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| Key Words |
| **Input** – sensory information we receive from our environment.  **Storage** – the retention of information in our memory system.  **Encoding** – turning sensory information into a form that can be used and stored by the brain.  **Acoustic encoding** – the process of storing sound in our memory system.  **Visual encoding** – the process of storing something that has been seen in our memory system.  **Semantic encoding** – the process of storing the meaning of information in our memory system, rather than the sound of a word.  **Output** – the information we recall, output can refer to a behavioural response.  **Retrieval** – the recall of stored memories.  **Short-term memory** – our initial memory store that is temporary and limited.  **Long-term memory** – a memory store that holds potentially limitless amounts of information for up to a lifetime.  **Duration** – the length of time information can be stored in STM and LTM.  **Capacity** – the amount of information that can be stored in STM and LTM.  **Rehearse** – when we repeat information over and over again to make it stick.  **Displacement** – when the STM becomes full and new information pushes out older information.  **Interference** – when new information overwrites older information.  **Amnesia** – memory loss, often through accident, disease or injury.  **Anterograde amnesia** – a memory condition that means new long-term memories cannot be made.  **Retrograde amnesia** – a memory condition that affects recall of memories prior to an injury to the brain.  **Schema** – a packet of knowledge about an event, person or place that influences how we perceive and remember.  **Active reconstruction** – memory is not an exact copy of what we experienced, but an interpretation or reconstruction of events that are influences by our schema when we remember them again.  **Omission** – when we leave out unfamiliar, irrelevant or unpleasant details when remembering something.  **Transformation** – when detaisl are changed to make them more familiar and rational.  **Familiarisation** – when unfamiliar details are changes to align with our own schema.  **Rationalisation** - when we add details into our recall to give a reason for something that may have not originally fitted with the schema.  **Sensory register** – our immediate memory of sensory information  **Primacy** – the tendency to recall words at the beginning of a list when asked to remember it.  **Recency** – the tendency to recall words at the end of a list when asked to remember it.  **Serial reproduction** – a technique where participants retell something to another participant to form a chain.  **Repeated reproduction** – a technique where participants are asked to recall something again and again.  **Reductionism** – the theory of explaining something according to its basic constituent parts.  **Holism** – the theory of explaining something as a whole. |

Memory

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| **Atkinson and Shiffrin (1968) Multi-store Model of Memory.** | **Bartlett’s (1932) Theory of Reconstructive Memory** |
|  | Memories are not exact copies of an event but are an interpretation. Schemas play a major role in this process of active reconstruction. Schemas are built through our experiences and are therefore different for everyone. Schemas can lead to omissions, transformations, familiarisation and rationalisation. |

**\*Use SCOUT to evaluate these theories.**

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| **Amnesia** | **Issues and Debates – Reductionism and Holism debate** |
| Amnesia is a condition characterised by forgetting or memory loss, particularly after a brain trauma.  Anterograde amnesia is the inability to store any new long-term memories following a brain injury. A patient with anterograde amnesia has an intact short-term memory, so can process sensory information in that moment of time. But they are unable to lay down any new memories that last beyond a few minutes. It seems their ability to transfer information from short-term to long-term memory is damaged.  Retrograde amnesia is where a patient who has suffered a brain injury cannot remember information from before the injury. This type of amnesia can be specific to one memory, such as the traumatic incident that caused the injury, or it can be limited to a specific time frame. | Reductionism is the scientific theory of describing something using its basic parts or the simplest explanation. Reductionism is associated with scientific methods such as laboratory experiments, where factors that may explain a behaviour can be isolated and tested under controlled conditions. A theory or study that describes a behaviour by a single, simple explanation can be said to be reductionist.  Holism is the opposite of reductionism, so can be explained as the theory of trying to understand the whole behaviour rather than its parts. To be holistic is to try to understand the whole person. This approach takes into account the fact that many different factors work together to cause a behaviour, and therefore dividing up these factors is not useful in understanding the behaviour as a whole.  Holistic psychologists tend to use qualitative methods and research is seen as unscientific. |

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| **Bartlett (1932) War of the Ghosts** | **Peterson and Peterson (1959) Short-term Retention of Individual Verbal Items.** |
| **Aim:** To test the nature of reconstructive memory using an unfamiliar story.  **Procedure:** 20 participants read a story to themselves twice and were asked  to reproduce it over different periods of time (repeated reproduction).  **Results:** Participants changed the story over each reproduction. The order  and the main themes of the story stayed the same. 7 participants omitted the  title and 10 transformed the title. Much of the content was rationalised.  **Conclusion:** There is very little accuracy in reproduction. Details of the  story are altered to fit the participants own tendencies and interests.  Rationalisation was used by participants to reflect their character and  individuality. | **Aim:** To see if retention was affected by interference during recall intervals. To investigate whether silent or vocal rehearsal would affect recall of items.  **Procedure 1:** 24 students were given trigrams followed by a number which they then had to count backwards from for increasing lengths of time before being asked to recall the trigram.  **Results 1:** With a 3 second interval recall was >50%, with a 15 second interval this dropped to <10%.  **Conclusion 1:** Information decays rapidly in the STM.  **Procedure 2:** 24 students were asked to repeat the trigram aloud while 24 students were not asked to do this, before being asked to count backwards and then recall the trigram.  **Results 2:** Recall in the vocal group improved with repetition, the silent group did not improve with longer repetition.  **Conclusion 2:** When repetition was vocal and controlled the accuracy of recall improved. |

**\*Use GRAVE to evaluate these studies**