

3RD SENIOR
 SPECIAL SUBJECTS: SCIENCE
 III TERM



Thanks for the Memory



Try to imagine what your life would be like if you could not remember anything from one day to the next, or from one minute to another.

Our ability to remember plays a crucial part in our existence.

There are 3 different types of memory:

Sensory memory takes the information provided by our senses and stores it very briefly (less than 2 seconds). It acts as a 'buffer', quickly sorting information before it passes to the short-term memory.

Short-term memory records a limited amount of information for periods of less than one minute. The time can be extended by repetition, e.g. repeating a new telephone number until it's been dialled. People can usually store 7 (+/-2) items in their short-term memory. Information can then pass to the long-term memory.

Long-term memory stores information about significant facts, events and skills we learn. It can store information for many years but can often become unreliable with time.



Information is passed on between 3 main types of memory.

Task A

Try to remember your last birthday. Can you remember your first day at school? What is your earliest memory? Which kind of memory are you using here?

Task B

Look at the following set of letters below for 10 seconds.
 Cover them up and try to write them down.

G C S E B T E C G N V Q A S

Which kind of memory are you using here?
 Now try doing the same but this time with letters 'chunked up'.

GCSE BTEC GNVQ AS
 Why do you think this is easier?



Andi Bell, the 2002 world memory champion can memorise the order of every playing card from ten shuffled packs in 20 minutes - all 520 of them! Find out how he does it from the BBC website
www.news.bbc.co.uk/1/hi/health/3152502.stm

The Memory Test

Bring it to class – it will be marked as a Test.



This experiment tests short-term memory by timing how quickly people can find matching pairs in grids of different sizes.

Think of a hypothesis you would like to test.

E.g. Do girls have better short-term memories than boys?

Are people better at remembering colours or patterns?

Experiment Design

What are the variables in your experiment?

How many people are you going to test?

How many times are you going to test them?

Results

Retrieve your results and put them in a suitable table.

What do your results show?

Conclusion

What do your results mean?

Task C

What other factors can you think of that may affect a person's short-term or long-term memory?

Task D

List some ways people try to improve their memories. Which of these do you use and can you think why it works for you.



Task E

Find out about some diseases that cause memory loss, e.g. Alzheimer's.

*Do you want to see
the video again?*



<https://www.youtube.com/watch?v=TUoJc0NPajQ&t>