## Day 1

- Introduce ourselves (who are we and why are we here)
- Ask students what they know, and what they want to know about the brain. Discuss brain myths. (write down the things that students want to know for the next class)
- Some possible opening questions (What do you know about the brain? What do you want to know about the brain? Have you heard any myths about the brain?)
- Get brains out and pass out gloves
- Students will handle brains

## Day 2

- Discuss some of the things that students asked about the day before.
- The students will be shown some images of different neurons. We will point out the different parts and briefly describe what each part does. We will explain how a neural impulse is transmitted to the brain (possibly using the example of stepping on a tack).
- Do a brief neuron building demo.
- Students will be given time to make their own neurons from different colored Pipe cleaners.

## Day 3

- Discuss more of the things that were written down the first day.
- Show more examples of a variety of different neurons, discuss how these different cells vary in form depending on where they are in the brain (for example Purkinje cells are found in the cerebellum) yet they all have basically the same parts and function in the same way.
- Show examples of more elaborate pipe cleaner neurons.

• Have students get out their neurons from last time and continue working on them. (we can also bring the brains back out at the end of class)

## Activity

- 1. *Before we begin,* divide pipe cleaners into handfuls of (roughly) twenty for each student.
- 2. Discuss the role of a neuron as a "messenger" of the system.
- Show students the parts of a neuron (cell body, nucleus, dendrites, axon, axon terminals, and myelin sheath) using images and our own pipe cleaner neurons. Explain each part's function. Show how a chemical message travels through a neuron.
- 4. Hand out pipe cleaners.
- 5. Do a brief demonstration on how to make a neuron, be sure to show them a variety of different neurons, discuss how these different cells vary in form depending on where they are in the brain (for example Purkinje cells are found in the cerebellum) yet they all have basically the same parts and function in the same way.
- 6. Have students make their own neuron.