshold Concept:** To maintain body weight it is necessary to balance energy intake (from Different types of food provide different amounts of food and drink) with energy expenditure (from activity). This is called Energy in Energy ou energy and to be healthy, energy balance should be energy balance. When energy intake is higher than energy output, over Energy balance state time this will lead to weight gain (positive energy balance). When energy achieved. intake is lower than energy output, over time this will lead to weight loss (negative energy balance). **Threshold Concept:** Plants are grown for food and might be grown on farms, allotments, in gardens or on windowsills. Animals are reared for food on farms in Different types of food are grown, reared or caught. fields and sheds. Some animals, like fish, are caught for food. Fishing usually takes place in the sea, rivers or lakes. **Threshold Concept:** A use-by date on food is about safety. You can eat food until and on the use-by date

Food can spoil and decay due to the action of micro-organisms (microbes), insects and other pests and that food needs to be stored properly and within its date mark. A use-by date on food is about safety. You can eat food until and on the use-by date but not after. For the use-by date to be a valid guide, you must carefully follow storage instructions. After the use-by date, don't eat, cook or freeze your food. The food could be unsafe to eat or drink, even if it has been stored correctly and looks and smells fine.

#### **Threshold Concept:**

Plant-based alternatives to meat and dairy products and locally grown, seasonal foods have a lower impact on the environment. Meat and dairy (farmed livestock) accounts for 14.5% of all manmade greenhouse gas emissions. That's roughly equivalent to the exhaust emissions of every car, train, ship and aircraft on the planet! If we all plant-based alternatives to meat and dairy products, the world's food-related emissions would drop 70% by 2050. Food transport, packaging and processing make up 6% of CO2e emissions from rich countries. Local, seasonal food means lower emissions



### Drama

### FLASHCARDS

Create your own flashcards, question on one side answer on the other. Can you make links between the cards?



You need to repeat the QdA process for flashcards you fail on more frequently & less frequently for those you answer correctly Create a flash card with all the key facts you want to learn (this can be drawn in your book). On the next page try writing down as many facts or as much of the knowledge as you can. If you find you are getting certain facts wrong then these are where you need to focus and relearn.

Darkwoo	d Manor	How can y performan	ou create tension and a ce?	tmosphere	within a
A. Physical Theatre	<u>B. 5 W's</u>	9	G. Physical Skills		H. Vocal Skills
Physical theatre is a way of telling a story through physical movement. It can include other techniques such as mime, gesture, music, dance, and visual art Performers often use very little or no dialogue at all.	Who am I? What am I doing? Where am I? When am I here? Why am I doing it? How will I show the audience my 5 W's?	Body Language Posture	How an actor uses their body to communicate meaning. For example, crossing your arms could mean you are fed up. The position an actor holds their body when sitting or standing. For example, an	Projection Volume Tone	Ensuring your voice is loud and clear for the audience to hear. How loudly or quietly you say something. (Shouting, whispering). The way you say something to communicate your
who work within this genre.			upright posture.		emotions. (e.g., angry,
<u>C. Levels</u> Levels refer to the use of different heights,	D. Proxemics Proxemics is the use of space/distance	Gait Facial	The way an actor walks. A form of non-verbal		worried, shocked tone of voice).
e.g., through standing or sitting, to convey meaning on stage. They can be used to create visual interest, but they can also signal status and character relationships.	represent the relationship between characters	Expressions	communication that expresses the way you are feeling, using the face.	Pace Pause	The speed of what you say. Moments of pause can create tension or show what
For example, a more dominant character may stand towering over a vulnerable character.		Gestures	A movement of part of the body, especially a hand or the head, to express an idea of meaning.	Accent	Use of an accent tells the audience where your character is from.
E Role Play	F Storytelling	Stance	The way you position yourself when standing to	Pitch	How high or low your voice is.
Role play is when you are assigned a role and, during a small scenario, act as you think the person, they are being would act in such a situation.	Storytelling is the interactive art of using words and actions to reveal the elements and images of a story while encouraging the listener's imagination.		communicate your role. An elderly person would have a different stance to a child!	Emphasis	Changing the way, a word or part of a sentence is said, to emphasise it. (Make it stand out).
\$+ \$*.			·		
	I. Horro	or Key Words			
<b>Tension:</b> Tension is the word to describe the	feeling that something is about to happen. At	mosphere: The a	atmosphere is the mood of feeling	g within a scen	e. E.g., tense, scary, light, happy
	Exaggeration: means making an action	or gesture ever	bigger than it is in real life.		

## English

### QUIZZING

Your questions with a partner & answer.

Question - What is a metaphor?

- A comparison using 'Like, as, than '
- A comparison where one thing is another.
- A comparison with a human attribute.

You can make your own questions. This process takes a lot of time, but if you create a study group you can each create a few questions and trade. However it is important that you write what Key facts or knowledge you expect to see in any answer.

#### Threshold Concept- Year 8- Animal Farm:

TC1 - Understanding texts

TC2 - Demonstrate an appreciation of the writer's craft through analysis and critically evaluative comments.



#### Threshold Concept- Year 8- Writing accurately.

TC6 - Organise information and ideas, using structural and grammatical features to support coherence and cohesion of texts

TC7 – Use a range of sentence structures for clarity, purpose and effect, with accurate punctuation and spelling.



-To create an additional pause.

have joined (i.e. don't)

-To indicate when something is being said.

-To show part of a sentence is extra information

-To show where a letter has gone missing when two words

-To show something owns something else. (i.e. The cat's fur).

Ellipses

Brackets

Speech marks

Apostrophes

...

....

()

accurately?

-Do I use all of this punctuation regularly in my work, not forgetting any piece?



wledge Orga	niser		Spelling St	rategies	
iniougo orgu	Frequently Mi	sused Words:	Pictures	Other version word	s of the
nctuation	×	1	H + ear = hear	de <u>fini</u> te, <u>fini</u> te,	finish
Question Mark ?	Alot	A lot	<b>O</b>	Word origins	
Use these to indicate a question is being	Would of	Would have	Invent Magmonics	satis – eno	ugh
asked.	Eachother	Each other	Accommodation = Cosy Cottages;	<u>bi</u> cycle – tw	o wheels
Apostrophe	Aswell	As well	Magnificent Mansions	Dictionary	Look,
Use apostrophes to show possession or	Inbetween	In between	Necessary = 1 collar, 2 socks		Cau
missing letters.	Homo	phones			Say,
Semi-colon	<u>There</u> – Place or position. <u>Their</u> – belonging to them	Where – Place or position. Were – Plural past tense of	Critical self-checking Does it look right?		Cover,
important parts of a sentence.	They are.	We're – We are/We were.	Syllables	Words within words	Write,
Brackets () Use these to add extra, non-essential, information to a sentence.	To – Preposition to show motion. Too – Adverb meaning 'also'.	<u>Your –</u> belonging to you. <u>You're</u> – You	Letter Pattern Links light bright sight fight might	business – b <u>us in</u> ess separate – there's a rat in	Check
	Apostrophe   Use these to indicate a question is being asked.   Apostrophe   Use apostrophes to show possession or missing letters.   Semi-colon   Use this to join two closely related, equally important parts of a sentence.   Brackets   Use these to add extra, non-essential, information to a sentence.	Alot   Question Mark   Pape   Use apostrophes to   sontence.   Semi-colon   Juse this to join two   closely related, equally   important parts of a   sentence.   Brackets   ()   Use these to add   extra, non-essential,   information to a   sentence.   Semi-colon  Theo Theo Theo T	Semi-colon       Semi-colon <td>Spelling St         Spelling St         Spelling St         Cuestion Mark       Prequently Misused Words:         Value these to indicate a question is being asked.       Prequently Misused Words:         Mould of Would have Each other         Apostrophe       Nould of Would have Each other         Aswell       Collar, 2 socks         Letter P Place       Or position.         There - Place       Or position.       Critical</td> <td>Spelling Strategies         Spelling Strategies         Other version         Vectuation         Semicolon         Sust is to join two closely related, equally motion, Incerve and extra, non-essential, information to a sentence.       Miner e Place or position. Their - Delonging to the motion, Incerve and extra, non-essential, information to a sentence.       Vour - tise - ment         Letter Pattern Links       bus in ess espanate - there's a rat in separate - there's a rat</td>	Spelling St         Spelling St         Spelling St         Cuestion Mark       Prequently Misused Words:         Value these to indicate a question is being asked.       Prequently Misused Words:         Mould of Would have Each other         Apostrophe       Nould of Would have Each other         Aswell       Collar, 2 socks         Letter P Place       Or position.         There - Place       Or position.       Critical	Spelling Strategies         Spelling Strategies         Other version         Vectuation         Semicolon         Sust is to join two closely related, equally motion, Incerve and extra, non-essential, information to a sentence.       Miner e Place or position. Their - Delonging to the motion, Incerve and extra, non-essential, information to a sentence.       Vour - tise - ment         Letter Pattern Links       bus in ess espanate - there's a rat in separate - there's a rat

### Literacy



Make sure you are regularly testing your knowledge using the resources provided by the school on platforms such as Sparx, Educake and Linguascope. You will have been issued with user names and passwords to access your accounts.

Parts of a sentence: subject, verb, object.	Examples: Every sentence must have a subject and verb.	Hyphens: are used to combine words that have a combined meaning or are	Examples: three-year-old	
<b>subject:</b> the person or thing carrying out the action.	John ran to the shops.	linked in the grammar of a sentence. They help avoid confusion.	rock-forming minerals long-term	
object: the person or thing that receives the action of the verb.	The opera was sung by the soprano.	Man eating shark- suggests the man is eating shark.	Man-eating shark – suggests the shark eats man.	
Active Voice: When the subject of a sentence performs the verb's action, we say that the sentence is in the <i>active</i>	<b>Passive voice:</b> When the subject is acted on by the verb. The passive voice is always constructed with a different form of the plue the verb's past.	Semi colons, colons and dashes can be used to separate boundaries between two clauses.	Example:	
voice.	participle and contains by.	Semi colons(;) separate two main clauses and are normally used instead	Some people like sweets; others like chocolate.	
Arthur read an interesting novel.	An interesting novel was read by Arthur.	of a coordinating conjunction.		
The progressive tense: a	Examples: The verbs in the progressive	<b>Colons(:)</b> are used to introduce related information.	He was missing two things: his hat and his coat.	
action in progress at some point in time.	present participle (an -ing verb).	<b>Dashes-</b> can be used in place of a colon when you want to emphasize the	The house rule is simple- clean up after yourself.	
Past progressive: contains was, were +	She was playing football.	conclusion of your sentence.		
an -ing verb.	We were eating dinner.	it is a second se		
An -ing verb. Present progressive: contains is, are, am	He is reading a book.	Semi colons, colons and bullet points can also be used in lists.	Example:	
an -ing verb. Present progressive: contains is, are, am + an -ing verb.	We were eating dinner. He is reading a book. They are making a cake. I am painting a picture.	Semi colons, colons and bullet points can also be used in lists. Semi colons(;) they are also used to separate items in a list that contain	Example: My dream band would be: Ray, vocals; Arthur, guitar and backing vocals; Rifat,	
An -ing verb. Present progressive: contains is, are, am + an -ing verb. Main clause: a clause that can form a complete conteneo standing alone	We were eating dinner. He is reading a book. They are making a cake. I am painting a picture. Subordinate clause: a clause, typically introduced by a subordinating	Semi colons, colons and bullet points can also be used in lists. Semi colons(;) they are also used to separate items in a list that contain commas already.	Example: My dream band would be: Ray, vocals; Arthur, guitar and backing vocals; Rifat, bass; and Tom, drums.	
<ul> <li>an -ing verb.</li> <li>Present progressive: contains is, are, am + an -ing verb.</li> <li>Main clause: a clause that can form a complete sentence standing alone.</li> <li>Contains a subject and verb. If the main clause comes first no comma is needed.</li> </ul>	We were eating dinner. He is reading a book. They are making a cake. I am painting a picture. Subordinate clause: a clause, typically introduced by a subordinating conjunction, that adds extra information and cannot stand alone.	Semi colons, colons and bullet points can also be used in lists. Semi colons(;) they are also used to separate items in a list that contain commas already. Colons(:) they are also used to present a list.	Example: My dream band would be: Ray, vocals; Arthur, guitar and backing vocals; Rifat, bass; and Tom, drums. I ordered the following: eggs, beans, sausage, bacon and a cup of tea.	
<ul> <li>an -ing verb.</li> <li>Present progressive: contains is, are, am + an -ing verb.</li> <li>Main clause: a clause that can form a complete sentence standing alone. Contains a subject and verb. If the main clause comes first no comma is needed.</li> <li>I still had energy for my lessons.</li> </ul>	We were eating dinner. He is reading a book. They are making a cake. I am painting a picture. Subordinate clause: a clause, typically introduced by a subordinating conjunction, that adds extra information and cannot stand alone. I still had energy for my lessons even though I cycled to school.	Semi colons, colons and bullet points can also be used in lists.Semi colons(;) they are also used to separate items in a list that contain commas already.Colons(:) they are also used to present a list.Bullet points. make a list easier to read. There are no capital letters or full stops needed.	Example: My dream band would be: Ray, vocals; Arthur, guitar and backing vocals; Rifat, bass; and Tom, drums. I ordered the following: eggs, beans, sausage, bacon and a cup of tea. Remember to: • wash up everything in the sink • dry the dishes with the towel	
<ul> <li>an -ing vero.</li> <li>Present progressive: contains is, are, am + an -ing verb.</li> <li>Main clause: a clause that can form a complete sentence standing alone. Contains a subject and verb. If the main clause comes first no comma is needed.</li> <li>I still had energy for my lessons.</li> <li>I crept inside the room.</li> </ul>	We were eating dinner. He is reading a book. They are making a cake. I am painting a picture. Subordinate clause: a clause, typically introduced by a subordinating conjunction, that adds extra information and cannot stand alone. I still had energy for my lessons even though I cycled to school. Although I was feeling scared, I crept incide the room	<ul> <li>Semi colons, colons and bullet points can also be used in lists.</li> <li>Semi colons(;) they are also used to separate items in a list that contain commas already.</li> <li>Colons(:) they are also used to present a list.</li> <li>Bullet points. make a list easier to read. There are no capital letters or full stops needed.</li> </ul>	Example: My dream band would be: Ray, vocals; Arthur, guitar and backing vocals; Rifat, bass; and Tom, drums. I ordered the following: eggs, beans, sausage, bacon and a cup of tea. Remember to: • wash up everything in the sink • dry the dishes with the towel • pack everything away on the shelf	
<ul> <li>an -ing vero.</li> <li>Present progressive: contains is, are, am + an -ing verb.</li> <li>Main clause: a clause that can form a complete sentence standing alone. Contains a subject and verb. If the main clause comes first no comma is needed.</li> <li>I still had energy for my lessons.</li> <li>I crept inside the room.</li> <li>Synonyms: words that have the same or similar meanings.</li> </ul>	We were eating dinner. He is reading a book. They are making a cake. I am painting a picture. Subordinate clause: a clause, typically introduced by a subordinating conjunction, that adds extra information and cannot stand alone. I still had energy for my lessons even though I cycled to school. Although I was feeling scared, I crept inside the room. Antonyms: words that have the opposite meaning	Semi colons, colons and bullet points can also be used in lists. Semi colons(;) they are also used to separate items in a list that contain commas already. Colons(:) they are also used to present a list. Bullet points. make a list easier to read. There are no capital letters or full stops needed. Subjunctive form: it is used to express wishes, hopes, commands, demands or suggestions. Usually it is the third-	Example: My dream band would be: Ray, vocals; Arthur, guitar and backing vocals; Rifat, bass; and Tom, drums. I ordered the following: eggs, beans, sausage, bacon and a cup of tea. Remember to: • wash up everything in the sink • dry the dishes with the towel • pack everything away on the shelf Example: I wish I were able to fly. It is vital that she attend the meeting. If Lorge you I'd eacent the offer	

Simple tenses	Example		Perfect tense	Example	
<b>Past</b> - when an action took place at a specific time and is <u>now finished</u> .	I <u>walked</u> into the monster's cave. I <u>walk</u> into the monster's cave.		Past perfect - is used to say when an action was completed in the past.	I had walked in the monster's cave.	
place now.			The past tense of 'to have' + past participle of verb.		
Future - when an action will take place in the future.	l <u>will walk i</u> r	to the monster's cave.	Present perfect - is used to say when: 1) An action has recently finished using	I have just walked in the	
Progressive tenses		Example	ʻjust',	monster's cave.	
Past progressive - used for a continuous a	action in	I was walking in the	<ol> <li>An action that has started in the past and is still going.</li> </ol>	I have worked in the bank for five years.	
the past. The past tense of 'to be' + present participle of the verb (verb ends in -ing).		monster's cave. He/She was	3) The time period has not finished.	I have not seen her today.	
		You/We/They were	<ol> <li>When the time period is not important or known.</li> </ol>	I have studied French, Russian and German.	
<b>Present progressive</b> - used for an action the happening at the moment of speaking.	hat is	I am walking in the monster's cave.	<ol> <li>The action is repeated in a period between the past and now.</li> </ol>	I have eaten at that restaurant several times.	
The present tense of 'to be' + present pa the verb (verb ends in –ing).	rticiple of	He/She is You/We/They are	The past tense of 'to have' + past participle of verb.		
Future progressive - used for an action that is will be continuing in the future. The present tense of 'to be' + present participle of		I will be walking into the monster's cave.	Future perfect –is used to say when an action will have been completed in the	I will have walked in the monster's cave.	
		He/She will be	future.		
מופ עפוט (עפוט פוומג ווו דוווצ).		You/We/They will be	The future tense of 'to have' + past participle of verb.		

Word class: Nouns				Word class:		
Proper noun - name, place, month- alwayse.g. Jostarts with a capital letterJames		e.g. John, South Woodford James went to the superm	e.g. John, South Woodford, March <u>James</u> went to the supermarket.		s e.g. blue, small, gentle The <u>white</u> snow	
Concrete nouns - things you experiencee.g. tathrough your five sensesIn my		e.g. table, pencil, chocolate, music In my bag I have many things including an <u>apple.</u>		Verb - an action, sta or occurrence	ate e.g. run, was, work The sun <u>is</u> hot so I	
Abstract nouns - ideas and cond can't touch them	epts; you	e.g. truth, justice, anger I feel hope for the future.		Advorb modifiest	play in the garden.	
Pronoun - replaces a proper nou common noun	ın or	e.g. he, she, they, it John had a bookmark; <u>he</u> used it in his book.		meaning of an adjective, verb or other adverb	soon I liked the cuddly rabbit best	
<b>Collective noun -</b> a noun that regroup of individuals	fers to a	e.g. herd, class, pack A <u>gaggle</u> of geese were at the pond.		Expresses manner, place, time or degree	ee	
Word class: Determiner	A modifying	word that determines the	Word class:			
	group has	ence a noull of noun	<b>Prepositions</b> - show the relationship between the noun or pronoun and other words in a sentence. They describe, for example, the position of something, the time when something happens, or the		e.g. after, in, with He moved here <u>after</u> the end of the war.	
Article - tells us the definite or indefinite	e.g. a/an, the <u>The </u> tree is bea	autiful in autumn.				
Quantifier - indicates quantity	e.g. few, many <u>Lots</u> of fun wa	, some s had at the party.	way in which something is done			
Possessives - indicates who it belongs to	e.g. my, its, his That is <u>her</u> coat.		<b>Co-ordinating conjunction</b> - a conjunction placed between words, phrases, clauses, or sentences of equal importance (main		e.g. for, and, nor, but, or, yet, so I like chocolate but I don't	
Demonstratives - points to	e.g. this, that, those		clause)		like sweets.	
Numbers - tells us how many	<u>These</u> computers are for sale. e.g. one, two, three <u>Seven</u> dwarves accompanied Snow White.		Subordinating conjunction - a conjunction that introduces a subordinating clause		e.g. while, since, although I went to the cinema <u>after</u> I had eaten my dinner.	

### Geography



Organise your ideas into a concept map, like the one below that summarises 'cells'. In a concept map, you take the main ideas and link them together with phrases that explain the relationship between the concepts. But, always try to make the concept map from memory first! Then check it with the knowledge organiser

### Climate Change Knowledge Organiser

#### Key terms

Atmosphere - a layer of gases that surrounds the planet Weather - the current conditions in the atmosphere Climate - the average weather conditions in an area over a period of time

**Greenhouse effect** - the process by which CO<sup>2</sup> and other gases prevent the Earth's heat escaping into space

**Greenhouse gas** - a gas, present in the atmosphere, which reduces the loss of heat into space (carbon dioxide, methane, nitrous oxide, water vapour, CFCs). **Global warming** - the slow increase in the earth's average temperature **Carbon emissions** - CO2 added to the atmosphere by burning fossil fuels **Enhanced Greenhouse effect** - the effect of increased levels of CO<sup>2</sup> and other gases in the atmosphere to prevent more of the earth's heat from escaping into space

#### **Causes of climate change**

#### Human causes

Burning fossil fuels – fossil fuels like coal and natural gas contain high amounts of carbon; burning them for energy releases this carbon into the atmosphere

**Transport emissions** – most use petrol or diesel for fuel which releases greenhouse gases into the atmosphere.

**Deforestation** - trees absorb carbon and transform it into oxygen during photosynthesis; if they are cut down there will be more carbon in the atmosphere

**Dumping waste in landfills** - when waste is left to decompose in a landfill it produces and gives off methane, another greenhouse gas like carbon **Agriculture** - agricultural practices lead to the release of nitrogen oxide & methane into the air

#### Natural causes

**Orbital changes** - the Earth has natural periods (like ice ages) where the average temperature changes a lot due to changes in the tilt, wobble and shape of the orbit.

**Solar output** - the amount of solar radiation from the sun changes; if it is stronger, Earth's temperatures will rise

Volcanic eruptions – during a volcanic eruption carbon dioxide is released.

#### What is the greenhouse effect?

**Solar radiation** (the sun's rays) power the climate system. Some solar radiation is reflected by the Earth and the **atmosphere**. About half the solar radiation is absorbed by the Earth's surface and warms it. Infrared radiation is emitted from the Earth's surface. Some of this infrared radiation passes through the atmosphere, but most is absorbed and reemitted in all directions by clouds & **greenhouse gases**. The effect of this warms the earth's surface and lower atmosphere. Human activities can impact the amount of greenhouse



gasses in the atmosphere, and can therefore increase global temperatures.

#### Impacts of climate change

Climate change affects the whole planet but looks different in different places or seasons. Below are some examples of positive **and** negative effects of climate change.

Positive	Negative
<ul> <li>Longer growing season for agriculture</li> <li>Energy consumption may decrease due to warmer climate</li> <li>Frozen regions like Northern Canada may be able to grow crops</li> <li>As ice melts in the Arctic, faster shipping routes may open up, helping trade</li> <li>Increase in fish stocks in some areas</li> </ul>	<ul> <li>Malaria and cholera increase due to temperature increase</li> <li>Increase in climate change refugees as areas become unsuitable for human life</li> <li>Sea level rise will affect ~80 million people</li> <li>Coral reefs damaged as a result of increased ocean/ sea temperatures</li> <li>Tropical storms will increase in magnitude (strength)</li> <li>Species in affected areas (i.e. Arctic) may become extinct</li> <li>Ski resorts may lose business as snow cover decreases</li> </ul>



### Climate Change Knowledge Organiser

#### **Reducing emissions**

Individuals can reduce their emissions by:

- Driving electric cars
- Using renewable energy sources e.g. solar panels
- Eating less meat
- Planting more tress
- Using public transport or walking/cycling
- Insulating houses
- Buying local produce.
- Reducing waste and recycling

#### Governments can reduce emissions by:

- International agreements such as the Kyoto Protocol or Paris agreement
- Investing in renewable technology such as wind energy
- Investing in public transport or cycling infrastructure e.g. cycle lanes

#### **Nuclear Power**

Nuclear power is created from the release of energy from nuclear reactions (fission or fusion). These reactions usually use uranium or plutonium.





### Wind Power

Wind energy is produced when the blades of the turbine spin and thus turn the generator which produces electricity.

Advantages

- Land beneath them can

be used for other things

- Produce verv little

pollution

- Renewable

e.g. farming

COP21-CMP1

**PARIS 2015** 





#### **Renewable and non-renewable energy sources**

We harvest energy from many different sources. These sources are either renewable (meaning they can be used over and over again without running out) or **non-renewable** (meaning they can only be used once and will eventually run out). Renewable energy sources are more sustainable because we never have to worry about future generations running out.

Renewable	Non-renewable
Wind power	Coal
Hydro-electric power	Natural gas
Wave & tidal energy	Oil
Solar power	Nuclear power
Geothermal energy	

### **Hydro-Electric Power**

Fast flowing water is used to turn the turbines, thus generating energy. Water is often stored behind a dam in deep valleys.



Disadvantages	Advantages	Disadvantages
<ul> <li>Wind is unreliable and may not always blow</li> <li>They can injure birds flying past</li> <li>Difficult to store excess energy</li> </ul>	<ul> <li>Dams can manage</li> <li>flooding and water</li> <li>resources</li> <li>Reservoirs can be used</li> <li>for water sports</li> <li>Can be used for</li> <li>irrigating crops</li> </ul>	<ul> <li>Can damage wetland and aquatic ecosystems downstream</li> <li>Expensive to build</li> <li>Large areas of land must be flooded to create reservoirs</li> </ul>

UK electricity generation

12 months ending September 2017

Proportion of total electricity generated from different sources in the

5% Othe

Gas



### History



You can make your own questions. This process takes a lot of time, but if you create a study group you can each create a few questions and trade. However it is important that you write what Key facts or knowledge you expect to see in any answer.

	Key Terms			Key events in order		
Industrial	The move towards increasing use of factories.	1700 - Most people live in the countryside	1709 - Darby's blast furnace is successful. The Industrial	1720-30 - The First factories	1760-1840 - The development of	19 <sup>th</sup> Century The Victorian
Living conditions	The name given to the homes lived in. The living conditions for the rich were good but the poor lived in slums which were dangerous.	and work in cottage industries.	Revolution begins.	developed.	This made production faster.	Changed to Britain.
Working conditions	The name given to whether a working environment was safe and secure or dangerous. Most work places in this time were dangerous e.g. mines and factories.		26	Key changes	8	24
Urbanisation	The increasing growth of towns and cities rather than rural villages.	Eact By 1900 E	<u>ories</u> Britain was T different in	<u>Technology</u> here was a huge increase	<u>Crime</u> At the s	and Punishment start of this time
Change	When things do not stay the same.	factories.	This helped to The mo	is included steam powered achines, the first camera,	killed. By 1 would be	ost criminals were 1900 most criminals sent to prison. The
Continuity	When things continue to stay the same during a time period.	produced Large numbe	Jobs for T ers of people.	ne use of electricity and much, much more!	biggest o 1828 Police fo	change occurred in when the first rce was developed.

 Key fact

 Treshold Concepts linked to this unit:

 FC15
 Events can significantly impact different parts of society in different ways

 Treshold Concepts linked to this unit:
 The Industrial Revolution in England began in Ironbridge in the modern town of Telford. The Darby families work with Iron allowed the rest of the Industrial Revolution to take place!

	Key Terms			Key events in order		1822
Enslaved	The term given to a person which is being controlled by another person in all parts of their life.	1600s Britain's involvement in the slave trade Begins with the	1600s Britain begins trading goods for people with	The Transatlantic Slave Trade develops with	Enslaved peo fight back against the	bple the Slavery Abolition Act aiming to end
Middle Passage	The journey between Africa and North America where enslaved men, women and children were taken by ship.	use of English criminals in the USA.	African nations.	more than 12 millions people being enslaved.	to increase	egin Transatlantic e. Slave Trade.
Plantation	A farm owned by slave owners which was used to grow crops such as cotton and tobacco which were picked by enslaved people.		So	Kay Abalitianists	<sup>1</sup> 1 1 9	
Rebellion	Where people rise up against people in authority. Can be violent or non-violent.	<u>Olaudal</u>	h Equiano	William Wilberforce	2.	<u>Mary Prince</u> A formerly enslaved lady
Abolitionist	A person who fought to end the slave trade.	enslaved who wro	gentleman ote about	who fought for the abolition of slavery in	solo	who was the first woman to have her autobiography publiched. Hen story
Emancipation	The end of the slave trade where all enslaved people were freed.	his life and gave against tro	in slavery speeches the slave ade.	Parliament.	MARK RELACT	helped many learn about the horrors of slavery. She also gave talks about her life in slavery.

TC17 The Transatlantic Slave Trade had a significant impact on Britain's development

TC18 The outlook on the significance of individuals and events will change over time

The Industrial Revolution in England began in Ironbridge in the modern town of Telford. The Darby families work with Iron allowed the rest of the Industrial Revolution to take place!

### Maths

### QUIZZING

Create practice questions on a topic Swap your questions with a partner & answer.

Question - What is a metaphor?

- A comparison using 'Like, as, than '
- A comparison where one thing is another.
- A comparison with a human attribute.

You can make your own questions. This process takes a lot of time, but if you create a study group you can each create a few questions and trade. However it is important that you write what Key facts or knowledge you expect to see in any answer.

### YEAR & - PROPORTIONAL REASONING

### @whisto maths



### YEAR 8 - PROPORTIONAL REASONING... @whisto\_maths Multiplicative Change



### YFAR & - PROPORTIONAL REASONING Multiplying and Dividing Fractions @whisto maths

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

### Keywords



### YEAR & - REPRESENTATIONS Working in the Cartesian plane @whisto maths



axes

Label and identify lines parallel to the

Recognise and use basic straight lines

Identify positive and negative gradients

Link linear graphs to sequences

Plot y = mx + c araphs

### Keywords

Quadrant: four quarters of the coordinate plane. By the end of this unit you should be able to:

Coordinate: a set of values that show an exact position.

Horizontal: a straight line from left to right (parallel to the x axis)

Vertical: a straight line from top to bottom (parallel to the y axis)

Origin: (0,0) on a graph. The point the two axes cross

Parallel: Lines that never meet

Gradient: The steepness of a line

I Intercept: Where lines cross



## YEAR 8 - REPRESENTATIONS

Siblings = 21 siblings

# Representing Data

knowledge

### @whisto maths



70ha

### YEAR 8 - REPRESENTATIONS... Tables and Probability



**46** The number outside represents those that did **neither** badminton or swimming

calculate just badminton

by 25 - 11

40- 11

The intersection

represents both.

Swimming **QND** badminton

29

14

Ш



100

### Numeracy



Make sure you are regularly testing your knowledge using the resources provided by the school on platforms such as Sparx, Educake and Linguascope. You will have been issued with user names and passwords to access your accounts.



### Numeracy – number facts Know number facts. Number bor times tables, doubles and halves

Know number facts. Number bonds,

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

- Know number bonds up to 10 •
- Using the inverse of adding, know number . families
- Square numbers .
- Multiplication tables •
- Use strategies to calculate the double of a . number, or its half.



Number bond: A relationship between 2 numbers that give a known value

Fact families: Extending a number bond to include other facts that use the inverse operation

Inverse operation: The opposite calculation

Square numbers: The answer calculated when a value has been multiplied by itself

Multiplication tables: The answers to each value below and including 10, multiplied by each value below and including 10. Usually set into a grid Calculation strategies: Use prior knowledge to further calculate an answer

Number bonds **Inverse Operation** These all add to 10 subtract add 9 + 11 + 9+ 2 + 88 + 2 subtract add х 7 + 33 + 7multiply divide 6 + 4Х multiply divide 5 + 5opposite

Fact Families By using the inverse of addition, number bonds using subtraction can extend knowledge to include more facts

<b>1</b> + 9 = 10	2 + 8 = 10	3 + 7 = 10	4 + 6 = 10
9 + <b>1</b> = 10	8 + <mark>2</mark> = 10	7 + 3 = 10	6 + 4 = 10
10 - 1 = 9	10 - 2 = 9	10 - 3 = 7	10 - 4 = 6
10 - 9 = 1	10 - 8 = 2	10 - 7 = 3	10 - 6 = 4
5 + 5	= 10	10 -	5 = 5
6 + 4 = 10	7 + 3 = 10	8 + 2 = 10	9 + 1 = 10
4 + 6 = 10	3 + 7 = 10	2 + 8 = 10	1 + 9 = 10
10 - 6 = 4	10 - 7 = 3	10 - 8 = 2	10 - 9 = 1
10 - 4 = 6	10 - 3 = 7	10 - 2 = 8	10 - 1 = 9

**Double and Half** 

5 x 5 =

25

Double of a number is to multiply by 2 or add Double 3,  $2 \times 3$ , 3 + 3 = 6



 $10 \times 10 =$ 

100

<b>Nultiplication</b> Tables				0							
	Х	1	2	3	4	5	6	7	8	9	10
	1	1	2	3	4	5	6	7	8	9	10
$3 \times 6 = 18$	2	2	4	6	8	10	12	14	16	18	20
3 × 0 = 10	3	3	6	9	12	15	18	21	24	27	30
	4	4	8	12	16	20	24	28	32	36	40
	5	5	10	15	20	25	30	35	40	45	50
	6	6	12	18	24	30	36	42	48	54	60
	7	7	14	21	28	35	42	49	56	63	70
rable	8	8	16	24	32	40	48	56	64	72	80
2 times table $1 \times 3 = 3$ $1 \times 2 = 2$ $3 \times 3 = 6$	9	9	18	27	36	45	54	63	72	81	90
$\begin{array}{c c} \hline 2 \times 2 = 4 & 3 \times 3 = 9 \\ \hline 3 \times 2 = 6 & 4 \times 3 \times 12 \\ \hline 4 \times 2 = 8 & 5 \times 3 = 15 \\ \hline \end{array}$	10	10	20	30	40	50	60	70	80	90	100
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		) 7 time $1 \times 1$ $2 \times 1$ $3 \times 1$ $4 \times 1$	es table 7 = 7 7 = 14 7 = 21 7 = 28		8 times $1 \times 8$ $2 \times 8$ $3 \times 4$		10 10 10 10 10 1 1 10 10 1 1 10 10 1 10 10 1 10 10 1 10 1 10 1 10 10 10 10 10 10 10 10 10 10 10 10 10 1	inter the state	able	* 0	20003
1         1 <th1< th=""> <th1< th=""> <th1< th=""> <th1< th=""></th1<></th1<></th1<></th1<>	our t	hev ceacl	w!! her f	for c	opie	s to	leari	n 12/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	

### Numeracy - mental calculations

Use what you know





### MFL - French

### FLASHCARDS

Create your own flashcards, question on one side answer on the other. Can you make links between the cards?



You need to repeat the Q&A process for flashcards you fail on more frequently & less frequently for those you answer correctly Create a flash card with all the key facts you want to learn (this can be drawn in your book). On the next page try writing down as many facts or as much of the knowledge as you can. If you find you are getting certain facts wrong then these are where you need to focus and relearn.

### Objective: To discuss where I live

Threshold Concepts:

-There are several variations of the prepositions "to" and "at" when referencing a place, which depend on the gender of the place and whether it is plural or singular. -There is no present progressive tense in French. French only has the simple present tense, therefore "je vais" from the verb "aller" can mean both "I go" and "I am going".

- Most adjectives in French are positioned after the noun. There are however a small handful of short, commonly used adjectives which go before. Some of these are irregular in the feminine form and before a vowel or silent h.

My Town- Essential Languange Il y a - there is / are Il n'y a pas de - there isn't/aren't un centre commercial un stade - a stadium un marché - a market un château - a castle une piscine - a swimming pool une patinoire - an ice rink une église - a church des magasins - some shops on peut - you can on ne peut pas you can't	<u>My house - Essential Vocabulary</u> chez moi - at my house il y a there is /are le salon - the living room le jardin - the garden la salle de bains - the bathroom la cuisine - the kitchen la salle à manger - dining room la chambre de mon frère / ma soeur ma chambre - my bedroom	<u>Time phrases</u> tous les jours - every day souvent - often quelquefois - sometimes de temps en temps - from time to time rarement - rarely le samedi - on saturday une fois par semaine - once a week le weekend le soir - in the evening quelquefois - sometimes hier - yesterday le weekend dernier - last weekend	Reasons for opinions à mon avis - in my opinion car c'est because it is bien - good génial - great amusant - fun intéressant - interesting pratique - practical chouette - great nul - rubbish ennuyeux - boring fatigant - tiring inutile - useless affreux - awful
vister les musées - visit the museums visiter les jardins - visit the parks manger au restaurant - eat at the restaurant aller au concert - go to a concert faire du vélo - do cycling faire du bowling - do bowling faire du bowling - do bowling faire une promenade en barque - do a boat trip faire du skate / roller - do skateboarding / roller skating jouer au babyfoot - play table football	Adjectives in French <u>Most adjectives go after the noun.</u> un chateau magnifique <u>There are some exceptions:</u> beau / belle - beautiful vieux / vielle - old nouveau / nouvelle - new joli (e) - pretty grand(e) / petit(e) - big / small Adjectives also "agree" with the gene the noun (masculine and feminine) La belle église - the beautiful church	Irregular Verbs aller - to go je vais - I go / am going tu as - you go / are going il / elle a - he / she goes / is on va - we go / are going nous allons - we go / are going vous allez - you go / are going ils / elles vont - they go / are je vais tu vas il/ elle/ on va	Saying where you go "to" The word for "to" is "à". This changes depending on the gender of the place you are going to: à + le = au (je vais au parc) à + le = à la (je vais à la piscine) à + les = aux (je vais aux magasins) Prepositions ("position" words) dans - in sur -on sous -under entre - between

### Music



Make sure you are regularly testing your knowledge using the resources provided by the school on platforms such as Sparx, Educake and Linguascope. You will have been issued with user names and passwords to access your accounts.

Ukulele	A small stringed guitar of Hawaiian Origin
Hawaii	Originally brought over from Portugal in 1879, the ukulele became pop- ular in Hawaii. Its name in Hawaiian means 'Jumping Flea'.
Soprano	Name given to the 'standard' size ukulele. This is the size we play in lessons.
Chord	A group of (typically three or more) notes sounded together.
Chord Progression	A sequence of chords played one after anoth- er.
Strum	A playing technique where the strings are played by sweeping a thumb or plectrum up or down across them.
Finger Picking	When individual strings on the instrument are plucked.
Arrangement	To create your own 'version' of a song.
Oral Tradition	Passing down songs and music from generation to generation without writing anything down.

### Year 8—Ukulele Skills



C MAJOR SCALE ON UKULELE



#### **Ukulele Chords**



G C E A	G G A
	100
3	3 8
4	4

### **Strumming Symbols**

- D = Down
- U = Up
- X = Tap/Hit



### PE





### Year 8 PE Autumn Knowledge Organiser

Head



### **Benefits of a Healthy Active** Lifestyle

**Physical health** – taking part in physical activity will help develop vour components of fitness. These include cardiovascular fitness, muscular endurance, strength, flexibility, reaction times, speed, power, balance, agility and coordination. Components of fitness

Emotional health – taking part in physical activity helps people to develop their mental health. It helps people to feel happy, self confident, self aware and resilient.

Social health – people who take part in physical activity are able to form and maintain good friendships, communication and empathy.

### **Emotional and Social Health**





### **Key Rules**

Use the QR codes to look at the rules for the activities you are taking part in this term.

Badminton

Rugby





**Gymnastics** 











Basketball





Respect

Heart

It is important to be respectful to others at all times but can be even more important when working with others in PE. To be respectful to others you must;

- Treat others as you wish to be treated
- Follow instructions
- Use equipment properly
- Play fairly
- Accept that everyone is different

### Self Motivation

- Stay positive
- Set small targets
- Reward yourself for your achievements
- Remember the why



### **Consistent skills**

Skills are physical movements that are performed during physical activity.

When you participate in physical activity it is important to perform skills **consistently** even when under pressure during competition.

A skill will be consistent when you can;

Repeat the skill over and over again.



- Perform the skill with confidence.
- Perform the skill under control.

Can you name 6 skills for the activity your are completing?

Here are some examples to start you off;

Badminton – serve	Football – short passin
Duanninton Scrve	

Netball – shooting

Rugby – receiving

Gymnastics – forward roll Basketball – dribbling

Can you describe how skills would change during competition?

For example serving in badminton can be short and low or long and high so you can outwit your opponent.

### PSHE

### BRAIN DUMP

Write, draw a picture, create a mind-map on everything you know about a topic.



Give yourself a time limit, say 3 minutes, then have a look at your books \$ add a few things you forgot.

### Year 8 - PSHE Studies Knowledge Organiser - Health and Wellbeing

Key Terms		PSHE covers a variety of topics that focus	<u>Key Skills</u>
Health and Wellbeing	The achievement and maintenance of physical fitness and mental stability	on developing understanding in four key areas: personal, social, health and economic.	<ul> <li>Active listening and communication</li> </ul>
Mental Health	Emotional, psychological, and social well-being	<u>Health and Wellbeing</u>	<ul><li>Teamwork</li><li>Negotiation and self advocacy</li></ul>
Cholesterol	A type of fat found in your body	exercise	<ul><li>Leadership</li><li>Presentation and debate</li></ul>
Stress	The body's reaction to any change that requires an adjustment or response	Being healthy also involves looking after your mental health, learning to reduce stress and anxiety	<u>County Lines</u>

### Gangs

Gangs are groups of people, often involved in criminal activities. Young people can become involved in gangs for many reasons - they are operating in their area, they are groomed, they see it as a way of making money

### Threshold Concepts:

TC1 Know that choices you make can affect your mental and physical health

Know how to: determine whether other children, adults or sources of information are trustworthy: judge when a family, friend, intimate or other relationship is unsafe (and to recognise this in others' relationships); and, how to seek help or advice, including reporting concerns about others, if TC2 needed.

Know about online risks, including that any material someone provides to another has the potential to be shared online and the difficulty of TC3 removing potentially compromising material placed online.

Know the concepts of, and laws relating to, sexual consent, sexual exploitation, abuse, grooming, coercion, harassment, rape, domestic abuse, TC4 forced marriage, honour-based violence and FGM, and how these can affect current and future relationships

- County lines is the exploitation of vulnerable young people
- It is a method of drug supply (primarily Class A drugs) from a city into rural towns or county locations
- It is a type of criminal exploitation

### RS

### FLASHCARDS

Create your own flashcards, question on one side answer on the other. Can you make links between the cards?



You need to repeat the QdA process for flashcards you fail on more frequently & less frequently for those you answer correctly Create a flash card with all the key facts you want to learn (this can be drawn in your book). On the next page try writing down as many facts or as much of the knowledge as you can. If you find you are getting certain facts wrong then these are where you need to focus and relearn.

### Year 8 - Religious Studies Knowledge Organiser - Sikhism

Three Pillars of Sikhism	Nature of God	Sikhism	Gurdwara
<ul> <li>Pray</li> <li>Work</li> <li>Give</li> </ul> Khalsa and the 5Ks <ul> <li>Khalsa = Pure Ones</li> <li>10<sup>th</sup> Guru = Guru</li> <li>Gobind Singh</li> </ul>	God = Waheguru Mool Mantra = Statement of Belief about Waheguru Waheguru is • Formless • Genderless • Eternal • The Creator • Only one	<ul> <li>Founder = Guru Nanak</li> <li>Symbol = Khanda</li> <li>Place of worship = Gurdwara</li> <li>Holy writing = Guru Granth Sahib</li> </ul>	Gurdwara = Doorway to the Guru Rest Room Diwan Hall (Prayer Hall) Langar Hall - Food is prepared and eaten Services are in Punjabi. Readings
<ul> <li>Panj Pyare = Five</li> <li>Beloved</li> </ul>	Sikhs	in the UK	are taken from the Guru Granth
• 5Ks = Kirpan, Kesh, Kangha, Kachera, Kara	Sikh soldiers fought in World Wars	on behalf on the UK	sung and prayers are read.
	Sikhs have lived and worked in the discrimination and bad treatment	UK for many years, sometimes facing	Sewa = Selfless service
Threshold Concepts:			l l
TC1 To understand that religious beliefs	s are interpreted differently, even with in th	e same religion or denomination.	
TC2 To understand that religious practic	ces have varying levels of adoption.		

TC3 To understand that misconceptions exist surrounding religious beliefs and practices that need addressing.

TC4 To understand that religious values can be accepted and adopted by non-religious believers.

TC5 To understand the varying impact of modern, often secular based, challenges to religious beliefs

To understand the influence key beliefs, teachings and practices have on religious believers, and at times non-religious believers, TC6 today (individuals, society and community).

TC7 To understand the variety of sources of authority within religion and the different approaches to them.

TC8 To understand the symbolisms found within religion.



Khanda

### Year 8 - Religious Studies Knowledge Organiser - Interaction

	<u>Culture</u>
•	Culture = the ideas, customs, and social behaviour of a particular people or society

### Identity

 Identity = the fact of being, or feeling that you are, a particular type of person

### Prejudice and Discrimination

- Prejudice = To prejudge someone
- Discrimination = Treatment based on prejudices
- Stereotype = an oversimplified image or idea of someone and apply it to all people in a group
- Human rights = Basic legal freedoms that belong to every person in the world
- Equality Act 2010 with its nine protected characteristics: age, sex, disability, ethnicity, gender reassignment, religion/belief, sexual orientation, marriage/civil partnership, pregnancy/maternity

### <u>Responses to Prejudice</u>

- Anthony Walker Victim of racially motivated attack.
   Mother and sister, both Christians, forgave the killers.
   Set up a charity in Anthony's name to address racism
- Corrymeela Community Was founded by Catholics and Protestants in Northern Ireland. Promotes peace, tolerance and respect by providing a place where people from different religions can meet and talk freely.

### Forgiveness

- Forgive = Cease to blame or hold resentment against, pardon
- Matthew 6:14-15 Jesus says, "If you forgive those who sin against you, your heavenly Father will forgive you. But if you refuse to forgive others, your Father will not forgive your sins."
- Peter came to Jesus and asked, "Lord, how many times shall I forgive my brother when he sins against me? Up to seven times?" Jesus answered, "I tell you, not seven times, but seventy times seven." Matthew 18:21-22.

### Threshold Concepts:

- TC1 To understand that religious beliefs are interpreted differently, even with in the same religion or denomination.
- TC2 To understand that religious practices have varying levels of adoption.
- TC3 To understand that misconceptions exist surrounding religious beliefs and practices that need addressing.
- TC4 To understand that religious values can be accepted and adopted by non-religious believers.
- TC5 To understand the varying impact of modern, often secular based, challenges to religious beliefs
- To understand the influence key beliefs, teachings and practices have on religious believers, and at times non-religious TC6 believers, today (individuals, society and community).
- TC7 To understand the variety of sources of authority within religion and the different approaches to them.
- TC8 To understand the symbolisms found within religion.

### RSE



Read through your knowledge organiser. Next, cover it up or put it away and try tho write down as many of the key facts that you can remember. Use your knowledge organiser to check the fact you have written down. Correct any you may have got wrong.

### Year 8 - RSE - Respectful Relationships

	<u>Key Terms</u>	RSE covers a variety of topics and focuses	Key Skills	
Age of Consent	It is an offence for anyone to have any sexual activity with a person under the age of 16	on developing understanding of different aspects of relationships. This includes with yourself, friendships, romantic and sexual	<ul> <li>Active listening and communication</li> <li>Teamwork</li> </ul>	
Conflict	flict A physical or verbal disagreement between two or more	relationships	Presentation and debate	
	people/countries. This can be caused by a single act or actions built up over time	<u>Stereotypes</u> Stereotypes are a commonly held public belief about specific social groups or types of individuals.	Racism	
LGBTQIA+	Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Asexual +	This can be done through the simplified representation of character, appearances and beliefs. For example, men are better at fixing things	Racism = Prejudice, discrimination, or antagonism directed against someone of a different race based on the belief that one's own race is superior Racism can be overt (out in the open,	
Sex	The term we use to refer to a person's sexual anatomy			
Gender	The term we use to refer to how a person feels about	Stereotypes can lead to prejudice and discrimination.	obvious) or covert (hidden, less obvious)	
	•		Homophobia	
Threshold Concepts:         Know the concepts of, and laws relating to, sexual consent, sexual exploitation, abuse, grooming, coercion, harassment, rape, domestic abuse, forced marriage, honour-based violence and FGM, and how these can affect current and future relationships         TC2       That there are similarities, differences and diversity among people of different race, culture, ability, sex, gender identity, age and sexual orientation         TC3       That there are differences between biological sex, gender identity and sexual orientation			Homophobia = the fear or dislike of someone, based on prejudice or negative attitudes, beliefs or views about lesbian, gay or bi people Homophobic language is derogatory language that is often aimed towards perceived lesbian	
TC4 prejudice is un	acceptable	ig sexisin, nomophobia, biphobia, transprobia, racisin, ableisin and faith-based	gay and bisexual people, or those thought to be	
TC5 That there is a TC6 That bullying h	need to promote inclusion and challenge discrimination as an impact			

### Science



Organise your ideas into a concept map, like the one below that summarises 'cells'. In a concept map, you take the main ideas and link them together with phrases that explain the relationship between the concepts. But, always try to make the concept map from memory first! Then check it with the knowledge organiser

# Metals

### Threshold Concept

Identify most metals have similar properties

### Metals and non metals

Most elements on the periodic table are metals. They are grouped together in the middle to the lefthand side of the periodic table.



Non metals are on the right-hand side.

### Physical properties of metals

Properties	Metals	Non-metals
Appearance	Shiny	Dull
Hardness	Very hard or hard	Brittle
Malleability	Malleable	Non-malleable
Ductility	Ductile	Non-ductile
Heat conduction	Good conductor	Bad conductor
onduction of electricity	Good conductor	Bad conductor
State	Solid	Solids, liquid, gases
Density	Higher	Lower

### Chemical properties of metals 回热版回 Water Acids **Burnt** in Metal air salts

### The reactivity series

Au

least reactive

sodium

calcium

magnesium

luminium carbon

zinc

iron tin

lead

hydrogen

copper silver

platinum

gold

The Reactivity Series K Na potassium most reactive lists metals in order Ca Mg how easily they react with other substances Sn Pb Cu Ag

### Keywords

Metal ..... DEFINITION Non metal ..... DEFINITION

Property ...... a characteristic of a particular substance

Reaction ...... a process that leads to the change of one set of chemical substances into another Alloy ...... a mixture of two or more metals, or a metal and a non-metal

Displacement ...... A more reactive metal will displace a less reactive metal from its compound.

### Metals and alloys

Making alloys changes the metals properties by changing its structure. Alloying is done for many reasons, typically to increase strength, increase corrosion resistance, or reduce costs

pure metals are malleable alloys are more brittle





### Equations for this topic

Metal + acid  $\rightarrow$  salt + hydrogen Metal + oxygen  $\rightarrow$  Metal oxide Metal + water  $\rightarrow$  Metal hydroxide + hydrogen

### Space

Outer core

Inner core

∎ 66÷i



- Planet: A sphere of rock or gas orbiting a star. - Sun: The Sun is our nearest star. It is a relatively small star when compared to other stars in the universe. Our Solar System contains the Sun and everything that orbits it.

- Gravity: Gravity is an attractive force that acts on all matter.

### Solar system:

Our solar system consists of eight planets orbiting a star, our sun. Most planets have at least one moon orbiting it. In addition, there is an asteroid belt 🖪 between Mars and Jupiter. Numerous comets also orbit the sun in elongated elliptical orbits







The earths rotation and revolution: revolve rotate To Spin or Turn Go Around TAKES: TAKES: 24 hours or 1 day 365 days or 1 year CAUSES: CAUSES: Day & Night The Seasons Modelling the solar system: A scale model is a copy of something that is much larger or smaller than the object itself but one which maintains the original's proportions. The universe: An orbit: a curved path that an object takes around another object. an object that orbits around A satellite: another object.

GEOSTATIONARY ORBIT

POLAR ORBIT

Threshold Concept

The earth:

# Electricity (Part 1)



# Rock Cycle

### Threshold Concept

Understand that rocks change within 3 types over time.

### <u>Types of rocks</u> Sedimentary rocks

Sedimentary rocks are formed from sediments that have settled at the bottom of a lake, sea or ocean, and have been compressed over millions of years.

### Metamorphic rocks

Metamorphic rocks are formed from other rocks which change due to **heat** or **pressure**.

### Igneous rocks

Igneous rocks are formed from molten (liquid) rock that has cooled and solidified.



### Types of weathering

### 1. Biological weathering

This describes rocks being broken up by the roots of plants, or animals burrowing into them.

### 2. Chemical weathering

This describes rocks being broken up because substances in rainwater, rivers and seawater or the air, react with the in the rocks.

### 3. Physical weathering

This describes rocks being broken up by changes in temperature, freezing and thawing of trapped water or the action of waves and rivers.



### Keywords

 Rock: The solid mineral material forming part of the surface of the earth and other similar planets, exposed on the surface or underlying the soil.

- **Earth:** The planet on which we live; the world.

- **Cycle:** Move in or follow a regularly repeated sequence of events.

- **Temperature:** The degree or intensity of heat present in a substance or object.

- **Pressure:** Continuous physical force exerted on or against an object by something in contact with it.



Rocks are continually changing due to processes such as, weathering, erosion and large earth movements. The rocks are gradually recycled over millions of years, changing between the different rock types.

Required practical

Equations for this topic