Y11 Preparing for your Exams Effectively

Form Time Literacy & Reading - Tuesday

Learning to Learn – how will it help me?

Learning to Learn: how useful is your learning toolkit?

Go to any online bookshop and you'll find hundreds of guides dedicated to exam preparation. 'How to revise' and 'How to get that grade 9' are familiar titles. **But one genre is less common: how to *teach* yourself**. In this short article, David Martindill describes some of the tools found in your teacher's toolkit. Knowing a little about these can help **support your independent learning.** After all, understanding *how* to learn is just as important as knowing ***what* to learn**.

Create

Albert Einstein once said that '*imagination is more important than knowledge*.' He was right: being creative while you work is one certain way to accelerate understanding. Rather than simply reading a textbook or browsing through online tutorials, **be active.**

- Tally count every mention of a key term or idea. Predict how sentences will end.
- Try converting information contained in text into a diagram, or transfer a picture into a list. Craft questions for which phrases and words you encounter could be the answers.
- Sketch Venn diagrams to compare different factors.
- Scribble mind maps that summarise new information.

Being creative in this way forces you to think deeper, rather than passively receive. It keeps you motivated for longer because it gives you ownership of the learning process.

Link

Lots of evidence suggests that we learn by linking our existing ideas with new information. This prior knowledge can also be real-life experience. You can exploit this by taking a moment to pause before you begin your study.

Ask yourself '*what do I already know about this topic?*' Go further and make some predictions. What are you likely to discover in the next hour or two? Be active and jot down a few words or short sentences on slips of paper. At the end of your study session, record a few summary sentences on different slips of paper. You may even wish to build a paper chain to show how your learning journey happened. Did your predictions come true? If not, why not?

For really effective learning, regularly review your new knowledge and break it down into different parts. Join ideas together to build a bigger picture. Your new knowledge should resemble how a house is formed from many bricks, each cemented with many others. 'Thinking up' as well as 'thinking through' new information is incredibly important for a deeper understanding.

Talk

Students who talk about new information as they encounter it can make the fastest progress. Creating dialogue is a very important education tool. Consider working with others online to collaboratively complete an essay, or produce a 'perfect' response to an exam paper. Otherwise, simply ask a friend or a family member to listen to what you have to say about a topic after you have studied – do they understand? Challenge them to ask you three questions about it. Can you answer them?

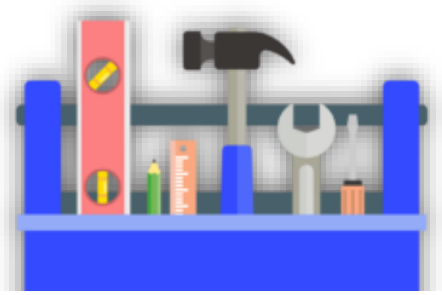
Text 1 TASK: Learning to Learn Comprehension

1. Scan through text one again, IDENTIFY at least **six ideas** for your **learning toolkit BELOW**.

2. Record them in a **mind map** around the toolkit image on this page. One example has been completed for you.

3. To add further ideas to your toolkit, watch this video on effective revision ideas, https://youtu.be/97Rs3oDzEtc

‘Be creative while you work’



Text 2: Flashcards and Retrieval

What are flashcards?

Flashcards are sets of small, double-sided cards used to learn and revise details, key words and vocabulary. They are useful for learning pieces of information because they provide an easy way to test yourself with answers close at hand. You write a question (or key word/subject term) on the front and then the answer or definition on the back. You can include images and/or symbols alongside words if appropriate.

Why do flashcards help you learn?

- When you make and use flashcards, you take control of your own learning.
- You have to decide what to put on each card, how often you're going to use them and then evaluate how well you know the information on each card.
- By doing all these things, you are using 'metacognitive processes' which have been proven to enhance long-term learning

Retrieval Practice

Retrieval practice is being able to recall information without having it in front of you. In recent years, cognitive scientists have been comparing retrieval practice with other methods of studying. What they have found is that nothing cements long-term learning as powerfully as retrieval practice

How to do it

- **Brain dump:** write down everything you know about a topic.
- **Think – pair – share:** with a partner and compare knowledge and identify any gaps that you have.
- **Retrieval taking:** make notes after reading or watching information.
- **Mini quizzes:** complete mini quizzes or create your own questions and answers based upon the information.

Oak National Academy has lots of retrieval practice quizzes in their lessons.
Oak National Academy Online Classroom (thenational.academy)

Log onto your Google Classroom or Seneca for specific quizzes and revision set by your teachers.

Text 2 Comprehension: Flashcards and Retrieval

No.	**Question**	**Answer**
1	What are flashcards?	
2	What goes on the front of a flashcard and what goes on the back?	
3	Who decides what goes on a flashcard and how often you use them?	
4	Metacognitive processes are: a) being aware of how to, and using processes to, develop your own knowledge b) relying on others to help you learn with little understanding of the process	
5	If you 'enhance' long-term learning, you: a) make long-term learning more complicated b) improve your chances of long-term learning	
6	Why is 'long-term' learning important?	
7	What does 'recall' mean?	
8	A cognitive scientist studies: a) childhood b) thought processes and learning	
9	What four strategies are listed for recall practice?	
10	What two online resources are names as good sources for recall practice development?	

Independent Learner Flashcard and Retrieval Challenge:

a) Design the front and back of a flashcard for a key piece of information learnt from any subject this week:

front	*Back]]*

b) For a different subject, brain dump up to ten pieces of information learnt in your last (not current!) topic:

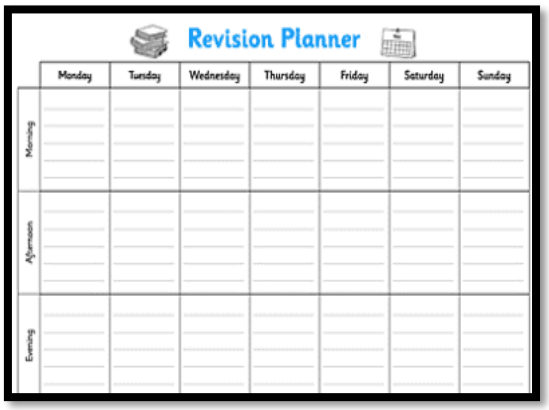
c) For another different subject, brain dump up to ten pieces of information learnt in your last (not current!) topic:

Text 3: Spaced Practice and The Leitner System

Spaced Practice

Spaced practice is the theory that short, sharp bursts of learning are more effective than cramming just before an exam or assessment. Our goal is to know more and remember more over the long term; spaced practice throughout your education is a great way to reach this goal.

When you plan your revision or home learning, you need to think about **how you structure it**. It is better to **interleave** a few things and **keep returning** to them to ensure that the **information is retained.**



Top Tips

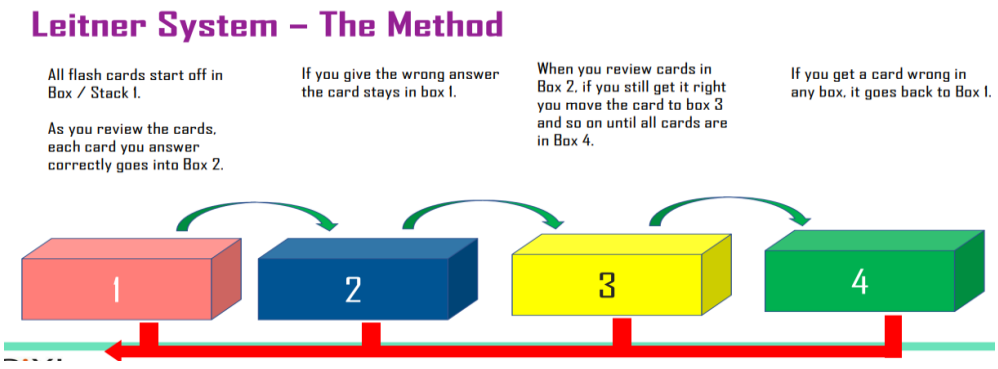
- **Plan** your revision (or home learning) schedule.
- Think about how to **prioritise** each subject.
- Include **exercise** and **rest** breaks.
- Include time with **family** and **friends**
- Don't forget to make time for your **hobbies** and **wider interests**

The Leitner System

Can you **remember** how to create and use **flashcards**? **Skim read <u>text one</u> to remind yourself** now.

The Leitner system is a learning method that uses flashcards, card boxes, and a spaced repetition scheduling system **to improve learning and memorisation**. The system is used to prioritise items that require reviewing and it was one of the first methods to take advantage of spaced repetition. Sebastian Leitner came up with the method all the way back in 1972 and research over time has shown it to be **effective for learning.**

How does the Leitner system work?
The Leitner system is based on a series of four flashcard boxes. Box number 1 is where all cards go at the start. Then, once you start reviewing the flashcards, you'll also start changing their placing depending on whether you were able to answer the information written on the card: those that you get wrong stay in box 1 and you know you need to practise these the most!



The key is that you review the flashcards that are in box 1 and 2 more often than those in box 3 and 4. You decide when to do this review using spaced practice.

Text 3 Comprehension: Spaced Practice

No.	**Question**	**Answer**
1	What is spaced practice?	
2	What is our learning goal?	
3	What should we think about when we plan revision or home learning?	
4	What does interleave mean?	
5	If you 'retain' something, you: a) forget it b) remember it	
6	What does 'prioritise' mean?	
7	True or False: A good revision or home learning plan includes prioritising time for exercise and time for hobbies.	
8	What is the Leitner System good for?	
9	How does the Leitner system help you prioritise learning?	
10	How does the Leitner system link to spaced practice?	

Independent Home Learning/Revision Plan Challenge:

Create a plan for your home learning/revision, remembering to check the top tips in text one.

What would you like to achieve?

I would like to…

When creating your plan, consider:

Mixing your topics across your day's revision:

M	T	W	T	F
MACBETH	UNSEEN POETRY	AN INSPECTOR CALLS	JEKYLL AND HYDE	CREATIVE WRITING
AN INSPECTOR CALLS	JEKYLL AND HYDE	CREATIVE WRITING	MACBETH	UNSEEN POETRY
CREATIVE WRITING	MACBETH	UNSEEN POETRY	AN INSPECTOR CALLS	JEKYLL AND HYDE

Plan in breaks – don't revise for longer than a couple of hours.

Don't work later than 10pm – get a good night's sleep so you can engage in your lessons the next day. That will cut down on the amount of revision you need to do at home as you'll be engaged in your revision during lessons.

	Monday	Tuesday	Wednesday	Thursday	Friday		Saturday	Sunday
3pm-4pm	P5 Revision	P5 Revision	P5 Revision	P5 Revision	P5 Revision		The subjects and skills I am revising today are:	The subjects and skills I am revising today are:
4pm – 5pm								
5pm – 6pm								
6pm – 7pm								
7pm – 8pm								
8pm – 9pm								
9pm – 10pm								

Text 3: Metacognition

What is metacognition?

Put simply, metacognition is **'thinking about thinking'**.

Some teachers also define it as **'learning to learn'**. When learners become **conscious of their thinking**, they can become **aware of their strengths** and the **strategies that are useful** to their own learning. (Or aren't useful.)

To support learning and revision, **metacognition** involves reflecting on **what you need to know, what you actually know** and **what you need to do to close the gap.**

What is planning?

Ask yourself: What do I need to know to complete this task? How am I going to achieve the goal? What steps will I take and in what order?

What is monitoring?

Ask yourself: Am I on track to meet my goal? Am I following my plan? Do I have checklists or success criteria?

What is evaluation and reflection?

Ask yourself: Did I achieve my goal, if not, why not? What would I do differently next time? Was I efficient?

Metacognition at Winterhill

In your lessons, **metacognition is embedded** through:

- The use of **clear learning objectives** and **success criteria**
- **Peer** and **self-assessment** against the success criteria
- **Modelling** and practising explicit **reading and comprehension strategies**
- **Modelling the process** of creating an effective response
- **Embedding independent work** into the main part of each lesson.

Planning your revision using the strategies you are used to in lessons (above) will improve the structure of your revision sessions.

Text 4 Comprehension TASK: Metacognition

No.	**Question**	**Answer**
1	What is metacognition?	
2	Sometimes, metacognition is called learning to _____.	
3	A **strategy** is: a) a deliberate plan or approach b) something that just happens	
4	As part of metacognition, what do you reflect upon?	
5	Explain what planning is.	
6	Explain what monitoring is.	
7	Explain what evaluating is.	
8	What is an objective?	
9	How do reading and comprehension strategies help you learn?	
10	How will metacognition improve your revision?	

Text 5: Dual Coding

What is dual coding?

Dual coding is the theory that for successful retrieval of knowledge you need to combine both words and visuals.

How it works

Linking words and visuals improves our ability to encode complex ideas. Encoding is the first process of memory, during which information is transformed so that it can be understood and stored in your brain.

Using dual coding will help you know more and remember more and, most importantly, you will then be able to recall the information better in different contexts including examinations and assessments.

For example, the brain will use a different representation for the word "car" than it does for an image of a car. By having two representations of the same information, it cements it deeper into our long-term memory.

Ways to use it

- Compare words to visuals – look at visuals and compare them to the words in your notes.

- Explain in your own words – look at an image, diagram, graph or timeline and explain in your own words what information is being presented.

- Turn your notes into visuals – take the information you are trying to learn and draw visuals to represent it. This will make it easier to recall when you are reviewing revision notes.

Research into dual-coding has found that:

- Students who revised with words and pictures performed twice as well in a problem-solving test compared to those who had just revised with just words
- Students who learn with both words and pictures remember around 50% more than those who revised by seeing words and then separately later seeing pictures

These results do not suggest that all students will make the same amount of gains using dual coding (as things like previous knowledge and the topic being covered will probably make a difference). Rather, that revising with both words and pictures offers a good boost to memory retention and recall.

Text 5 Comprehension TASK: Dual Coding

No.	**Question**	**Answer**
1	What is dual coding?	
2	What is improved by linking words and visuals?	
3	What does dual coding help you do?	
4	Why is it important to cement things deeper in longer term memory?	
5	Give three examples of using dual coding in revision.	
6	What evidence is there that dual coding works?	
7	Does everyone benefit the same amount from dual coding?	
8	What provides a boost to memory?	
9	What does retention mean?	
10	What does recall mean?	

Dual coding challenge:

Choose a key word from the text and draw and image to represent it

Word _____

My image:

Pick a topic/subject/lesson from yesterday or last week. Summarise the content in less than three sentences and draw **an image/symbol or diagram** that represents your learning:

Summary:_____

_____

_____

_____

_____

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My image/symbol/diagram: