

Learning Difficult Concepts

How do you make sure you really understand difficult ideas and concepts, and thoroughly learn them, so that you can answer questions on them? If you are at a bit of a loss, try following this step by step plan.

Day 1	What you need to do	Top tip
Step 1	Find the information you need to learn. Make sure it is in enough depth to let you understand but not so long, or so over complicated that you cannot understand it.	Text books are often better than revision guides for this. Make sure it is for your specification though.
Step 2	<i>Actively</i> read through the information. This means reading slowly and taking your time, writing down word or notes as you go.	Reading out loud to yourself might help. Highlighting is something else you might find useful.
Step 3	Make either revision notes, questions, a mind map or index cards or something else.	Remember the techniques: Index it Map it Question it
Step 4	Stop and ask yourself if you really understand it now. NOW LEAVE IT.	If you don't understand you need to get more help. Try explaining what it is you do not understand to someone else. This often works really well! Friends, teachers or family can all help. Try a different source of information. Some on-line videos are very clear.
DAY 2 OR DAY 3		
Step 5	Re-read your original information carefully again. Re-read your cards or mind-map or whatever you have.	You HAVE to top up your memory or you will not learn it well.
Step 6	Test and correct yourself.	You could get someone to test you or have questions.
DAY 3 OR DAY 4		
STEP 7	Test yourself again using your cards or questions or mind-map. Ask yourself if you still really understand it. If you do, great, if not go back to Step 4.	
STEP 8	Get an exam question from a revision guide or past paper or your teacher. Try it and mark it. Work out what a model answer would be.	This is making sure you can use the information you learnt. If you are not sure that you are getting it right, ask a teacher or a friend.
DAY 6 OR DAY 7		
STEP 9	Go over your cards. Do another exam question.	
DAY 12 OR DAY 13 OR DAY 14		
STEP 10	Go over your cards or mind map, etc. Do another exam question, if you think it would help.	If you repeat after leaving a gap, the information is more likely to stay in your long term memory. It should not take that long to top up your memory.