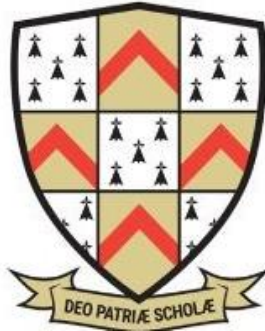


Independant Study

King Edward VI School



A SUCCESSFUL STUDENT.....

WHAT ARE THE BEHAVIOURS OF A SUCCESSFUL STUDENT?

MAKES MISTAKES AND LEARNS FROM THEM.



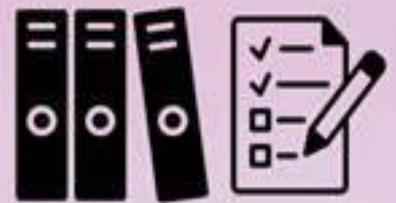
Mistakes are a vital part of the learning process. They help us to think differently and develop problem solving skills.

ASKS FOR HELP WHEN THEY NEED IT.



You are **NOT** alone! There are people there to help you. Asking for help doesn't show weakness or make you a bother. It shows you want to do well.

IS ORGANISED AND PRIORITISES.



Organising and prioritising can help you feel in control of your learning and ensure that you meet all your deadlines.

IS PATIENT



Learning is not instantaneous. It is a process and one that is life long. You may not get something first time through but that doesn't mean you won't understand it ever. Give yourself time to learn

IS BRAVE



A fear of failure will stop you from trying new things that can improve your learning. Don't be afraid to ask questions, take risks, and experience new things.

MAKES CONNECTIONS



Look for the connections between your different subjects, to what is happening in the world around you. This will reinforce what you are learning and show its relevance.

LOOKS AFTER THEMSELVES



You will not be able to learn if you are not well.

Get a good nights sleep, eat well, exercise and take time to relax.

If you are struggling reach out.

IS PROACTIVE



Go beyond the tasks set by your teacher, seek out information to add to what is taught in the lesson.

Listen to podcasts, watch documentaries, read around your subject and ask questions.

IS NOT PERFECT



No one is perfect, and trying to be can limit your success and affect your health.

Acknowledging your areas of weakness can help you to improve as well as focus your revision on a study.

Independent Study

Contents

What is Metacognition?

How does memory work?

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Past exam papers

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Review task

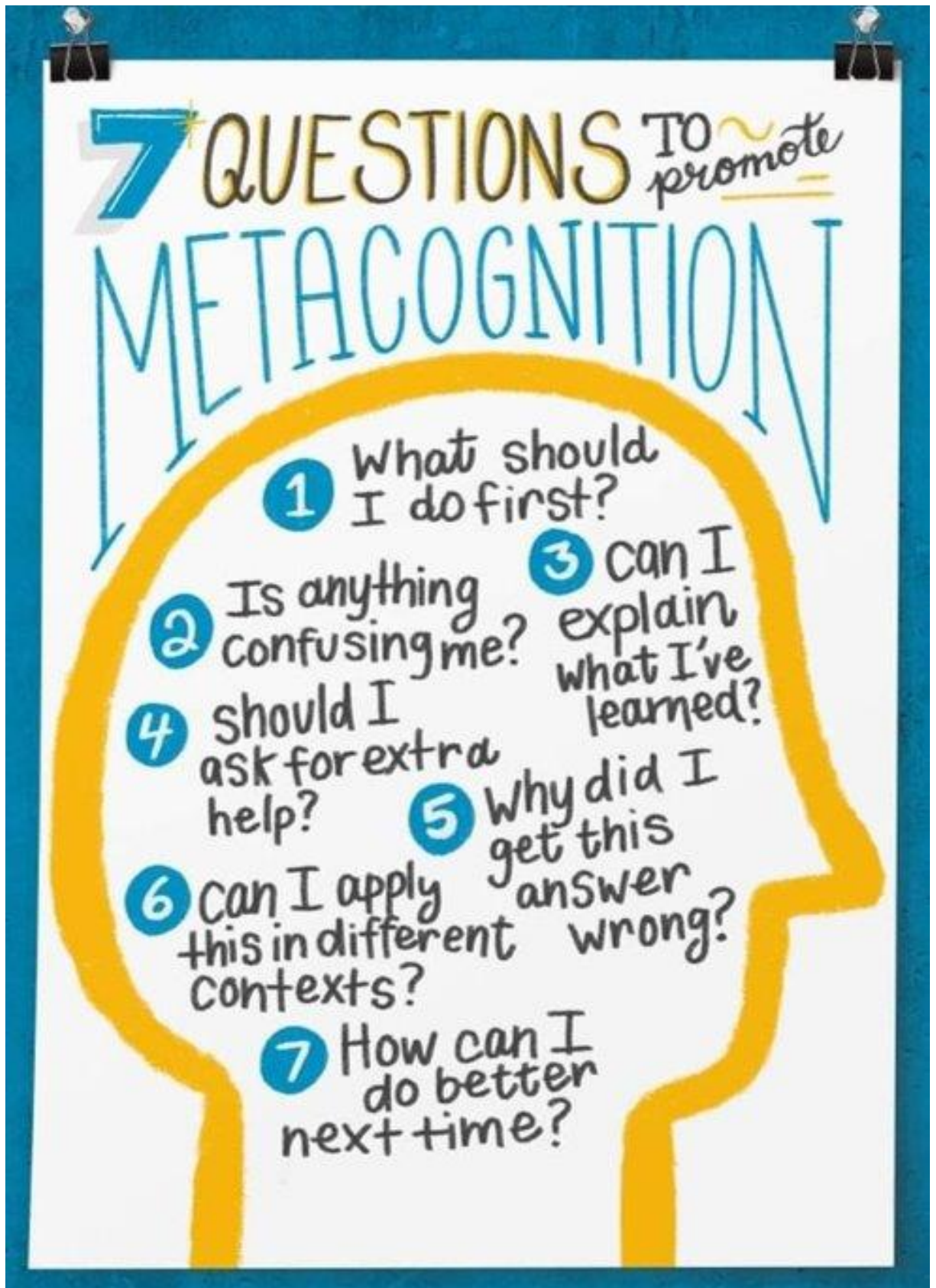
Think harder in the classroom

Improve your own learning

What is Metacognition?



- Setting yourself challenging but realistic goals.
- Asking yourself effective questions that require you to think deeply about the task.
 - Monitoring your performance.
- Seeking feedback so you can replicate what works and avoid what doesn't.

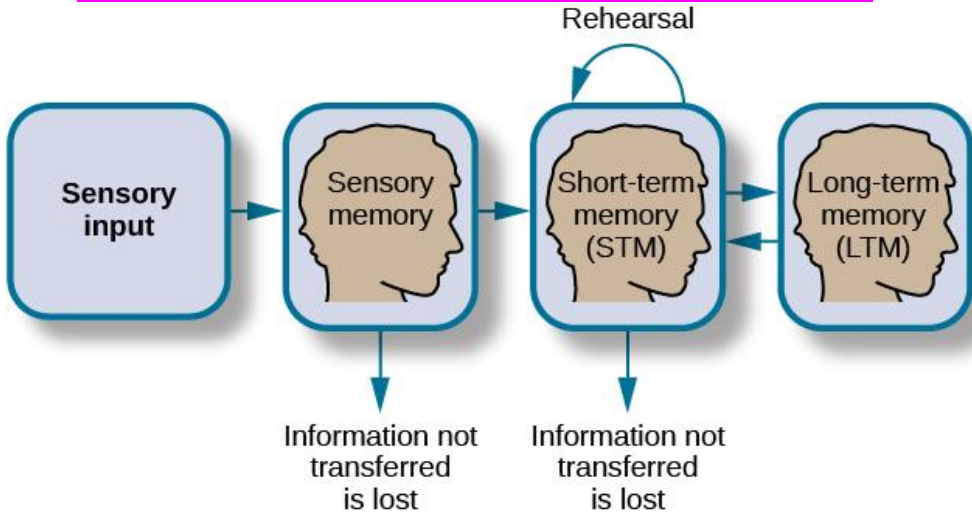


How does memory work?



- To learn you need to understand how the brain works and how memory works.
- Working memory is where all new information is stored - but it has a very limited capacity and if not used and referred to frequently, will be forgotten. Your long-term memory is vast. Independent study, retrieval and home learning is all about growing the power of your long-term memory by transferring information between working memory and long-term memory. This is done through spacing your learning, attempting to recall information to enable you to link information and use information in creative and developed ways.

LEARNING = A CHANGE IN YOUR LONG-TERM MEMORY.



Memory is person's ability to retain information over time

Working memory

This is where all information is processed. Working memory has limited capacity, storing small amounts of information for a very short time.

Long-term memory

This is where large amounts of information are stored semi-permanently. Transferring knowledge into long-term memory is critical for enabling students to engage in higher order learning tasks such as critical thinking and problem-solving.

What influences memory?

<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <h4>Emotions</h4> <table border="0"> <tr> <td style="width: 50%;">WHAT How we feel influences our ability to learn and retain information</td> <td style="width: 50%;">HOW Create a warm, supportive classroom environment</td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <h4>Spaced practice</h4> <table border="0"> <tr> <td style="width: 50%;">WHAT Spread retrieval and practice over time</td> <td style="width: 50%;">HOW Repeat the same material on different days and in different forms</td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px;"> <h4>Existing knowledge</h4> <table border="0"> <tr> <td style="width: 50%;">WHAT A new concept is always learned in association with already existing knowledge</td> <td style="width: 50%;">HOW Ensure ideas build sequentially across lessons and students have requisite background knowledge</td> </tr> </table> </div>	WHAT How we feel influences our ability to learn and retain information	HOW Create a warm, supportive classroom environment	WHAT Spread retrieval and practice over time	HOW Repeat the same material on different days and in different forms	WHAT A new concept is always learned in association with already existing knowledge	HOW Ensure ideas build sequentially across lessons and students have requisite background knowledge	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <h4>Retrieval practice</h4> <table border="0"> <tr> <td style="width: 50%;">WHAT We need to practice retrieving and using new content</td> <td style="width: 50%;">HOW Provide regular opportunities for recall and reuse</td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <h4>Dual coding</h4> <table border="0"> <tr> <td style="width: 50%;">WHAT Representing information visually can support memorisation</td> <td style="width: 50%;">HOW Use graphic organisers, infographics, and diagrams</td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px;"> <h4>Information overload</h4> <table border="0"> <tr> <td style="width: 50%;">WHAT We can only process a limited amount of new information at once</td> <td style="width: 50%;">HOW Break new information into small digestible chunks and explicitly teach new concepts</td> </tr> </table> </div>	WHAT We need to practice retrieving and using new content	HOW Provide regular opportunities for recall and reuse	WHAT Representing information visually can support memorisation	HOW Use graphic organisers, infographics, and diagrams	WHAT We can only process a limited amount of new information at once	HOW Break new information into small digestible chunks and explicitly teach new concepts
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Retrieval practice can take many different forms (this booklet will give you several strategies you can use). The form of retrieval practice is not as important as what it does for your learning. If done correctly, retrieval practice should be hard but not too hard and should enable you to:

1. Identify your own gaps in your knowledge and understanding.
2. Make connections between topics and information!
3. Strengthen connections.
4. Make new learning easier (as you have a bank of knowledge to hook new learning on)

The Benefits of Retrieval Practice

by @Inner_Drive | innerdrive.co.uk

1. Identifies gaps in knowledge



2. Makes connections



3. Checks for misunderstandings



4. Strengthens connections



5. Makes connections robust under pressure and stress



6. Makes it easier to learn new things



9 Ways to use retrieval practice

by @inner_drive | www.innerdrive.co.uk

1



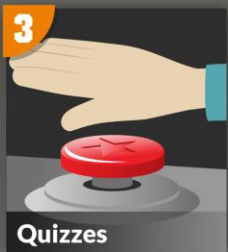
Past papers

2



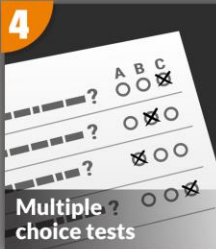
Practice tests

3



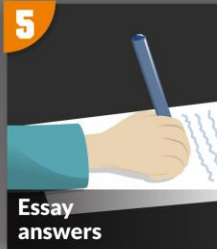
Quizzes

4



Multiple choice tests

5



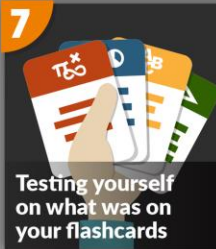
Essay answers

6



Answering a spoken question

7



Testing yourself on what was on your flashcards

8



Making your own questions and answering them

9

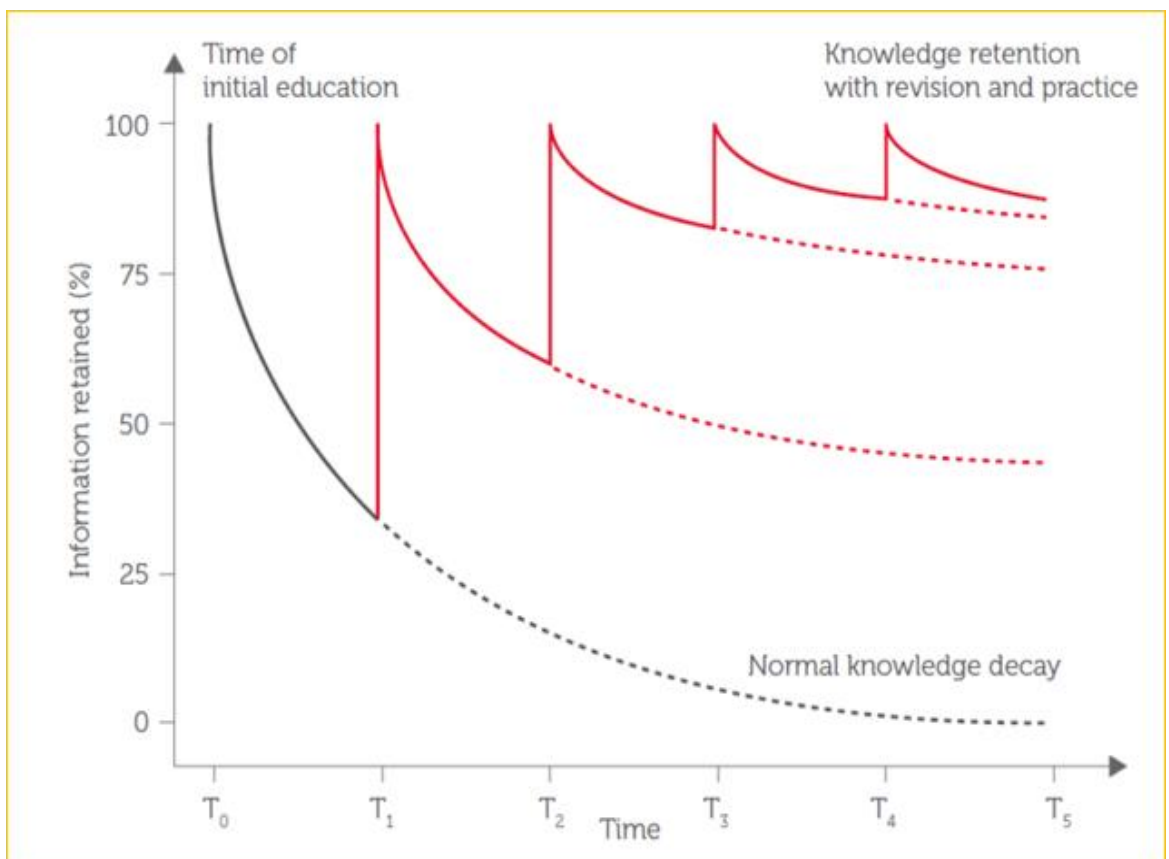


Having someone ask you 3 questions about a topic

The forgetting Curve



If learning is a change in the long-term memory, to make that change, we must use and retrieve the information we need to learn. Retrieval practice is the act of deliberately recalling information, often done through questioning yourself or others. Spacing is the act of revisiting learning and material regularly - as over time we are prone to forget information. Cognitive science research shows that we forget things very quickly after we learn them, but more importantly, that we tend to forget information no matter how much we initially seem to remember, regardless of how the information is presented to us.



Retrieval practice is about getting you to think and actively recall information.

Flash Cards



Instructions: Flash cards are an excellent resource to consolidate your knowledge and learning on a particular topic. You can use course topic outlines or checklists to identify headings or titles for one side of the flashcard. On the other side you can write your sample answer or a summarised guide of how to structure your answer to question

Self-assessment: You can now use your flashcards as marking schemes to attempt past paper questions. For example, you might revise the flashcard and then attempt the question. Then use the flashcard to mark your answer and identify any areas you missed.

Peer of family learning: You could give your flashcards to a friend or family member to test your knowledge on a topic or question. Based on the flashcards you created, they will have the heading and the answer. Remember to take a note of anything you are not sure of.

USING FLASHCARDS TO REVISE

by @inner_drive | www.innerdrive.co.uk

1 Split a box into 5 different compartments and label them 1 to 5.



3 Test yourself on a flashcard



5 Continue to test yourself and each time you correctly recall the information, move the flashcard into the next compartment. Flashcards from compartment 1 should be reviewed daily, with flashcards from compartment 2 being reviewed every other day, compartment 3 every third day and so on.



Instructions:

Dual coding refers to the technique and process of combining written text with visuals. This might take the form of a timeline, diagram or infographic depending on the subject or what you feel is best suited to the subject or topic. These can be created by writing down information from memory with accompanying relevant images to enhance your points. You can then check your notes to identify information you have missed.

5 Ways to Use Dual Coding

by @inner_drive | www.innerdrive.co.uk

Dual coding is the process of blending both words and pictures while learning, but what are some specific different ways you can do this?



1. Drawings

These boost learning by getting students to think deeply about information



2. Diagrams

These are helpful for breaking down complex concepts or processes to make them easier to understand



3. Posters

These are great for combining writing, pictures, and diagrams all within one page of information



4. Timelines

These can be used for information that happens in a particular order or sequence



5. Graphic Organisers

These organise verbal and visual information by the relationships between different concepts. Examples include tree diagrams, mind maps, and Venn diagrams

Mind Mapping



Instructions: Mind maps are a popular revision technique for a number of pupils. For maximising long term learning, creating memory maps as a retrieval practice is more challenging and effective without using your notes to directly copy from.

Mapping from memory: Choose a topic you have studied. On the paper write down the headings which cover the key content in the topic. Now revise your notes on one particular section for 10 minutes. Write down on your mind map all you can remember. Repeat for the next section until you have covered all areas. Now go back and check your first heading using your notes to see what you have missed.

Add the extra points you have missed in a different colour. You can either repeat the mind or use it as a flash card to recall the information.

Try teaching your work to someone at home by explaining the topic areas.

6 Mind Mapping Mistakes

by @inner_drive | www.innerdrive.co.uk



Mistake #1 Using only words

Students should combine words and pictures. Giving two representations of the information helps to cement it into long term memory.



Mistake #2 Using too many words

Rather than copying everything down, students should prioritise information, and only include the stuff they really need to know.



Mistake #3 Wasting time making it too pretty

Students should get onto testing themselves and actively using their mind map, instead of spending hours perfecting it.



Mistake #4 Not using elaborative interrogation

Students should ask themselves questions like 'why is this true?' about mind map content, to get them thinking deeply about the information. Re-reading just won't do.



Mistake #5 Not utilising retrieval practice

Don't forget to test yourself! Try to re-create the mind map from memory, get a friend to test you, or teach the mind map information to a friend.



Mistake #6 Not transferring mind map knowledge

Students should use the mind map to answer quizzes and past paper questions, and be sure to transfer mind map knowledge so that they truly understand and can apply it.

Retrieval clocks



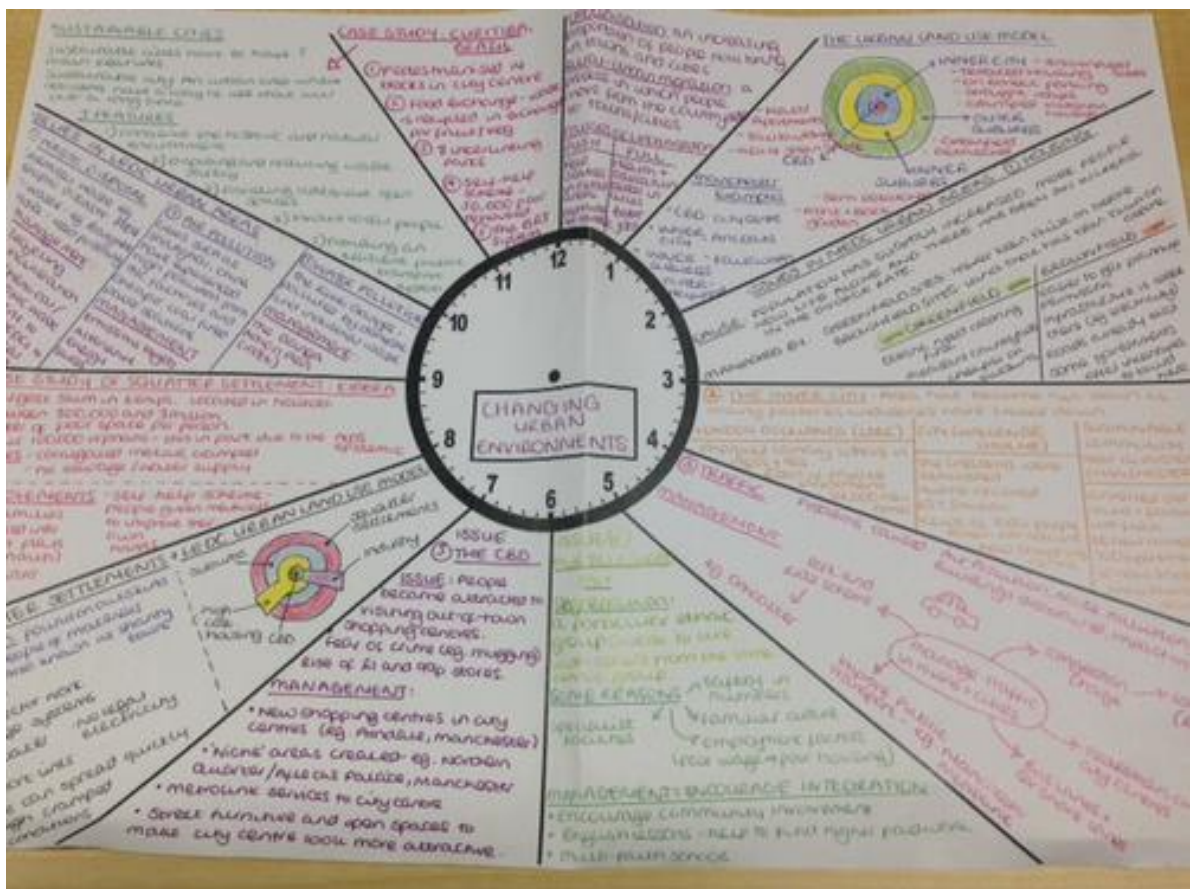
Instructions:

split your paper into 12 segments, like a clock face. Write down the different questions or subtopics that you can be asked about as part of this unit of work.

Task:

Take two colours of pens. Using your first pen, spend 5 minutes completing each segment of your clock from memory. Check your notes and then take your second colour of pen. Add in any additional information you missed first time round. You could also combine this activity with images like the dual coding example.

Ask someone to ask you questions about each section or teach them about the key aspects of your topics.



Past exam papers



Instructions:

Search your exam board and syllabus provides all past papers for the subject.

Please note, some departments in school will provide you with a past paper question booklet. The past paper questions might even be separated into particular categories so you can focus and tailor your revision on a certain topic.

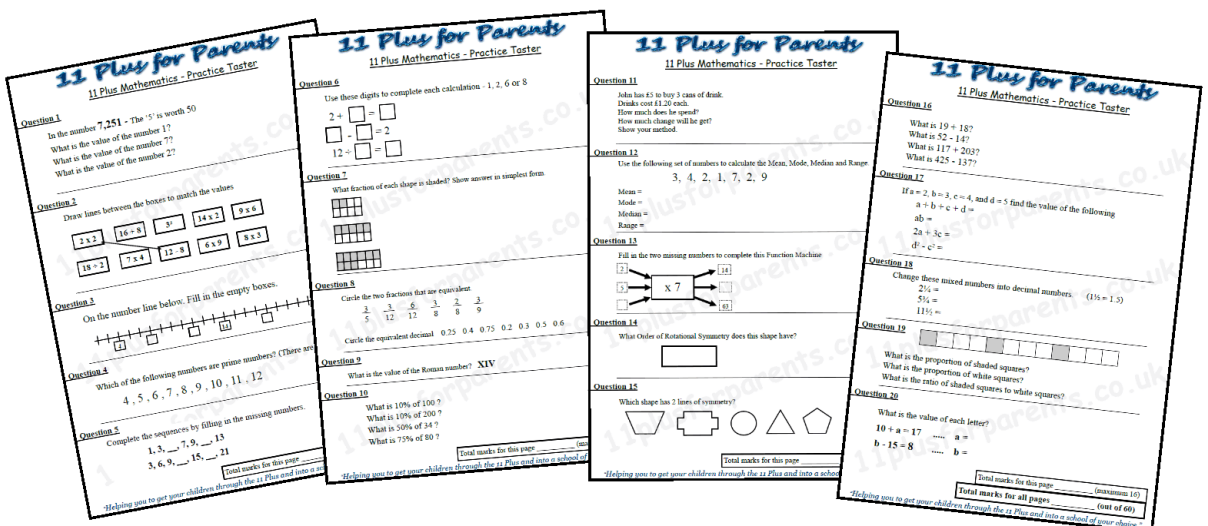
Task: Now you have the questions, what is your plan?

Are you going to attempt the questions without using your notes and then check your notes as marking scheme?

Are you attempting questions and asking your teacher to mark them for you?

Are you looking through questions and identifying the ones you find most challenging and asking your teacher for support?

Are you going to complete the questions, then mark the paper yourself. Using the mark scheme add in the correct answers you got wrong or additional marks you could add in. Use a different colored pen to help you identify knowledge that you can recall and what you needed help with.



Mind Mapping



Instructions:

You will know what questions within a topic you personally find the most challenging. This strategy invites you to create your own challenge grid where you rank the difficulty of questions. Remember when writing or speaking your answer to do so without notes to see what you know. Then check your notes to identify gaps. The challenge grid can also be used by friends or family to help quiz you on the topic. You could make your easier question worth 1 point going to 4 points for harder questions. Or colour code the questions in terms of difficulty

Challenge grid – Medieval Life

What is the name of a Medieval peasant house?	What was a peasant's house made from?	Where did Medieval people go every Sunday?	Can you describe three jobs a peasant would carry out in the winter?
What language was the bible in the Medieval period?	What type of clothing did Medieval peasants wear?	What did the peasants have to ask the Lord of the manor for permission to do?	What is another name given to a Medieval peasant?
What did Medieval children do in the day?	How did peasants scare away the birds?	What is the crime of treason?	Name three foods that peasants ate.
What is the tithe?	What is the name for the area where all the peasants and the Lord lived?	Can you describe the punishment of the pillory?	What is the term given for a field that is left empty, to rest and recover?

Four points

Three points

Two points

One point

How many points can you score?

WHY INTERLEAVING WORKS

by @Inner_Drive
innerdrive.co.uk

What it is:

Blocking



Blocking involves doing topic 1, then topic 2, then topic 3.

Interleaving



Interleaving involves mixing up topics within a subject.

Why it works:

1. Discrimination learning: Spotting **differences between similar things**



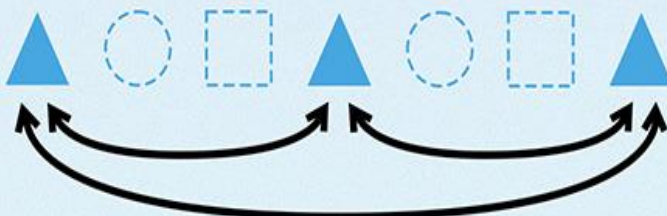
When students think about differences, we prompt them to think harder. Contrasting information is more likely to stick in our mind.

2. Involves remembering **similarities between different things**



By highlighting similarities between different things, we provide more "anchor points" for students to hook new information onto.

3. Involves the **benefits of spacing**



Each time the information is revisited, it helps ingrain and cement it into our long-term memory.



Task Planning: Ace the Task!

What's the task?

What do you need to do and what outcome do you need to achieve?

Strategies I can use...

Has the teacher shown you a good way to approach the task? What are the **key steps**? Is there a strategy you have used before that might help again?

How I'm feeling...

Do I feel confident about approaching this task in the way that's expected? (circle)



if not, what factors are stopping you?

Make a Plan: How will you approach the task?

Checkpoints: Plan in clear stages to check it's going to plan. How will you know? Do you need to do something differently?

1

2

3

Reflect: How did it go? What could you take forward next time/task?



6 WAYS TO THINK HARDER IN THE CLASSROOM

by @inner_drive | www.innerdrive.co.uk

LEARNING STRATEGY HOW TO USE IT TO THINK HARDER

RETRIEVAL PRACTICE



Use resources such as past papers, flashcards and multiple-choice tests to practise retrieving what you have learned.



SPACING

Space out your revision instead of cramming your studying the night before the test.

INTERLEAVING



Mix up revision topics when studying to improve learning.

ELABORATIVE INTERROGATION



Ask yourself "why" questions to understand the meaning of the information you are trying to remember and enhance learning.

THE PRODUCTION EFFECT



Produce something from what you are learning. For example, write notes, diagrams or create mind maps.

THE PROTÉGÉ EFFECT



Teach someone else what you have learned. This allows you to organise your thoughts and consolidate learning.



14 QUESTIONS TO ASK WHILST STUDYING

by @inner_drive | www.innerdrive.co.uk

Improve your learning by asking yourself...

- 01 Why does it make sense that...?
- 02 Why is this true?
- 03 What is the main point being made here?
- 04 Why would this fact be true for X and not for Y?
- 05 What are the similarities between X and Y
- 06 What are the main differences between X and Y?
- 07 What would have happened if X did not occur?
- 08 Why does X cause Y to happen?
- 09 How does this link to what I learnt last week?
- 10 What part of this topic do I still not understand?
- 11 Do I agree with X's opinion (and why)?
- 12 How would I argue against what Y said?
- 13 What solutions or strategies would fix this situation?
- 14 What might have been going through their mind when they said that?