1. What is your earliest childhood memory? About how old were you?
TAKE A MOMENT TO RECALL YOUR FIRST/EARLIEST MEMORY...

Class Similarities

1. What TYPE of memories are recalled?

2. What AGE range are MOST memories recalled?

3. What is required for an individual to store these types of memories?
2. Write down the names of the seven dwarves from Disney’s *Snow White*. 
### Recall/Recognition Exercise

**Seven Dwarves**

<table>
<thead>
<tr>
<th>Grouchy</th>
<th>Dumpy</th>
<th>Shy</th>
<th>Scrubby</th>
</tr>
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### Recall/Recognition Exercise

#### Seven Dwarves

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1. Which way is Lincoln facing on a penny?
2. Is In God We Trust on the front or the back?
3. Is the word Liberty on the right or left of Lincoln?
Which Penny is the Correct Penny?
1. What Color was Mr. C’s shirt/jacket?
2. Was he wearing dress pants or jeans?
3. Was he wearing glasses?
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THE NATURE OF MEMORY
MEMORY PROCESS

Encoding

Storage

Retrieval
**Step 1: Encoding**

- Sensory info is put into memory codes
- The encoding does not *perfectly* record events/ideas.

**Acoustic**
What is your favorite song?  
(Can you hear the lyrics/music?)

**Visual**
What is your favorite TV show?  
(Can you see the characters?)

**Semantic: General Meaning**
Hay/Pig/Key/Dog  
(Can you give this list meaning?)
Step 2: STORAGE

- Keeping info over a period of time.
SENSORY MEMORY

Holds sensory info for only 1 second.

Visual
Auditory

Tactile
Chemical (taste/smell)
Short Term memory

Temporary Storage
(1 hour - 2 weeks)

Attention to sensory info is the only way to store in the short term.

Capacity: 7 +/- 2

Also referred to as working memory.
LONG TERM MEMORY

Permanent storage

Episodic Memory: Memories of events

Procedural Memory: Skill based memory

Semantic Memory: Memory of general knowledge

Capacity: Thought to be unlimited.
STEP 3: RETRIEVAL

- Bringing stored info to consciousness (awareness)

“Tip-of-the-tongue” phenomenon makes you aware of the retrieval process.
**RETRIEVAL TYPES**

**Recall**
(what you are required to do to take an essay exam)

**Recognition**
(what you are required to do when taking a multiple choice exam)
Leonardo DiCaprio

Justin Timberlake

Ryan Gosling

Ryan Phillippe
Denzel Washington
Barack Obama
Forrest Whitaker
Jamie Foxx
Flashbulb Memory
Abnormal Conditions of Memory

Perfect Autobiographical Memory

- Abnormally detailed encoding of events

Amnesia

- Blocking of old memories or inability to form new memory.
- **Psychogenic** (caused by a psychological trauma)
- **Neurological** (caused by TBI, virus, or other physical condition)

Alzheimer’s Disease

- Common form of dementia (decline in cognitive function)
- Memory loss is the most significant symptom of Alzheimer’s
FALSE MEMORY

Define

1. What is false memory?
2. Using one of Elizabeth Loftus’s stories, describe the impact of false memory.

Statistics

3. Describe at least one statistical finding regarding false memory.

Ethics

• 4. What important ethical questions should be remembered to consider when it comes to false memory?
IMPROVING MEMORY TECHNIQUES

Unit II-part II: learning, memory & intelligence
Mnemonic Devices: Acronyms (STM)

**Description:** Mnemonic Devices are techniques for using associations to memorize and retrieve information.

See application of “Acronyms” to the right →

**Never Eat Soggy Waffles**

**ROY G. BIV**
Mnemonic Devices: Method of Loci (STM)

**Description:** Mnemonic Devices are techniques for using associations to memorize and retrieve information.

See **application** of “Method of Loci” to the right

**Application:** also called “memory palace” or “mind palace” technique. Physically walk from place to place while attempting to memorize information. Then when it’s time to recall, mentally retrace your steps and the knowledge will follow.
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Mnemonic Devices: Rhymes (STM)

Description: Mnemonic Devices are techniques for using associations to memorize and retrieve information.

See application of “Rhymes” to the right.
Mnemonic Devices: Mental Pictures (STM)

Description: Mnemonic Devices are techniques for using associations to memorize and retrieve information.

See application of “Mental Pictures” to the right.
MAINTENANCE REHEARSAL (STM)

Description: Mental Repetition

• Helps maintain info in Short Term Memory

Application: mental repetition of a phone number

2498567
CHUNKING (STM)

**Description:** Grouping Information

- Helps maintain info in short term memory

**Application:** Group a list of items to be memorized into categories.

How could you make this list more manageable for memorization?
**Elaborative Rehearsal (LTM)**

<table>
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<td>• Helps maintain info in Long Term Memory</td>
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<td>• The more connections, the more consolidated the info will be in Long Term Memory</td>
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**Application:** You may connect the 21st amendment with knowledge you already have—you have to be 21 years old to consume alcohol. That association may help you remember the amendment.

Age 21 to legally drink
SENSORY & EMOTIONAL ASSOCIATIONS (LTM)

**Description:** Form of Elaborative Rehearsal

- The more connections, the more consolidated the info will be in Long Term Memory

**Application:** Color-coding your notes, or studying with music on will help you make a sensory or emotional connection.
Description: Both “Avoiding Interference” and “Distributed Practice” are methods for protecting memories.

See applications to the right →

Avoiding Interference

• Overlearn it!
• Don’t study similar subjects together (History/Government)

Distributed Practice

• Studying in one period of time increases interference.
• You lose information from memory after 1 hour of presentation.