



Memory

3 Kinds of Memory

- Episodic Memory
- Semantic/Generic Memory
- Procedural/Implicit memory



Episodic memory

- Memory that consists of events that people have experienced or witnessed
- Flash bulb memory-
Able to recall great detail of the event



Generic/Semantic Memory



- General knowledge usually not able to remember when we acquired the information
- E.g.. Washington was our first president

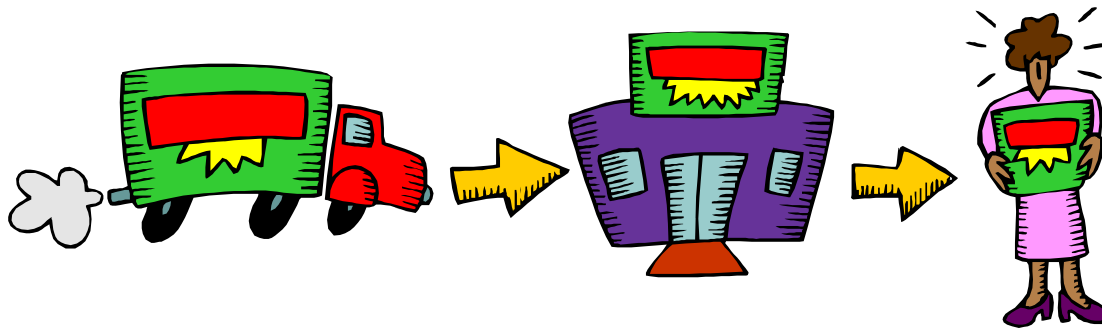
Procedural/Implicit Memory



- Skills or procedures we have learned..once the skill has been learned it usually stays for many years
- E.g. How to make a sandwich or ride a bike or swimming

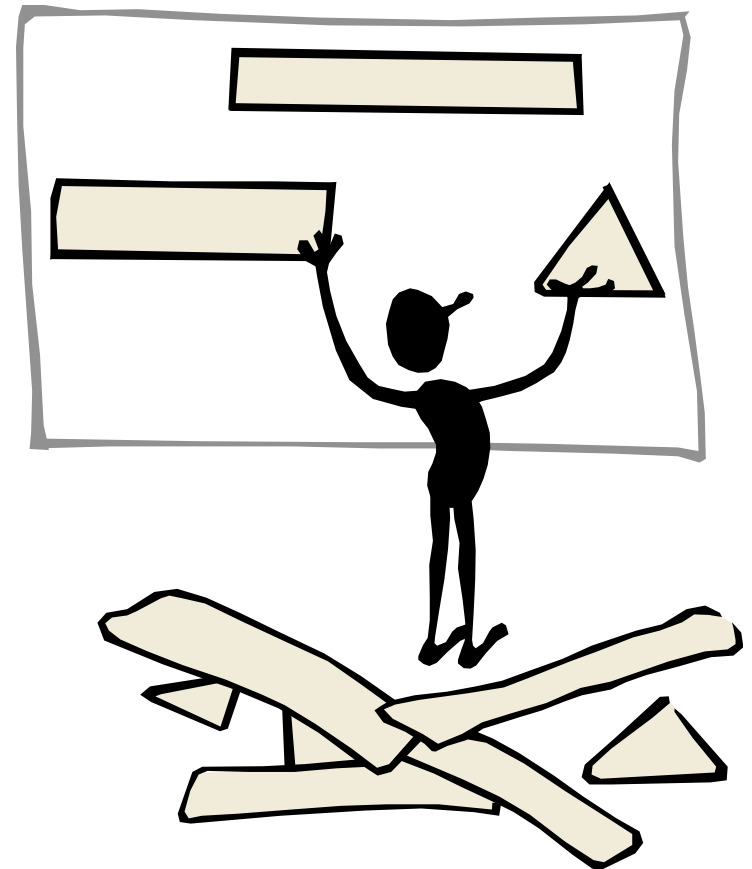
3 Processes of Memory

- Encoding
- Storage
- Retrieval



Encoding

- The translation of information into a form that can be stored
- **Visual codes**-picture it in your mind
- **Acoustic codes**-hear it
- **Semantic codes**-make sense of it



Storage



- Maintenance of encoded information over a period of time-stored
- **Maintenance rehearsal**-Repeating over and over to rehearse
- **Elaborative rehearsal**-Relate to info already known
- **Organizational systems**-The more organized the storage the better chances for retrieval

Retrieval

- Locating information and returning it to conscious thought
- Retrieval of info stored previously like a computer retrieves and locates files

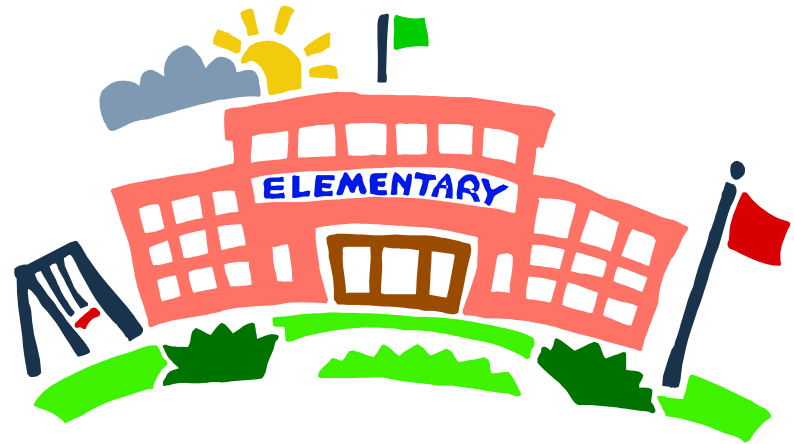


Bob's wine cellar

Context-Dependent Memory

Retrieval continued

- Dependent on the place where the memory was stored i.e.. the environment
- E.g.. Visiting Elementary school and some memory from that experience comes back



State-Dependent Memory

Retrieval continued



© Ron Leishman * www.ClipartOf.com/441875

- Easier to retrieve these type of memories when the same emotion or mood is achieved that is similar to when the memory was encoded
- E.g..Happy times triggers memories of other happy times

On the Tip of the Tongue

Retrieval continued

- Sometimes we are so close to retrieving information it is said to be on the Tip of the tongue

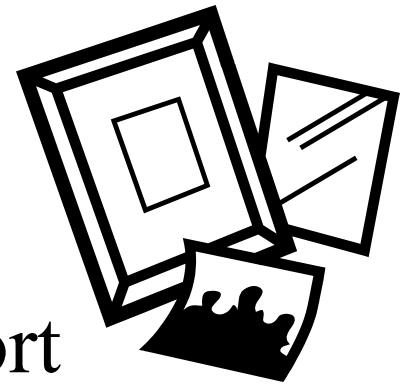


Three Stages of Memory

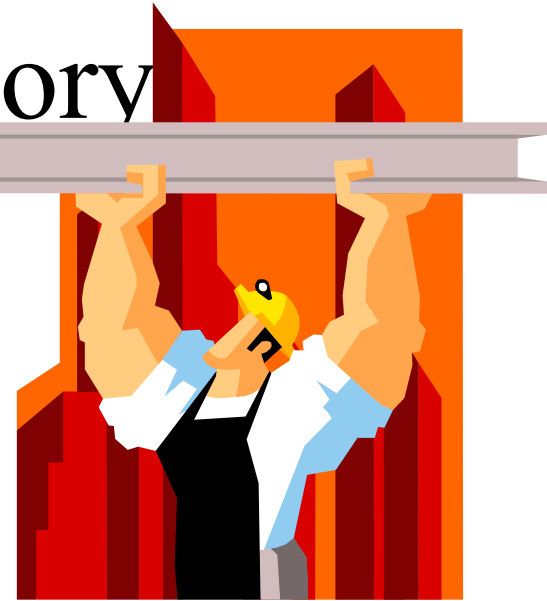


Sensory Memory

- First stage of memory-initial recording of information through our senses
1. Iconic memory -Snapshots very accurate photographic memories short period of time
 2. Eidetic Memory- Visual memories over a long period of time
 3. Echoic Memory-Mental traces of sound (acoustic easier to remember than visual)



Stage 2: Short-Term Memory aka Working Memory



- Information is transferred from the Sensory memory to this second stage of memory processing
- Consciously thinking about the information here
- Rapidly begins to fade after several seconds so attention must be paid to the information to pass it along further to the LT memory

Memory cont.



- **Primacy effect**-recall initial items in a sequence
- **Recency effect**- Tendency to remember the last items of a sequence
- **Chunking**- organization of units into manageable familiar units
- **Interference**-When new information takes the place of old information in the working memory

Long-Term Memory

- Third and final stage of memory
- No limit to the capacity of long-term memory (infinite)
- We tend to remember or reconstruct memories based on our life experiences and our view of the world



Schemas

- An idea or mental framework
- Organizing bits of information into knowledge





Basic Memory tasks

- **Recognition**-Identifying objects or events that have been encountered before
- **Recall**-Bring back to mind
- **Relearning**-Relearn things forgotten e.g..
Algebra 25 years later



“Stock is Best!”

Forgetting

- Repression- Pushing painful, unwanted memories into the subconscious mind
- Amnesia- Severe memory loss due to brain damage

Amnesias

- Infantile Amnesia-
forgetting early infancy
memories are forgotten.g.
birth
- Anterograde Amnesia-
Memory loss that prevents
a person's brain from
forming new memories
- Retrograde Amnesia-
Forgetting the period of
time that leads up to a
traumatic event



Improving Memory



- Drill & Practice-Going over and over again (maintenance rehearsal)
- Relate things to What you Already Know (elaborative rehearsal)
- Form Unusual Associations
- Construct Links between already established patterns e.g. learning languages
- Mnemonics devices-Systems for remembering information

**Encoding through
senses**

Process

Storage

Process

**Cognition
Thinking**

20-30 seconds

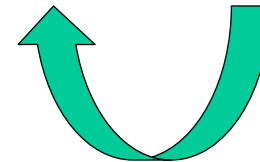
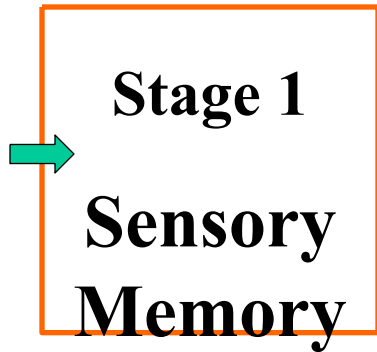
Stage 2

**Working
(Short-
term)
Memory**

Stage 3

**Long-
Term
Memory**

**S
E
N
S
E
S**



**Retrieval
Process**