SCIENCE LAB SHEET

Making a Model of a Neuron

Name: _____ Date: _____ Grade: _____

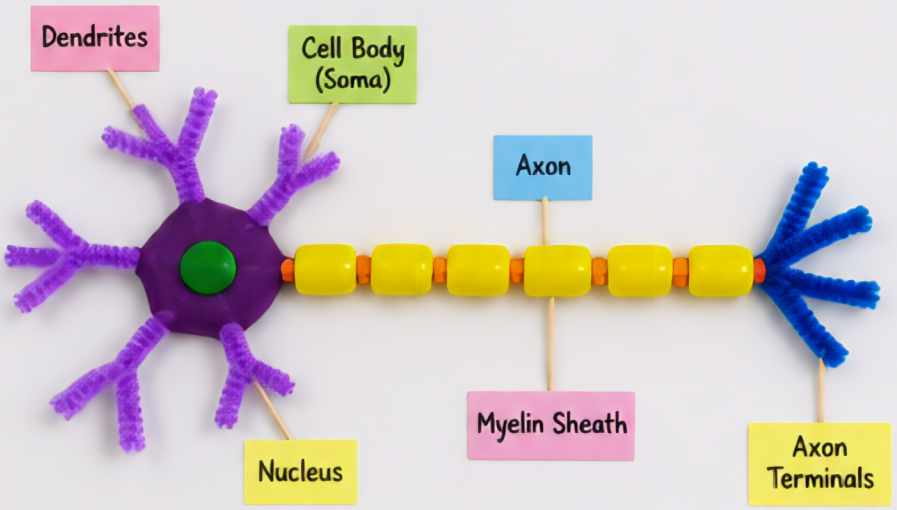
EXPERIMENT GOAL

To create a labeled model of a neuron using craft materials and identify the main parts and their functions.

MATERIALS

- Colored clay or playdough
- Pipe cleaners
- Beads (large pony beads work well)
- Construction paper or cardstock
- Markers or colored pencils
- Toothpicks or small sticks
- Glue or tape
- Scissors
- Labels (sticky notes or paper pieces)

EXAMPLE MODEL



PROCEDURE

1. Review the parts of a neuron and their functions (see chart).
2. Use clay or playdough to form the cell body (soma) and add a small piece for the nucleus.
3. Use pipe cleaners to make the dendrites and attach them to the cell body.
4. Build the axon using a pipe cleaner or row of beads.
5. Add beads or clay segments around the axon to represent the myelin sheath.
6. Add branching pipe cleaners at the end for the axon terminals.
7. Label each part of your neuron using the labels provided.

PARTS OF A NEURON

Dendrites	Receive signals from other neurons.
Cell Body (Soma)	The center of the neuron that keeps the cell alive and processes signals.
Nucleus	Controls the cell's activities.
Axon	Carries signals away from the cell body to other neurons or cells.
Myelin Sheath	Protects the axon and helps signals travel faster.
Axon Terminals	Pass the signal to the next neuron or cell across a tiny gap called a synapse.

REFLECTION

1. What is the job of a neuron? _____
2. Which part of the neuron do you think is most important? Why? _____

_____

3. What did you enjoy most about making your model? _____

_____

EXTENSION IDEA

Research how neurons send signals in the body. Draw a diagram or write 3 facts you learned.