



SPOT LIGHT ON:

TEACHING AND LEARNING TERMLY UPDATE

During this term we have restored our focus on recall and retrieval – one of our key foundations for learning. The activities we have been delivering in the classroom and during the Learn 2 Learn sessions I have delivered to each Year group are to encourage the act of ‘practising remembering.’

It is at the core of what effective learning is about. The more we know, the more we can know. The more we know the more we can understand. The more often we retrieve knowledge from our vast complex stores of memories in different ways-all those facts, words, ideas, concepts and experiences- the stronger those memories become and the more fluently we can recall them.

The more fluently we are in recalling our knowledge the better placed we are to explore new knowledge, to solve new problems, to engage in debate, to respond to challenges, to understand what we read. The more we know, the more creative we can be.



SPOT LIGHT ON:

The retrieval process cements the information into the long term memory, which should enable that information to become easier to retrieve in the future. It isn't just about memorising facts, it does support the recall of key facts that are part of any knowledge rich curriculum. It also helps students to solve problems, make links and connections to help them provide rich explanations. There are some other key reasons why we are undertaking these types of activities.

-It aids later retention- every time you retrieve a memory it becomes stronger and easier to access

-It helps show gaps in knowledge. Students can work out what they know and what they don't know. This helps them (and teachers) to prioritise their studies

-Produces better organisation of knowledge. Helps students to connect and structure knowledge, making links and identifying patterns when they have to retrieve information

-Helps improve transfer of knowledge. Making links between new information and existing knowledge is a key part of learning.

-Provides teachers with feedback about what students know and the misconceptions they have.

These are all based on research – if you are interested here is a link!

https://www.researchgate.net/publication/291166244_Ten_Benefits_of_Testing_and_Their_Applications_to_Educational_Practice



SOME EXAMPLES:



Retrieval Activities Year 11 (Combined - H)

These are to be completed in the back of your book in the first 5 minutes of every lesson.

Answers only! Please tick off once complete.



Lesson 1 Topic knowledge

Choose 5 important key words about the current topic and explain why you chose them.



Lesson 7 Electrolysis of (aq) solutions

Name 3 products of electrolysed brine.

Describe the positive tests for the gases.

Explain the differences of the products of brine and electrolysis of molten sodium chloride.

Write half equations for the brine process (H)

Lesson 2 Neutralisation & the pH scale

What distinguishes alkalis from other bases?

What do all alkalis have in common?

Write an equation for KOH dissolving in water.

What ions do acids produce in aqueous solution?

Describe how pH changes when a strong acid is added slowly to a strong alkali.

Lesson 8 Hydrocarbons

What is crude oil?

Can you separate crude oil using distillation?

Write the general formula of the alkanes.

Draw the displayed formula of octane.

Why are alkanes describe as saturated hydrocarbons?

YEAR 8 PORTRAITURE – HOW MUCH CAN YOU REMEMBER?

1) What does proportion mean?

2) Draw the correct proportions of the eyes, nose, mouth and hairline


3) What is Tone and how does using it affect your drawing?

4) Why is it important to sketch the main shapes lightly before adding detail to a drawing?

5) What does it mean to graduate when shading?

6) Show your understanding of this by graduating 5 tones in the space below


Last month 2 weeks ago Last week

Pick 'n' Mix Recall Challenge - Macbeth

1: Guess Who (is speaking)

Where shall we three meet again?	"Screw your courage to the sticking place"	"Is this a dagger I see before me?"
Witches	Lady Macbeth	Macbeth

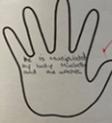
2: Find and fix the mistakes

"Foul is fair and fair is foul"	There is truth and truth is truth
The thane of Fife is executed for treachery	The thane of Fife is executed for treachery
Lady Macbeth murdered Duncan	Macbeth murdered Duncan
The Gunpowder Plot was foiled in 1603	Macbeth murdered Duncan
Macduff hears the witches' prophecies	Macduff hears the witches' prophecies

3: Give me three ...

Adjectives to describe Macbeth	ambitious	brutal	ambitious
Themes	Appearance vs Reality	Appearance vs Reality	Appearance vs Reality
Reasons Macbeth goes for not killing Duncan	Jealousy	Jealousy	Jealousy
Adjectives to describe Lady Macbeth	Powerful	Manipulative	Manipulative

4: On the other hand: Macbeth is evil. Write down two opposing sides of the argument

 <p>He is evil because he killed Duncan and he killed Macduff's family.</p>	 <p>He is not evil because he was forced to do it and he was a good man before.</p>
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Activity-Logic Gates

Define problems using Boolean logic

Recall – What are the 4 main logic gates?

Name the 4 main logic gates. For each gate write the notation, draw the diagram and write out the truth table.



KEY WORD ZAPPER

comiendo eating	tiene he/she has	en in / on	están they are
en el fondo in the background	en la derecha on the right	también also	está he / she is
en la izquierda on the left	en el primero plano in the foreground	jugando playing	puedo ver I can see
hay there is	en la foto in the photo	hablando talking	es it is

Total Recall

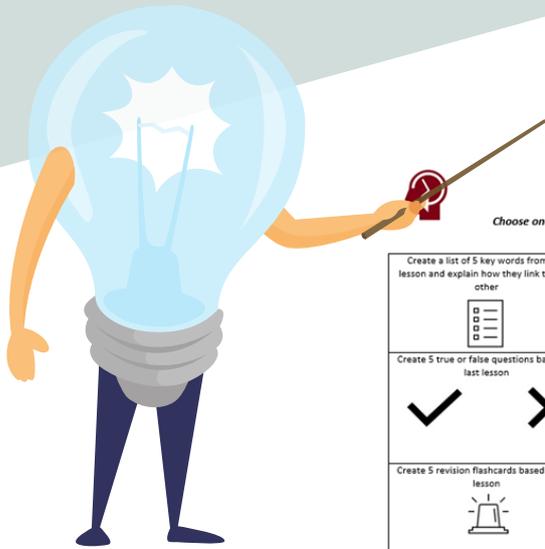
On your whiteboard...

Write 5 notation key words

Now link two key words within a sentence.



SOME EXAMPLES:



Retrieval Practice

Choose one of the following activities to complete in the back of your book.

No peeking! See what you can remember!

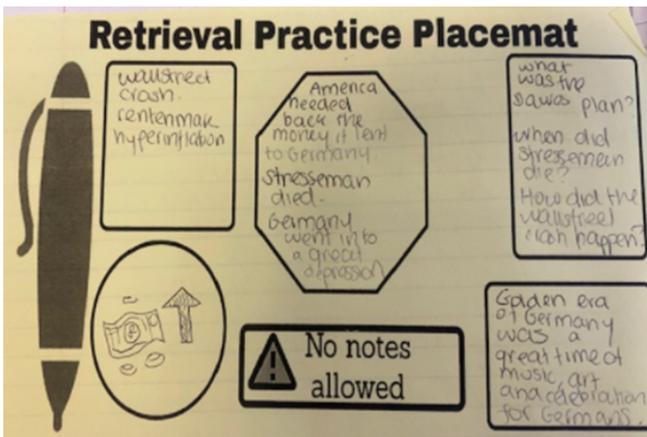
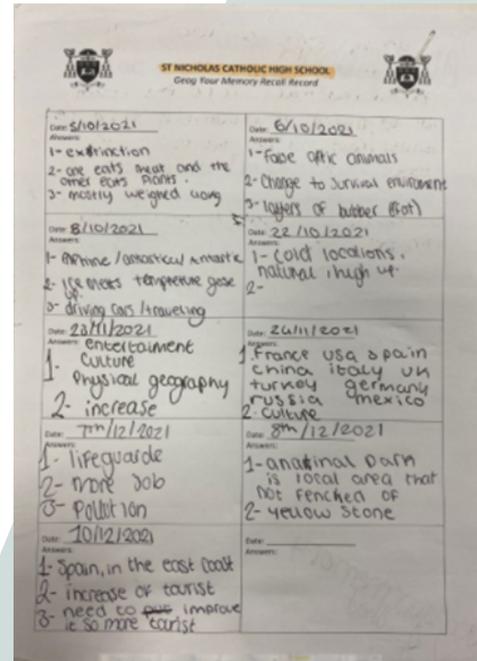
<p>Create a list of 5 key words from last lesson and explain how they link to each other</p>	<p>Create a mind map of key terms from last lesson or the topic</p>	<p>Create 5 multiple choice questions based on last lesson</p>
<p>Create 5 true or false questions based on last lesson</p>	<p>Choose 5 important key words about the current topic and explain why you chose them</p>	<p>Summarise what you learnt last lesson in 4 lines</p>
<p>Create 5 revision flashcards based on last lesson</p>	<p>Create an assessment style question on last lesson and a student friendly mark scheme</p>	<p>Create a list of 5 key words that link this topic to a previous topic - explain the links</p>

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NOT A: $\neg A$ A A AND B: $A \wedge B$ A B A OR B: $A \vee B$ A+B A XOR B: $A \oplus B$ A ⊕ B

INPUT (A) OUTPUT (-A) INPUT A INPUT B OUTPUT A ∧ B INPUT A INPUT B OUTPUT (A ∨ B) INPUT A INPUT B OUTPUT (A ⊕ B)

A	$\neg A$
0	1
1	0

INPUT A	INPUT B	OUTPUT A ∧ B
0	0	0
0	1	0
1	0	0
1	1	1

INPUT A	INPUT B	OUTPUT A ∨ B
0	0	0
0	1	1
1	0	1
1	1	1

INPUT A	INPUT B	OUTPUT A ⊕ B
0	0	0
0	1	1
1	0	1
1	1	0

Retrieval Practice Placemat

What key words did you use or learn last lesson?

State 3 key facts from last lesson

Write out 3 questions you could ask your partner based on the content covered this term

Draw a picture of 1 key word from last lesson

No notes allowed

Explain a key concept or idea from last week in your own words



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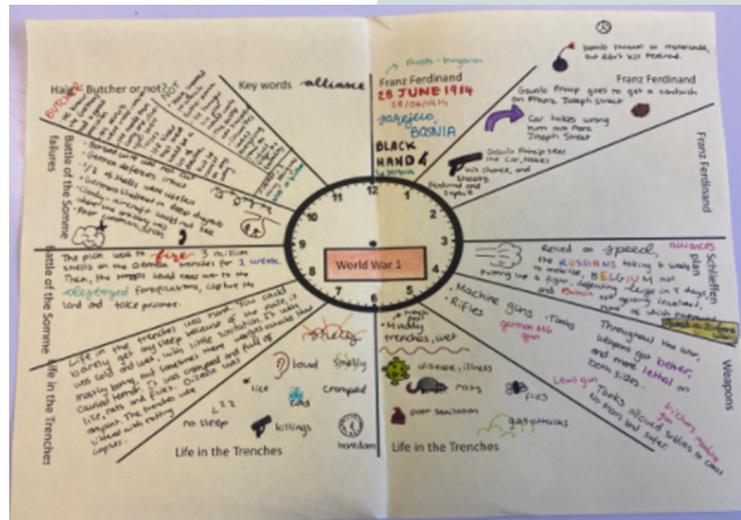
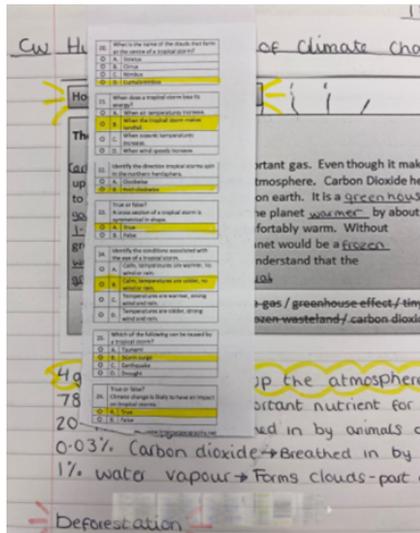


Retrieval Practice

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No peeking! See what you can remember!

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Starter Darter

You have 3 minutes to think of as many key words from the test completed last lesson.

Each keyword is worth 1 point.

However there are 5 bonus keywords which are worth 2 points.



How can you overcome obsolescence?	List 2 qualities that an entrepreneur may have	List 2 benefits of a flatter organisation structure
Sales of chocolate increased from £3bn to £3.8bn in 2017. What percentage increase was this?	How do you calculate margin of safety?	What is meant by an original idea?
Explain decentralisation	2 reasons why someone may start their own business	What is the formula for break-even?

Agas ago

Recently

Currently