



LEARNING ACTIVITY – Memory and Mnemonics

Topic

Study Skills

Type of Activity (Virtual/In-person)

In-person

Recommended Grade Level(s)

9-10

Time Needed

30 min.

Group Size

Small group to whole class

Materials Needed

- Pens/pencils
- Handout: “Memory Test” (attached)
- Handout: “Three Ways to Improve your Memory” (attached)
- Handout: “Practice with Mnemonics” (attached)

Social Emotional Skill(s) to Integrate

- Self-Awareness
- Self-Management
- Social Awareness
- Relationship Skills
- Responsible Decision-Making

Space Needed (if in-person)

Meeting space or classroom

Description of Activity

Students will learn a few quick tips to help improve their memory.

Students will understand...

Enduring Understanding(s)

Organizational and study skills lead to success.

Students will be able to...

Skills acquired

Use tools and learning strategies to manage attendance, assignments, and tests.

Preparations

Make copies of the “Memory Test” handout (attached), “Three Ways to Improve your Memory” handout (attached), and “Practice with Mnemonics” handout (attached).

Instructions

1. Explain to students that research has shown that long-term memory is enhanced when students engage in retrieval practice. The memory of names, facts, information, dates, events, and other things are crucial in our fast paced, information-dependent society and today you will learn a few tips to help you.
2. Pass out the “Memory Test” handout. Explain to students that you will slowly read the following list. Ask students just to listen and to not write anything down. Let students know that once you are done talking then they can begin writing down as many words as they can remember, in no particular order, on Part I of their handout.

Word List for Part I

dog	horse
strawberry	carrots
cow	apple
onion	chicken
orange	corn
squash	grapefruit
rat	celery
plum	

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3. Read back the 15 words for students to check their score. Ask students how they were able to remember the words. Many students will have used the techniques below.
4. Pass out the “Three Ways to Improve your Memory” handout. Review with students the three ways to improve their memory quickly
 - You can use your visualization skills to picture the words in your head and create a scene. For instance, in the last list, you could picture each animal eating a different food.
 - You could organize the words into like groups. In the last list of words, you could sort the food from the animals.
 - You can use repetition and say the words over and over in your head. You could create a word list in your head. As I read a new word, repeat the words I said previously.
5. Ask students to turn their handout over as you read the next list of words. Again, ask that students listen until you are finished speaking and then they can flip their paper over and begin writing the words that they remember, in no particular order, under Part II on their “Memory Test” handout.
6. Slowly read off the Word List Part II across each line to include one of each category.

Word List for Part II

Sea Creatures	Kitchen Utensils	Tools
Shark	Plate	Drill
Starfish	Cup	Nail
Tuna Fish	Sugar Bowl	Wrench
Eel	Knife	Saw
Crab	Drinking Glass	Screwdriver

7. Read back the 15 words for students to check their score. Ask students to share how they were able to remember the words this time.
8. Pass out the “Practice with Mnemonics” handout and let students know that now they will be focusing on mnemonics and that they have probably learned a few mnemonics in school. Ask students to pair up and complete the handout. Allow students to share any acrostics or acronyms that they came up with if time allows at the end.

Reflection Activity, Questions, Discussion Prompts

- What are some other strategies or techniques to improve memory?
- How did trying new techniques help or hinder memorizing the words?
- Why is memory important in your everyday life?
- How could you use these techniques in school or at a job?

Variations for this Activity

None



Three Ways to Improve your Memory

Visual Images

A visual picture can cue a strategy or represent a concept.

For example, suppose your student needs to remember that our First Amendment rights are free speech, religion, the press, and the right of assembly. Since it is the First Amendment and one rhymes with sun, use a sun as a visual cue. Draw a happy sun with legs and arms, singing. Place the word RAPS in a talk bubble. RAPS is a mnemonic to remember the freedoms of Religion, Assembly, Press, and Speech. (Richards, 2003, p. 198).

Pulling It All Together

Organizing and ordering information can significantly improve memory.

Imagine, for example, how difficult it would be to remember a random list of 62 letters. On the other hand, it would not be difficult to memorize the first sentence in this paragraph (consisting of 62 letters). Similarly, learning a large amount of unconnected and unorganized information from various classes can be very challenging. By organizing and adding meaning to the material prior to learning it, you can facilitate both storage and retrieval. In other words, you can learn it better and recall it easier. This can mean organizing material on paper, such as when you make an outline or idea web, or simply organizing material in your memory, such as learning it in a particular order or making intentional associations between ideas.

Repetition

Multiple repetitions of the information provide rehearsal but doing so may bore students. When bored, the brain can go into a pattern like the "screen saver" mode on your computer monitor. The student may not pay attention to what he is repeating. Therefore, using strategies with humor, movement, songs, and other forms of novelty are critical in enhancing the value of the repetition.

As an example, consider the task of learning five state capitals:

- Practice saying the capital and the state together, as in "Sacramento, California; Columbus, Ohio" etc. This helps create the association between the two words.

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- Develop silly mnemonics to help remember which capital goes with the state. For Ohio, sketch a picture of a person saying, "oh, hi, oh Columbus." This associates the word "Columbus" with the word "Ohio."
- Practice matching flash cards of capitals to state names, and states to capitals.
- Perform a motor activity such as jumping on a small trampoline or playing catch while saying the city in response to hearing the state, or vice versa.
- Create a rap or jingle that repeats each state and its capital.

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Memory Tests

Part I.

After listening to the list, see how many you can remember and write them here. They do not need to be in any particular order.

After the list is re-read, write the number of words you remembered: _____

Part II.

Write as many words as you can remember. Try using a memory technique we just discussed.

How many words did you remember this time? _____



Practice with Mnemonics

Acrostics

Acrostics are creative rhymes, songs, poems, or sentences that help us to remember. To write an acrostic, think of a word that starts with the letter of the idea you want to remember. Sometimes you can rearrange the words if necessary, to form a sentence. At other times, it is necessary to keep the words in order. The more unusual the sentence, the easier it is to remember.

Here is an example: Classification in biology: Kings Play Cards on Fairly Good Soft Velvet (Kingdom, Phylum, Class, Order, Family, Genus, Species, Variety)

Create an acrostic for the planets in the solar system. Keep the words in order, from closest to the sun to farthest from the sun (Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto).

Acronyms

To make your own acronyms, list the items you wish to remember. Use the first letter of each word to make a new word. The new word you invented can be an actual word or an invented word.

Here is an example: The Great Lakes: HOMES (Huron, Ontario, Michigan, Erie, Superior)

The following are the excretory organs of the body. Make an acronym to remember them. Rearrange the words if necessary:

Intestines, Liver, Lungs, Kidneys, Skin

Write down any acrostics or acronyms that you know. Share them with your group.