

CURIOSITY AT HOME

WHAT'S ON THE TRAY

Can you remember the color of the shirt you wore yesterday? What about the food you had for lunch last Tuesday? If you can, chances are you have a pretty good memory, which is our brain's ability to collect and store information to be used at a later time. In this game, you and a partner will test out your short-term memory.

MATERIALS

- Tray or large plate
- 15–20 small random objects from around your home (ex. pencil, hair tie, small toys, etc.)
- Small cloth, like a kitchen towel or bandana
- Stopwatch or clock
- Paper and something to write with

INSTRUCTIONS

- Gather your small objects and place them onto your tray or large plate. For now, be sure to keep these items hidden from your partner.
- Cover the items on the tray using the cloth.
- Have your partner sit in front of the covered tray. Explain that you will remove the cloth and give them some time to review the items they see. As they look over the items they will need to try and remember as many as they can, without writing anything down.
- Remove the cloth from the tray and give your partner 1 minute to view the different objects.
- Once the 1 minute is over, cover the objects back up.
- With the tray still covered, set a timer for 30 seconds and have your partner try and write down as many objects from the tray as they can remember. How many items did they remember? What were they missing?
- Return the first set of small objects and have your partner collect 15–20 new items; no peeking as they get set up! Repeat the game with you trying to remember what's on the tray.

Experiment continued on next page...



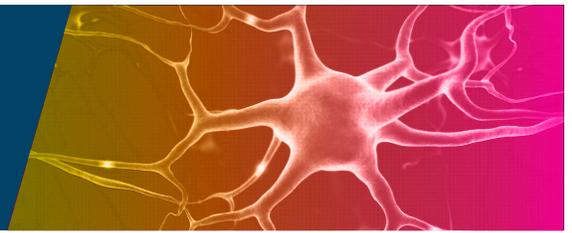
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EXPLORE MORE

For a bonus challenge, have your partner close their eyes while you remove one of the objects from the tray. Next, have your partner open their eyes and see if they can name the object that is now missing.

A mnemonic device, sometimes called a memory device, is a tool used to help improve memory. There are many different types of mnemonic devices such as acronyms, creating rhymes or stories, and organizing items into groups. For example, if some of the objects include a penny, a toy car, a paper clip, and a twist tie, you might make up a story like “A copper colored car named Clippy was caught in a twister....” Try playing while testing out one of these strategies.

DID YOU KNOW?

The process of memorization follows three stages.

1. The process begins with sensory memory, in which new information is first noticed, for example seeing a car drive by or smelling a flower. Sensory memory typically only lasts for a couple seconds.
2. This information is then encoded by the brain, moving it to short-term memory. Short-term memory is remembered longer than sensory memory, but still usually under a minute or so without rehearsal. As you play “What’s on the Tray”, your ability to recall random items found on the tray requires you to encode the sensory memory of the different objects you saw and then use your short-term memory to list the items you remember.
3. Finally, information can be further encoded by the brain and saved for long periods of time, making it long-term memory.



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