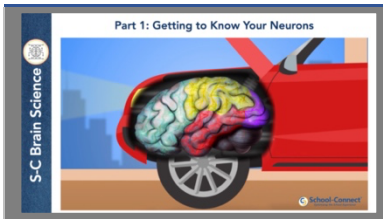
S-C Brain Science–1: Getting to Know Your Neurons

OUTLINE

Objectives: Students will be able to:

1) Consider how brain science could be helpful and applicable.
2) Label and identify the parts of a neuron.
3) Describe how electrical impulses pass through neurons.

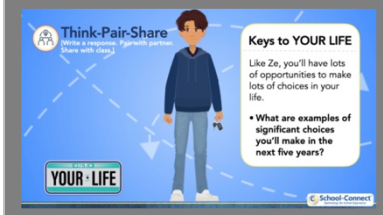
MATERIALS NEEDED: Handout 1.4.1



Video – S-C Brain Science, Pt 1: Getting to Know Your Neurons

5 min

[**PLAY** video introducing Ze and his life coach Ty. Ze is new to brain science and not sure what to expect. Ty explains brains are kind of like car engines but far more sophisticated. Now that Ze's a teen, he's ready to take the wheel, so it's a good time to learn how to make the most of his brain and life. Ty starts by explaining how neurons are the message system throughout the brain and body. Future episodes will revisit how neurons are essential to learning and decision-making.

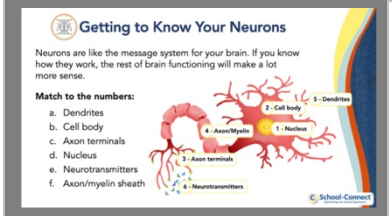


Think-Pair-Share – Keys to YOUR LIFE

4 min

[After watching the video, **CLICK** to next slide. Ask students to write on their handout or other paper (think), then share with a partner (pair), then discuss as a class (share):]

- **Like Ze, you'll have lots of opportunities to make lots of choices in your life. What are examples of significant choices you'll make in the next five years?**
- **How could a better understanding of your brain give you more control over your life and choices?**



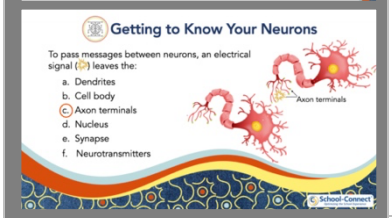
Getting to Know Your Neurons [also on Handout 1.4.1]

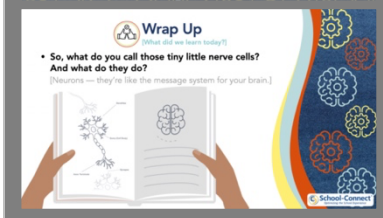
4 min

Neurons are like the message system for your brain. If you know how they work, the rest of brain functioning will make a lot more sense.

- **Match the letters to the numbers.** [**Answers:** a=5; b=2; c=3; d=1; e=6; f=4]

1. **To pass messages between neurons, an electrical signal leaves the:** c. axon terminals
2. **The electrical signal leaves the axon terminals, then crosses the:** e. synapse
3. **The electrical signal crosses the synapse with help from:** f. neurotransmitters
4. **After the synapse, the electrical impulse passes to the:** a. dendrites

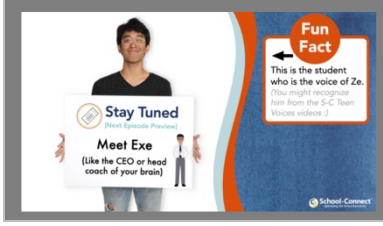




Wrap Up

1 min

- **So, what do you call those tiny little nerve cells? And what do they do?** [Neurons — they're like the message system for your brain.]



Stay Tuned for the Next Episode

1 min

The next episode will be about Exe for executive functions (like the CEO or Head Coach of Ze's brain).

***FUN FACT:** Most of the voices are students from the School-Connect Teen Voices videos or Knowledge Hub speakers.