# Study Techniques

- Indexing
- Mnemonics
- Mind Mapping
- M.U.R.D.E.R.



#### Study Techniques

- Our brains hold lots of information that can be recalled when you actively search for it.
- Try to retrieve information 'out of the blue': e.g. the capitals of the European Union. All the States of America, the periodic table, etc.
- As you can see we link information and by establishing the correct links we can recall lots of information that we have learned. The stronger the links the easier it is to recall the information.



#### How can I know what to learn?

How to read notes/sources of information (SQ3R method)

SQ3R method for reading to learn

| Scan     | try to get an overall impression of the text                                  |
|----------|---|
| Question | make up some questions to ask yourself: Who? What? Where? How? Why?           |
| Read     | read the text more carefully  |
| Remember | test your memory by jotting down 3 key points of the story.                   |
| Review   | read the passage again and note down some of the smaller, important, details. |

It is important that 'notes' must reduce information to a summary (as much as possible).



# How can I know what to learn?

| English | Maths | Physics | Chemistry | History | French | Graphics | Art |
|---------|-------|---------|-----------|---------|--------|----------|-----|
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### How can I know what to learn?

#### <u>Using Past Papers, previous homework</u> <u>exercises etc to make study notes</u>

By doing a past paper question you will inevitably have to refer back to your notes/textbook. When you find the correct section that will give you your answer highlight it / underline / asterix. As you do more and more questions you will begin to see that the area you have highlighted is required more and more when answering different questions.

When you have attempted many questions – the highlighted sections in your notes should be the basis of your summary notes/ index cards etc.

### Study Techniques - Indexing

#### Memorising using Study Cards/indexing

making the cards is studying, and learning the material is studying.

It is a time-tested way of being sure that you have the material learned and ready to use in an exam situation.

This is a method of studying that gives you an accurate perception of how well you know the material, and forces you to think about it, rather than just look over it.



### Study Techniques - Indexing

- Review your notes and readings frequently, so the material is "fresh"
- As you're reading your text or reviewing your notes, generate and write down questions about the material.
  - Imagine you're teaching the course. What questions would you ask on the exam?
- Keep track of any terms you need to know



## Study Techniques - Indexing

- Write each question or term on the back of an index (study) card
- 2. On the front of each index card, write an answer or an explanation for the above.

  Use your notes and text for a reference, but put the answer or explanation in your own words whenever possible
- 3. Shuffle the index cards so you can't figure out any answers based on their location in the deck
- Look at the card on the top of the deck:

  Try to answer the question or explain the term. If you know it, great! Put it on the bottom of the deck.

  If you don't know it, look at the answer, and put it a few cards down in the deck (so you'll come back to it soon)
- 5. Proceed through the deck of cards until you know all of the information

Now Try It!!

### Study Techniques – Indexing - Tips

- 1. Carry your cards with you everywhere. Take advantage of little pockets of time. Test yourself while you're waiting on line, riding the bus, etc.
- If you think you know an answer, but can't put it into words, you probably don't know it well enough. Being able to explain the information is the only way to be sure that you know it. It's also the best way to prevent test anxiety
- 3. Consider testing yourself someplace where nobody can see you (and think you're crazy), and reciting the answers out loud. That's the best way to be sure that you can explain them
- 4. Study with a friend from your class.
  You can share ideas and help each other out with concepts.
  Also, you can use each other to make sure that you're explaining your answers adequately

### Study Techniques – Mnemonics

#### Memorising using Mnemonics

This method can be used for storing lists for easy recall. You can code the information in a way that is easier to remember. Rhymes (thirty days has September, April June......), Songs, word associations, keywords or poems are used to remember facts figures or processes. For example: Do you recognise any of the following?

- 1. Richard of York gave battle in vain
- 2. <u>Good Xylophonists Usually Vary In Many Radical Tunes</u>
- 3. My very easy method just speeds up naming planets
- 4. Every soldier must have orders
- 5. Every good boy deserves fun

See next slide for answers



#### Study Techniques – Mnemonics

- 1. Richard of York gave battle in vain colours of light in order of wavelength red, orange, yellow, green blue indigo & violet
- <u>Good Xylophonists Usually Vary In Many Radical Tunes</u> leads us to the members of electromagnetic spectrum. Gamma, X-rays, UV, Visible light, Infrared, Microwaves, Radio and TV waves.
- 3. My very easy method just speeds up naming planets planets in order from the sun mercury, venus, earth, mars, jupiter, saturn, uranus, neptune & pluto
- Every soldier must have orders the great lakes Erie, Superior, Michigan, Huron, Ontario
- 5. Every good boy deserves fun music notation EGBDF



#### Study Techniques – Mnemonics

Is there is any content in your courses where you could use this technique.

It can be used to remember almost anything in any subject. Be creative when making up your keyword or song.

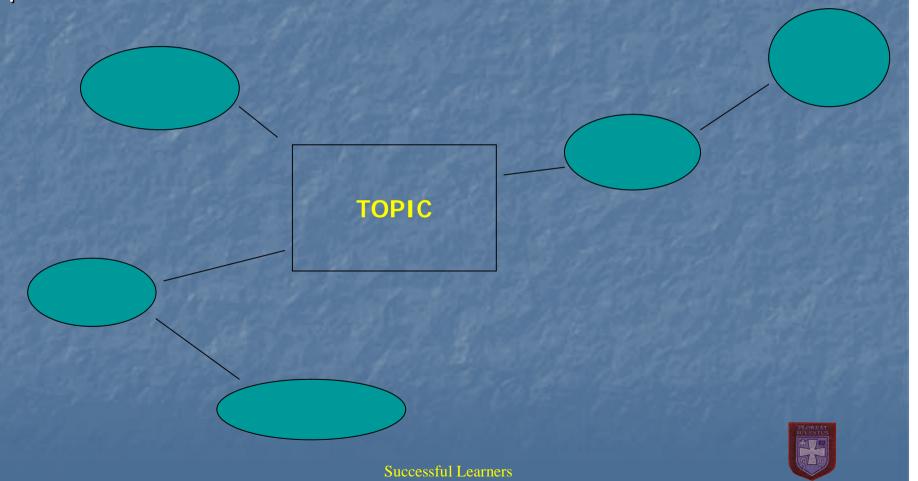
The more outrageous the more you will remember it

Now Try It!!



## Study Techniques – mind maps

mind maps are used to establish relationships between separate elements of information.



### Study Techniques – mind maps

- Identify that this method does not suit everybody or all subjects.
- Identify the importance of mind maps being a summary and not too complex.
- Identify that some people colour code the content and this helps them remember the content.
- Identify that this can be a good way to revise a subject.
- Identify that this can also be a way of preparing for exams
   the mind map can be the first thing you write for an exam question so that you don't miss out any bits of the answer.

#### Study Techniques – mind maps

- Use just key words, or wherever possible images.
- 2. Start from the centre of the page and work out.
- 3. Make the centre a clear and strong visual image that depicts the general theme of the map.
- 4. Create sub-centres for sub-themes.
- 5. Put key words **on** lines. This reinforces structure of notes.
- Print rather than write in script. It makes them more readable and memorable. Lower case is more visually distinctive (and better remembered) than upper case.
- 7. Use colour to depict themes, associations and to make things stand out.
- 8. Anything that **stands out** on the page will stand out in your mind.
- Think three-dimensionally.
- Use arrows, icons or other visual aids to show links between different elements.
- Don't get stuck in one area. If you dry up in one area go to another branch.
- Put ideas down as they occur, wherever they fit. Don't judge or hold back.
- Break boundaries. If you run out of space, don't start a new sheet paste more paper onto the map. (Break the 8x11 mentality.)
- 14. Be creative. Creativity aids memory. Get involved. Have fun.

# Study Techniques – M.U.R.D.E.R.

| Mood       | Set a <i>positive</i> mood for yourself to study in. Select the appropriate time, environment, and attitude  |
|------------|--|
| Understand | Mark any information <b>you don't understand</b> in a particular unit;<br>Keep a focus on one unit or a manageable group of exercises  |
| Recall     | After studying the unit, stop and put what you have learned into your own words  |
| Digest     | Go back to what you did not understand and reconsider the information; Contact external expert sources (e.g., other books or an instructor) if you still cannot understand it  |
| Expand     | In this step, ask <b>three kinds of questions</b> concerning the studied material:  •If I could speak to the author, what questions would I ask or what criticism would I offer?  •How could I apply this material to what I am interested in?  •How could I make this information interesting and understandable to other students? |
| Review     | Go over the material you've covered,<br>Review what strategies helped you understand and/or retain<br>information in the past and apply these to your current studies  |