

SfS Away from the Classroom!

AP19: Neurons (Recommended for Grades 6-8)

Please use the following resources to learn about neurons (nerve cells).

Watch this Video: https://www.youtube.com/watch?v=1uG0AEnoLDU

Answer these questions:

- What are the main parts of your nervous system?
- What is a neuron?
- There are 2 directions messages travel through your nervous system- towards and away from the brain. What are messages heading away from the brain usually about?

Activities: Follow these directions to use dominos to make a model of working neurons.

You will need:

dominoes	Tape measure	timer (cell phone is good)
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- 1. Use a measuring tape to measure the distance from your head down to your big toe.
- 2. Create a chain of dominoes the same length as the distance from your big toe to your brain.
 - a. dominoes should be about 1 inch apart.
- Start your timer when you knock down the first domino in your chain. Stop the timer when the last domino falls over.
 - a. Record your time(s) on the sheet of paper.
 - b. Repeat 3 or more times for more accurate data.
 - c. Put away the dominos once you've finished your trials.
- 4. You will need a lab partner for the next steps.
- 5. It's important that you do not look at your lab partner or at your foot while you do this.
- 6. Your lab partner should poke your big toe and start the timer- at the same time.
- 7. Raise your hand when you feel your foot poked and have them stop the timer when you raise your hand.
 - a. Record your time (s) on the sheet of paper.
 - b. Repeat 3 or more times for more accurate data.

The dominos are a model for how neurons pass information to each other and your brain in your body. Consider ways the model captured accurate things about neurons and the ways it failed to accurately represent neurons.





Make observations & use Claims, Evidence, and Reasoning!

- 1. **Claim**: Neurons are important to our nervous system.
 - Evidence:
 - Reasoning:
- 2. Claim: Neurons can pass messages to the brain very quickly.
 - Evidence:
 - Reasoning:

