**Activity Goals**

**Station 1: The brain.** See the document “Brains, brains, brains.” One person will staff this station, which has brain specimens (sheep, rat, mouse, human) and brain models that are props for talking to visitors about the brain and how it controls our muscles and behavior. We can talk about things like what parts of the brain control your thinking (the prefrontal cortex), what parts of the brain register what you see and hear (sensory cortices), and what parts of the brain are important in memory (hippocampus).

**Station 2: Attention and Memory activities.** The inner lab space is limited to a certain number of visitors per volunteer, so it will depend on how many volunteers we have and how long visitors stay at the activity. Visitors can wait to enter the lab space at the entrance, and this is a good opportunity to prepare and engage them prior to the memory activity. If people are waiting, a volunteer can tell them that this will be a lab on attention and memory, then engage them with the following example questions:

- **What do we use to see?** (eyes, brain) What do we use to know what we see? (brain) What do we use to remember what we see? (brain)
- **How do you know what you are seeing?** How do you remember what you are seeing?
- **What does it mean to pay attention?** Can you remember things that you don’t see? Can you remember things that you don’t pay attention to? What is it like to have a new brain?
- **How do you know what you are seeing?** How do you remember what you are seeing?
- **What makes it easier or harder to pay attention and find the shared picture?** Is it easier/harder/faster/slower when you are competing compared to just looking?
- **What about when you are distracted by someone touching your arm or talking to you?**
- **What kinds of things would be more distracting than others?**

**“Memory Trays” – how much can you remember?** For this activity, one volunteer can work with 1-3 children (plus associated adults). Explain to the visitors that you have a tray of objects (like small toys and everyday items) and you want them to pay attention to them so they can remember as many of the objects as they can. You will give them 30 seconds to look at the tray, and then they can see how many objects they remember. For younger children (7 or younger), 10 objects works well to start; older children could potentially start with more.

- **Older kids can compete against each other by writing down how many objects they remember, then comparing to the actual tray.**
- **Younger kids (non-writing) can work together, taking turns to call out items while you write it on a list for them.** Alternatively, younger kids may want to have their parents write for them.
- **You can talk about “mnemonic devices,” tricks to improve your memory.** These can include chunking (sorting into categories, making it easier to remember items by remembering categories) and making up a story with the items.

**Variations on this activity:**

- **Give visitors 30 seconds to look at the tray, move the tray behind the counter and add/remove something to it, scrambling the items. Who knows what was added/removed?**
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**Ending the lab...** At some point the visitors need to leave, maybe because they are finished, and maybe to make room for others to enter. As a wrap up, you can ask, “Do you have any more questions or ideas about _____?” Invite the visitors to write on our feedback poster anything they learned or enjoyed. The feedback poster will be placed near the exit. Offer a freebie to the visitors (we’ll have brain pencils and stickers until they run out) in exchange for giving us feedback.