

Brain Health: It's SPECtacular

How Your Brain and Your Body Talk (♠ A Brain Facts Story)
(3rd Grade – 8-9 yrs.)
Drawing: One Step at a Time



STORY CONNECTION - SLIDE 10 (Approx Time: 10-15 mins)

To understand how neurons can communicate with the various parts of your body, you need to understand a couple of things about the neurons. Neurons are made of a cell body, just like other cells, but neurons have finger-like processes that come out of the cell body called dendrites. Dendrites are the main part of the neuron that **gets** information. Neurons also have one process that comes out of the cell body, called an axon. This is the main part that the neuron uses to **send** information. The information is in the form of chemical or electrical signals.

Materials needed:

- Drawing Link: https://www.youtube.com/watch?v=GL54E7qGo0A (2:52)
- Equipment to play online video
- Paper
- Pencils
- Markers, crayons, colored pencils
- Black Sharpie markers or other black fine-tipped markers
- Parts of a Neuron (included below- optional)
- Scissors (optional)
- Glue (optional)

Preparation needed:

- Preview the drawing video
- Create an example with labels for student(s) to see or make it with the student(s) to model.
- Determine if student(s) will cut/paste labels or write them on drawing
 - o Print labels (1 per student) and cut into strips to give students

Instructions:

- 1. In this activity, student(s) will learn more about neurons including a more accurate description of what they look like and what the various parts of the neurons do.
- 2. First, pass out paper and pencils.
- 3. Explain to the student(s) that they will watch an artist draw a neuron. Their job will be to do what they do. Remind them to do the best they can.
 - **NOTE: You might want to stop the video at various times to make sure student(s) are caught up, so they do not get overwhelmed or frustrated if they need to stop to erase, sharpen a pencil, etc. **
- 4. Play the video clip (link above) pausing as needed.

- 5. Have the student(s) draw with pencil first and then go back over with a black marker when finished.
- 6. Student(s) will then color the neurons as directed by the video.
- 7. After all drawings are drawn and colored, pass out the Parts of a Neuron sheet and have the student(s) cut the labels apart and add them to their drawing making it a diagram. Student(s) can also print the names and functions of the part if desired rather than cutting and gluing them on.
 - **NOTE: There are additional labels in the video; however, the labels provided are those parts referenced in the story.**
- 8. When all neurons are completed, hang up in a prominent space to reference throughout the rest of this story.
- 9. In closing, review the parts of the neuron and the function of each part. Also, remind student(s) that neurons communicate with various parts of the body in the form of chemical and electrical signals.



Dendrite- finger-like projections of a neuron (nerve cell) that receive signals (information) from other neurons



Nucleus-is near the center of the cell and acts as its control center.



Cell body- the compact section of a nerve cell that contains the nucleus and the cytoplasm. It is also known as the soma



Axon- the extension from the neuron cell body that takes information away from the cell body



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