Think about your brain…What is its purpose? What features does it have? If you can, try to break brain function down into small, discreet parts. Record them on the white board or poster.

**The Brain in the Living Systems Gallery**

Spend some time observing organisms in the Living Systems Gallery. Use your map to find the corresponding exhibits. For each:

* Describe the specific behaviors these organisms exhibit.
* Use your new knowledge of brains and what they do to make inferences from these behaviors about what **features** and **components** of a nervous system you think these organisms must have.

Be sure to consider:

* + What does this organism perceive?
  + How does this organism show preferences?
  + How does this organism respond to the environment?
  + Does this organism do anything else?

|  |  |  |
| --- | --- | --- |
| **Exhibit/Organism** | **Behavior Observations** | **Features or Components of a nervous system** |
| A. Plankton Ballet |  |  |
| B. Mosquitos |  |  |

|  |  |  |
| --- | --- | --- |
| C. Mice |  |  |
| D. Mimosas |  |  |
| Your Choice! |  |  |

**Discussion Questions:**

Consider the behaviors that you observed. Which do you think are homologous to something you have seen in human behavior? Make an argument and explain how you would test it.

If you were going to use these organisms as a **model system** to study aspects of neuroscience, what types of behaviors or phenomena do you think each organism might be appropriate for?