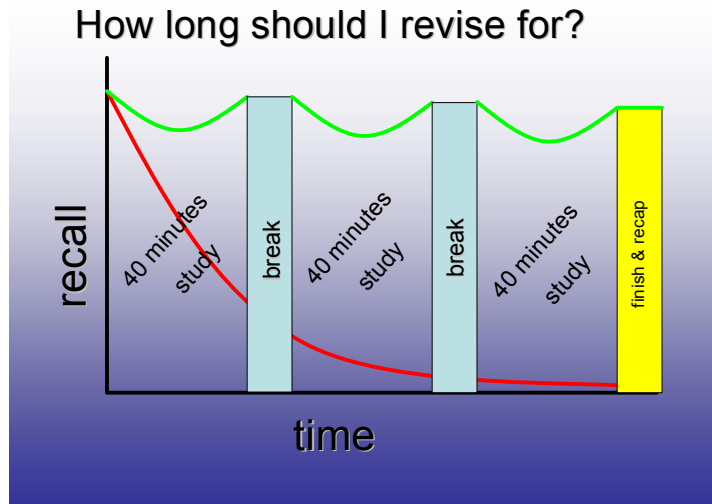


## Memory – A working Guide

- Lots of people think that they have a poor memory. This is not true! It is just that they have never really been taught to understand how their memory works and some simple techniques to improve it. We can learn to have a good memory.
- The human brain is the most complicated and sophisticated structure that evolution has ever produced. Unfortunately evolution takes a long time (10,000 years +). Our brains are pretty much the same as our cavemen ancestors that did not have much use for the use of the written word. This is why for a lot of us it is difficult to remember difficult information just from reading and writing – it's just not natural!
- Nature has designed our brains to forget. This is because if we remembered every little detail of every little thing that we said did or looked at each day then we wouldn't be able to work out what was important from the millions of other useless bits of information that was swarming around our brains. Unfortunately, our brains don't always classify the information needed for GCSE or A-Level exams as "important" which is why we often forget the stuff we have learned in class. It is actually perfectly normal for humans to be forgetful. We just need techniques that teach our brains that GCSE and A-Level information is important and needs to be remembered.
- Our brains are made up of 1,000,000,000,000 brain cells. When we learn something it is because these brain cells make connections with each other. They do this by one brain cell generating electrical energy which travels along the nerve, jumps a gap called a synapse as chemical energy and makes a connection with the next cell. These connections can be very short lived or last a longtime. Developing a good memory is about making the connections between our brain cells as permanent as possible.



## Tips and techniques to improve your memory Using your study time to suit your brain

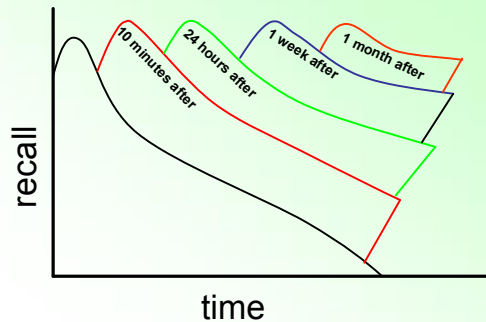


- If we sit for long periods of time without a break we remember the beginning but then our recall quickly falls off.
- Studies of memory show that when we tend to remember the beginning and ends of things, with a dip in the middle. The people who make adverts know this as well which is why they try to get their product on at the beginning or end of a commercial break, often by “sponsoring” soaps or sport programs.
- When we are revising we can improve our memories by having more beginnings and ends. The ideal is 40 minutes before having a short break (5 Minutes). Make sure you get up and walk around/ get a drink / some food as the change in your body movements will signal to your brain that you have reached the end of a study period. After your break come back and start another 40 minutes.



## Regular review

When should I look at it again?



- Have you ever sat down to start your revision, looked at your notes from weeks or months before and not remember doing them?
- This is because our brains work on a “use it or lose it” basis. The connections that are formed when we first learn something are often very weak to start with. If our brain does not think that something is important it will lose the connections that have been made after a short period of time and you won't be able to recall what you have learned.
- The easiest way of strengthening these connections is to regularly review the work that you have done. Review is not time consuming and simply involves briefly going over the work that you have done before – 5 or so minutes per topic should be adequate. You have done the hard work learning it in the first place; you are simply going over it to strengthen the connections in your brain to make sure that you don't forget. This will ensure that most of your lessons go into your long- term memory and mean less revision and stress before the exams.
- Another way of looking at it is to think of your memory as being a bit like a field of wheat. If you walked along through a field of wheat once the stalks would bend for a short period of time before springing back. If you walked the same route several times a path would form and last a long time. Reviewing your work regularly does the same to the pathways in your brain.

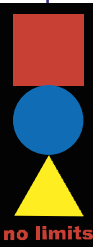
## No Limits Review planner and log

Subject : Science

| Topic                       | Date First Learned      | After school Review      | 24 hour Review           | 1 Week review            | 1 Month review            |
|-----------------------------|-------------------------|--------------------------|--------------------------|--------------------------|---------------------------|
| Defending against infection |                         |                          |                          |                          |                           |
| Pathogens                   | 2 Sept 2008<br>Score: 3 | 2 Sept 2008<br>Score: 5  | 3 Sept 2008<br>Score: 7  | 10 Sept 2008<br>Score: 9 | 10th October<br>Score: 10 |
| Bacteria                    | 23Sept 2008<br>Score: 5 | 23 Sept 2009<br>Score: 6 | 24 Sept 2008<br>Score: 7 | 1 Oct 2008<br>Score: 8   | 23 Oct 2008<br>Score: 8   |
| Viruses                     | 30 Sept 2008<br>Score:  | Score:                   | Score:                   | Score:                   | Score:                    |
| White blood cells           | Score:                  | Score:                   | Score:                   | Score:                   | Score:                    |
| Vaccination                 | Score:                  | Score:                   | Score:                   | Score:                   | Score:                    |
| Antibiotics                 | Score:                  | Score:                   | Score:                   | Score:                   | Score:                    |
|                             |                         |                          |                          |                          |                           |

### Task

This is the No Limits Review planner. It can be stuck into the front of any of your subjects exercise books or folders as a reminder to spend a little time each week reviewing the work that you have done previously. The start of this has been filled in as an example





### Notes of guidance

Regularly reviewing the work that you have done in the past requires self discipline. This planner will help you too plan your time effectively so that you review your work on a “little and often” basis. By doing this it should stay in your long term memory and save you the time of “relearning” everything just before your exams.

### Tasks

(1) Take an exercise book or folder (from any subject) and look at lessons that you learned from:

- (1) A month ago
- (2) A week ago
- (3) Within the last couple of days

How much do you remember? Most people will have good recall of the recent lessons but will struggle with the topics from a month ago.

### E.g Science

- 1) Fill in the topics that you covered in the Left hand column.
- 2) Fill in the date that you first learned that topic
- 3) Give yourself a score out of 10 for how much you recall for each lesson,
  - 1 = Nothing
  - 5 = About half
  - 10 = Everything
- 4) Fill in the other columns as a reminder of when you need to review that work next
- 5) Leave some rows blank so that you can fill in lessons in future.

IF YOU DISCIPLINE YOURSELF TO STICK TO THIS TIMETABLE YOU WILL FIND THAT YOU WILL REMEMBER MUCH MORE AND FORGET MUCH LESS

## Blank Review planner and log

Subject

| Topic | Date First Learned | After school Review | 24 hour Review | 1 Week review | 1 Month review |
|-------|--------------------|---------------------|----------------|---------------|----------------|
|       |                    |                     |                |               |                |
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|       |                    |                     |                |               |                |



### How to improve your memory to do list

- Cover sheet / extension description
- Intro
- Planning time
- Regular review
- Visual Mnemonics
- Other memory techniques?