Y10 HT2 Memory Knowledge Organiser

Key terms

Key Term	Definition
Encoding	info is changed from one form to another so it can be stored
Storage	how much your memory can hold
Retrieval	process of accessing information from your brain
Sensory memory	large capacity, short duration, coding from 5 senses
Short-term memory	limited capacity, limited duration, coding acoustic (sound)
Long-term memory	large capacity, long duration, coding is semantic (meaning)
Episodic memory	for personal events
Semantic memory	knowledge of the world (facts)
Procedural memory	knowledge of how to do things
Duration	how long something lasts for
Capacity	amount of info stored
Multi-store model	model of memory with 3 separate stores, overemphasis on the role of rehearsal
Chunking	breaking words/letters down into chunks to help memory
Recency effect	words at the end of the list will be remembered as they have been heard most recently
Primacy effect	words at start of the list are remembered as they have been well rehearsed
Serial position effect	describes tendency for people to recall first and last words in a list best. It is the position of the words that influences their likely recall
Re-constructive Memory	fragments of stored info is reassembled during recall as the gaps are filled in using experience
Interference	forgetting may occur if two memories compete with each other
Context	situation in which something happens, can act as a cue for recall
False Memories	a memory which did not happen but which feels is a true memory

Processes of Memory

Encoding – changing info so it can be stored
Different **types of encoding** include -
Visual – some memories are stored visually
Semantic – stored by meaning e.g. you know the word elephant and understand what it is
Acoustic – memories stored by how they sound, e.g. favourite songs
Tactile - is a memory of what things feel like
Olfactory – memory for smells

Process of memory can be described as

1) Encoding – changing info so it is stored
2) Storage – keeping info in your brain for a period of time
3) Retrieval – info is located and brought back

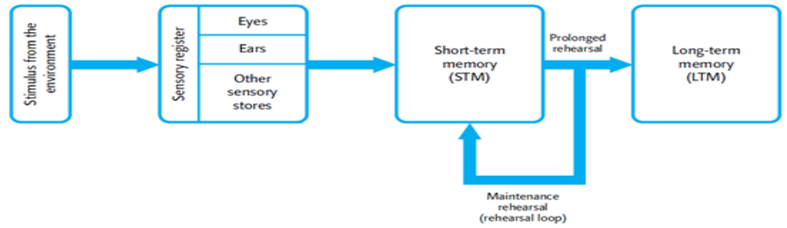
Retrieving memories –
Recognition – e.g. doing multiple choice questions or seeing someone and knowing who they are
Cued recall – when you are trying to remember something which is on the tip of your tongue and then someone helps you be reminding you it starts with the letter 'B'
Free recall – when you have no prompts

Long Term Memory – types

Episodic – memory for events in your life
Semantic – memory of what things mean
Procedural – memory of how to do things
Declarative / Non-declarative – declarative is your ability to consciously recall information and therefore episodic and semantic memories are described as declarative and procedural is non-declarative

Structures of Memory

Multi-store Model



	Sensory	STM	LTM
Encoding	From senses	Acoustic (sound)	Semantic (meaning)
Capacity	Very high	5-9 items	Unlimited
Duration	Very brief	Less than 30 secs unless rehearsed	Lifetime

Role of rehearsal – you have to go over and over things to keep them in your STM, if you rehearse enough they will transfer to your LTM

Evaluation
Supporting research for the evidence of memory stores – Baddeley's study clearly supports here!
Model is too simplistic – in fact we have more than one LTM (see types of LTM)
Stretch evaluation:
Artificial materials – word lists used in research makes the research lack validity

Primacy and recency effects in recall
Primacy effect – words at the beginning of a list are remembered more (rehearsed so in LTM)
Recency effect – words at the end of the list are remembered more (heard recently so in STM)
Murdock Serial Position Curve (Key Study)
Aim – to see if words are affected by the location in a list
Method – P's learned 20 word lists with 10-40 words on them, recalled after each list
Results – recall related to the position of words, high recall for the first words (primacy) and last words (recency)
Conclusion – shows the serial position effect and supports the MSM stores
Evaluation:
Controlled lab study – high level of control so it could be concluded position of words determined recall
Artificial task – word lists were used which is only one type of memory, so study lacks validity
Stretch evaluation:
Supporting research – some amnesiacs can't store LT, which shows the primacy effect is related to LTM

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Memory as an active process		Factors affecting the accuracy of memory		
Theory	**Study**	**Interference**	**Context**	**False Memories**
People rebuild memory as an active process **Memory is inaccurate** – it is not an exact reproduction of experiences **Reconstruction** – record pieces of information recombined to tell the whole story **Social and cultural influences** – expectations come from the world/culture we live in, and affect storage and recall **Effort after meaning** – we focus on the meaning of events and make an effort afterwards to make sense of fragments of memory **Evaluation** **More realistic research** – reflects how we use memory in everyday life because it uses a story not word lists **Some memories are accurate** – not all recall is reconstructed as some memories of the story are accurate **Real life application** – explains problems with eyewitness testimony as people do not always recall accurately	**Bartlett – War of the Ghosts (Key study)** **Aim** – to see how memory is reconstructed when recalling an unfamiliar story **Method** – the War of the Ghosts story was read by one participant and recalled after 15 mins, then read by another participant and recalled and so on **Results** – P's changed the story to fit cultural expectations, leaving out unfamiliar information **Conclusion** – we use our knowledge of social situations to reconstruct memory **Evaluation** **Lacks control** – P's were not told accurate recall was important, which could have affected results **Results were biased** – Bartlett analysed the recollections himself, so we cannot fully trust the conclusions **Story was unusual** – story was unusual so may not reflect everyday memory processed	Interference is one explanation of forgetting. Forgetting may occur if two memories compete with each other, especially likely if the two memories are quite similar. **McGeoch and McDonald's Study** (optional study) **Aim** – to see the effect of doing two activities on accuracy of memory **Method** – learned a list of 10 words and then another list of varying types e.g. synonyms and antonyms **Results** – memory was affected by the second list, most of all if the second list had similar meaning (synonyms) **Conclusions** – shows interference affects accuracy of memory and is strongest when you try remember two similar things **Evaluation** **Controlled research** – high control e.g. counterbalancing was used to reduce bias **Artificial task** – it does not reflect real life memory as we don't often have to remember very similar words **Not really forgetting** – it may be information is not forgotten but just cannot be accessed so isn't actually forgotten	Certain triggers (cues) can be encoded in memory at the time of learning. Context can increase the accuracy of memory. **Godden and Baddeley** (optional study) **Aim** – to see if context improved recall **Method** – divers listened to and recalled words in the same or different settings on the beach and underwater **Results** – recall was highest in the same environment for learning and recall **Conclusions** – context of learning acts as a trigger or cue, improving the accuracy of memory **Evaluation** **Artificial task** – lists of words were used, when more complex materials were used better recall was found **Recall was short term** – p's recalled the words almost immediately unlike in everyday life **Similar context** – context only acts as a cue if context at learning and recall are very similar, which rarely happens	A false memory is a memory for something that did not happen but which feels like it were a true memory **Loftus and Pickrell's study** (optional study) **Aim** – to see if false memories could be created in p's through suggestions **Method** – four stories about childhood events were read where three were true and one was false (shopping mall) **Results** – 6 / 24 (25%) of p's recalled the false story fully or partially **Conclusion** – imagining an event can implant a false memory in a person, reducing the accuracy of memory **Evaluation** **Artificial task** – harmless events could be implanted easily but traumatic events may not, so conclusions are limited **Ethical issues** – p's may be left with implanted false memories which lingered after the study, causing distress **Real-world applications** – research has implications for eyewitness testimony as police questioning could accidentally implant false memories