

# How can I revise?

L.O. To explore some different methods of revision **proven** to be effective.

- 1) Retrieval Practice
- 2) Dual Coding
- 3) Interleaving
- 4) Concrete Examples



One size **doesn't** fit all...

All the methods we are going to look at today have been scientifically proven to help people revise. However everyone needs to find the method that best suits them.

**Challenge:** Try some of these ideas. See which work for you in different subjects.

I am taking the following for granted in this presentation.

- 1) You are actively spending some time revising (at least 20 minutes per week per subject).
- 2) You are revising for all your subjects (though you may have “priority subjects”).
- 3) You know which topics to revise in each subject.

Maths	English	Science	...
Solving linear equations	Character study: Tybalt	Reactivity series of metals	
+/-/x/÷ decimals	Learning quotes from Journey's End	Structure of the heart	
Calculating the estimate of the mean	Practice "evaluate" answer for Paper 1	Formulae connected to number of moles	
Remembering the formulae for area	Writing an effective story	Balancing reaction equations practice	

It is not possible to revise every topic at once. You will need to select a few topics to prioritise from each subject. You must fully master these before revising a new topic.

Task: Identify 4 topics from maths, English and science that you will prioritise for revision for your PPEs.  
Use the prompt sheet to help with this.

Maths	English	Science	...

# Retrieval Practice

## Method:

Using no books/notes/revision materials write as much as you can remember about a topic. This needs to be as thorough as possible.

When finished, check your notes for accuracy, and to identify anything important you missed.

## Things to consider;

1. This will only benefit you if you actually check your notes afterwards.
2. This should be a specific topic rather than a broad one. “Fractions” rather than “Maths” or “Number”.
3. You can identify topics by taking past papers. Pick one or two topics/styles of question you are struggling with. Your teacher should also be able to identify some topics with you.
4. Don't only recall key words and definitions. You need to recall the ideas too, and how things are related to one another.

Modelled example

Converting  
F,D,P

Key  
vocabulary

+/-/x/÷

Fractions

Algebraic  
Fractions

Fraction of  
an amount

Have a go...

Use the handout to have a go at retrieving information.  
You will have 5 mins working on your own in silence.  
Some key ideas have been added as a starting point.

Have a go

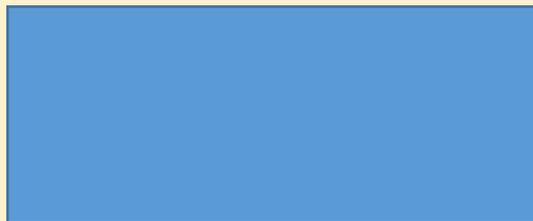
Common mistakes

Formulae

Area

Surface Area

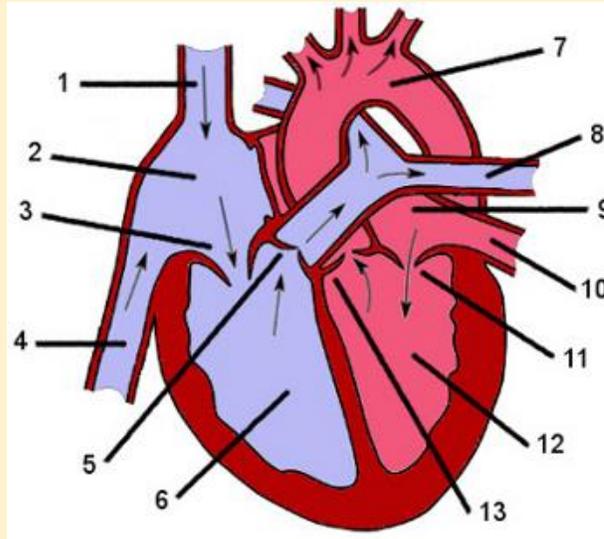
Units



## Summary

- Spend some time remembering the key ideas about a topic. Check you have everything correct and haven't missed any key point.

# Dual Coding


$$\frac{M + E + A + N}{4}$$

A, D, E, I, M, N

$$\frac{E+I}{2}$$

T,H,E,M,O,D,E

E

## Method:

Draw visuals to represent information you are trying to remember. Different types of visualisation help.

## Things to consider;

- 1) There are different ways to visually represent information;
  - a) Infographic, timeline, cartoon strip, diagram of parts...
- 2) Some topics / subjects will be harder than others.
- 3) The representations need to make sense to you. Using somebody else's might not work!
- 4) Revision needs to be time efficient. If you are spending two hours drawing the perfect cartoon of one scene in a book, you are probably not being time smart.

# Modelled example

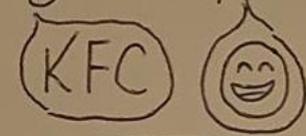
## Fractions

$$\frac{3}{4} - \frac{1}{3}$$



I'm sorry. We don't have enough in common.

$$\frac{3}{8} \div \frac{6}{7}$$



Hey! We're both squares!

$$\frac{3}{5} \times \frac{5}{9}$$

Let's keep things simple

Just do it

$$\frac{2x^2 + 5x - 3}{x^2 - 9}$$

Do we have anything in common?

$$\frac{(2x-1)(\cancel{x+3})}{(\cancel{x+3})(x-3)}$$

$$\frac{2x-1}{x-3}$$

$$\frac{32}{5} \quad \frac{17}{5}$$

We're identical twins!

What are the key steps required to solve the following equations?

$$x + 3 = 7$$

$$4x = 18$$

$$\frac{a}{4} = -3$$

$$5x + 2 = 15$$

$$4x + 3 = 6x - 6$$

How could we dual code this?

Have a go

Equations

## Summary

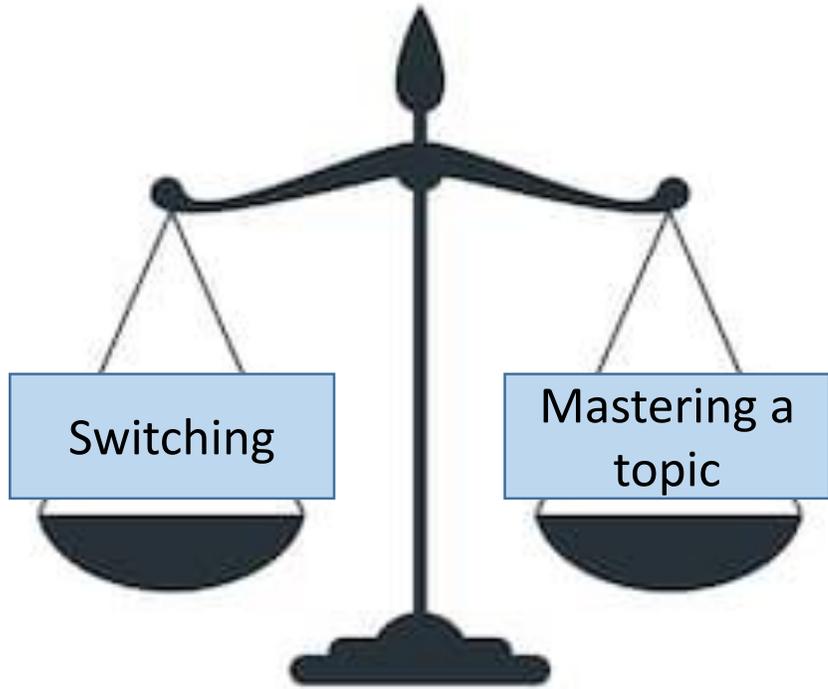
- Spend some time remembering the key ideas about a topic. Check you have everything correct and haven't missed any key point.
- Use visualisations to remember key points/concepts. You should experiment with timelines, infographics, cartoon strips etc.

# Interleaving

## Method:

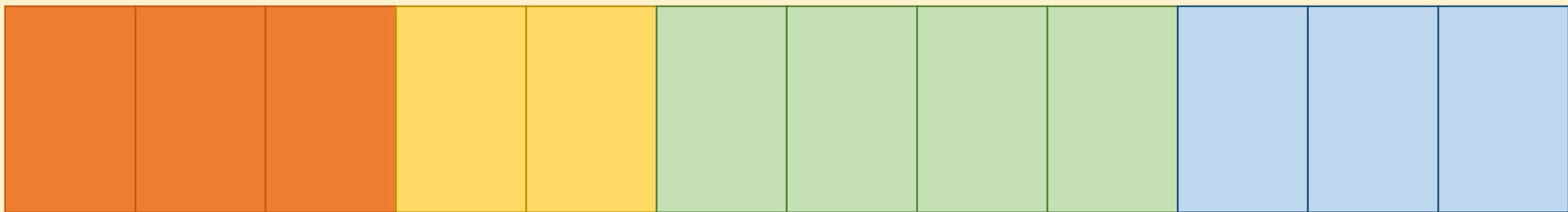
Every time you revise, change the order you revise subjects / topics in.

Changing between subjects and topics is useful, however there is a fine balance between switching too much and not switching enough.



## Things to consider;

- 1) For each subject you probably want to juggle 3 or 4 topics at a time. Once you have mastered them, then add in a new topic.
- 2) Consider switching subject/topic every 20-30 minutes of good revision.



# What might this look like in reality?

Maths	English	Science	...
Solving linear equations	Character study: Tybalt	Reactivity series of metals	
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Remembering the formulae for area	Writing an effective story	Balancing reaction equations practice	

Revision session	1	2	3	4	5	6
Slot 1 (20 mins)	English Topic 1					
Slot 2 (20 mins)	Science Topic 1					
Slot 3 (20 mins)	English Topic 2					
Slot 4 (30 mins)	Maths Topic 1					
Slot 5 (30 mins)	Science Topic 2					

Revision session	1	2	3	4	5	6
Slot 1 (20 mins)	English Topic 1	Maths Topic 2				
Slot 2 (20 mins)	Science Topic 1	English Topic 2				
Slot 3 (20 mins)	English Topic 2	Science Topic 1				
Slot 4 (30 mins)	Maths Topic 1	Maths Topic 1				
Slot 5 (30 mins)	Science Topic 2	English Topic 1				

Revision session	1	2	3	4	5	6
Slot 1 (20 mins)	English Topic 1	Maths Topic 2	Science Topic 2			
Slot 2 (20 mins)	Science Topic 1	English Topic 2	Maths Topic 3			
Slot 3 (20 mins)	English Topic 2	Science Topic 1	English Topic 3			
Slot 4 (30 mins)	Maths Topic 1	Maths Topic 1	Maths Topic 2			
Slot 5 (30 mins)	Science Topic 2	English Topic 1	Science Topic 3			

Have a go...

Using the topics you picked for maths, English and science earlier this session, try completing a revision planner by slotting in topics and subjects in a deliberately random order.

Revision session	1	2	3	4	5	6
Slot 1 (20 mins)						
Slot 2 (20 mins)						
Slot 3 (20 mins)						
Slot 4 (30 mins)						
Slot 5 (30 mins)						

## Summary

- Spend some time remembering the key ideas about a topic. Check you have everything correct and haven't missed any key point.
- Use visualisations to remember key points/concepts. You should experiment with timelines, infographics, cartoon strips etc.
- Pick 3 or 4 topics for each subject. Master these topics before revising new topics. Try mixing up the order you revise subjects/topics each revision session.

# Concrete Examples

## Method:

Collect together as many examples of completed questions as you can find from your teachers.

Make sure you understand which topics each question ties in to.

Revision requires you to do some work... try answering those questions repeatedly.

Your teacher should be able to point you to some reliable places you can find practice questions.

What is the question asking for? Are there words in <b>bold</b> ?	Areas of maths used / formulae needed
The time in Rio is three hours behind London. The time in New York is five hours behind London. What is the time in New York when it is 1.00 am in Rio?	
Answer _____ (Total 2 marks)	
Structured solution	Where are marks awarded?

**FIGURE IT OUT Friday**

**Figure It Out Friday**

**exampro**

Quadratics  
Higher

Name: \_\_\_\_\_  
Class: \_\_\_\_\_  
Date: \_\_\_\_\_

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Time: 57 minutes

Marks: 50 marks

Comments:

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**MME**

Revise ▾

Past Papers ▾

Mock Exams & Cards

**Warning:**  
Some online sources might be incorrect. If in doubt, check with your teacher!

Can you find...						
Year 11 PPE papers						
Year 10 PPE papers						
Year 9/10 exercise books						
Practice question papers						
Model Answers						
Modelled questions						
Exam booklets						
ARR materials						

## Summary

- Spend some time remembering the key ideas about a topic. Check you have everything correct and haven't missed any key point.
- Use visualisations to remember key points/concepts. You should experiment with timelines, infographics, cartoon strips etc.
- Pick 3 or 4 topics for each subject. Master these topics before revising new topics. Try mixing up the order you revise subjects/topics each revision session.
- Use practice questions to check your understanding. These should be audited by your teacher, but could come from a variety of locations.

Take 3 minutes silent time to reflect on revision.

- 1) Do not try to revise **all** the content for each subject. You should pick 3 or 4 topics per subject, targeting topics you are less secure with.
- 2) Do not just revise for the subjects on the first day/week.

To start revising;

- 1) Start by thinking about which topics you will revise for each subject.
- 2) Choose a method to revise, plan your time to do this!