

High School Science Virtual Learning

Forensic Science Human Memory April 27, 2020



High School Forensic Science Lesson: April 27, 2020

Objective/Learning Target:

Students will be able to assess human memory and how it relates to witnesses



On your own sheet of paper answer the following:

- 1. What is the difference between these two photos?
- 2. If you were called to be an eyewitness to a crime, are you confident in your memory? Why?





- 1. There was a missing tall bush on the right picture behind the stone statue.
- 2. Answers may vary but can include:
 - a. Yes, because I am trustworthy
 - b. Yes, because I am not easily fooled
 - c. Yes, because I notice everything
 - d. No, because I know I don't pay attention
 - e. No, because I know I am human



Lesson Activity:

Directions: You will be watching this show clip, making you a witness to a crime scene. Then you will watch an analysis of what just happened with your memory. While watching, you will need to answer the practice questions as you go along.





Practice

You will use the desert crime video from the activity on slide 5 to answer the following questions.



Practice Questions

- 1. What color was the car that got hit? _____ Were you correct? _____
- 2. How fast do you think the car was going when it bumped into the other car?_____ Were you correct?_____
- 3. Why did the witnesses guess so differently?
- Did you see the driver blow through a stop sign right after the accident?
 Were you correct?
- 5. Are human memories perfect? Why or why not?



Answer Key

Once you have completed the practice questions check with the work.

- 1. Blue, (yes or no)
- 2. 20 miles an hour (yes or no)
- 3. The words that the officer used to interview the witnesses, like smash vs bumped
- 4. No, it was a yield sign (yes or no)
- 5. No, The memory changes as you hear conflicting information from trustworthy sources, and memories formed under stress are more vulnerable.



More Practice

You will use the "Art of Remembering" video from the activity on slide 5 to answer the following questions.



More Practice Questions

- 1. What are retrieval cues?
- 2. What is Context-Dependent Memory?
- 3. What is the recency effect?
- 4. What is the term given when memories after a while are no longer easily brought back?
- 5. What is source misattribution?



Answer Key

Once you have completed the practice questions check with the work.

- 1. Cues the brain that associate something stored in a memory.
- 2. Return to context, situations, or place in order to remember something.
- 3. Last words, images, ect. Linger in working memory due to being the most recent.
- 4. Retrieval Failure
- 5. Forgetting or incorrectly recalling the source of a memory



Additional Resources

If you would like to explore more on how faulty human memory is in and out of the courtroom here are a few resources:

Article on fallacy of human memory

How reliable is eyewitness testimony?

Memory Expert TED Talk