

# Student Instruction Sheet

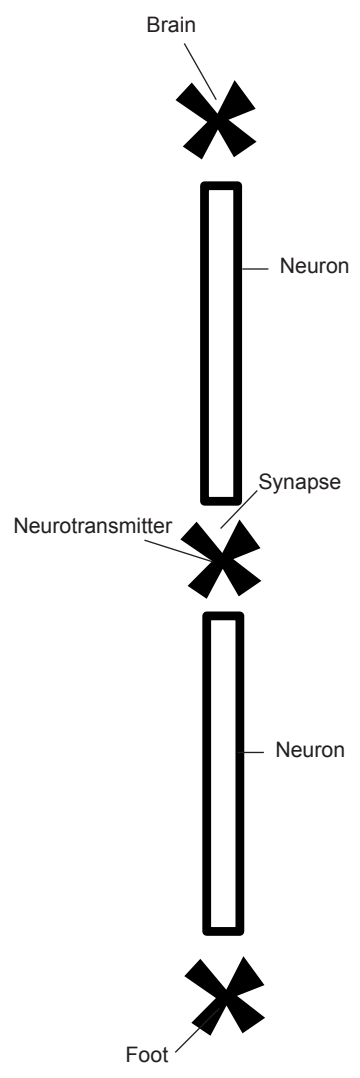
## Module 3: Sending and Receiving Messages

1. How does your leg know when to move while walking?  
How does your arm know when you want to raise your hand? How are messages sent and received throughout the body? Think about these questions. Share your thoughts with your classmates. Your teacher will write your ideas on a chart.

2. You will be working in teams of nine at activity areas set up around the room. Go to an activity area with your teammates.

3. Three students will sit along each area marked by the masking tape. They are a *neuron* team. One student will sit between two neuron teams. He or she is pretending to be a chemical called a *neurotransmitter*. One student will be the “sore foot.” Another student will be the “brain.” Your teacher will tell you what to do and give you signs to hold. (Refer to the diagram.)

4. Your teacher will give the “sore foot” student the message that says, “Why does my foot hurt?” He or she hands the message to the first member of the neuron team.



5. The message should go to the other two students on the team. The last neuron team member hands the message to the neurotransmitter student in the middle.

6. The neurotransmitter student gets up and hands the message to the next team of three students. This team sends the message to the brain. When the message reaches the last member of the neuron team, that student gets up and hands it to the student acting as the brain.

7. When the brain receives the message, that student exchanges it for another message. The new message says, "Sit down. You hurt your foot on a tack." Send the message back to the student pretending to have a sore foot.

8. Now the student with the sore foot knows what to do.

9. You may want to go through these steps one more time. This stuff is tricky—but you can do it!

10. **CONGRATULATIONS! YOU HAVE JUST COMPLETED MISSION 3 OF *BRAIN POWER!***

