



Move It or Lose It (🧠 A Physical Health Story)
(4th Grade – 9-10 yrs.)
Think, Pair, Share: Left or Right Brain?



STORY CONNECTION – SLIDE 9 (Approx Time: 25-30 mins)

To move, your brain talks to your spinal cord which then talks to your muscles in your body so you can move. There is an actual map of your body in your brain with different parts of your brain controlling the different muscles in your body. In the front of your brain, in the frontal lobe, is the part of your brain that controls your muscles. There is a “picture” of your body on your brain to show which parts of your brain control which parts of your body. It is called a homunculus.

Materials needed:

- Data recording sheet (included below)
- Ball
- Stairs (or step stools)
- Coins
- Paper or cardboard tube
- Paper with a hole cut in it
- Small box with a small object inside

Preparation needed:

- Optional: Explore more info about the frontal lobe [here](https://www.webmd.com/brain/what-you-need-to-know-about-the-frontal-lobe)
<https://www.webmd.com/brain/what-you-need-to-know-about-the-frontal-lobe>
- Determine location to complete activities
 - If stairs/step stools are not available, put a piece of string down or draw a line on a piece of paper and have the partner step over the line.
- Gather and determine how to use materials with student(s)
 - Each pair to have their own set
 - Set up stations or rotation of materials
- Print Data Recording Sheet (1 per student)

Instructions:

- This lesson is an extension of the information in the story on the frontal lobe. The frontal lobe has a dominant side. Each frontal lobe controls the operations on opposite sides of the body: the left hemisphere controls the right side of the body and vice versa. (<https://simplypsychology.org/frontal-lobe.html#:~:text=Each%20lobe%20controls%20the%20operations,logical%20thinking%2C%20and%20analytical%20reasoning>)

- This activity will allow student(s) to explore this concept by working with a partner to conduct several tests.
- There are tests for three areas: right/left foot, right/left eye, and right/left ear.
- Have one partner complete all three tests before switching partners.

Part I: Tests

Test #1: Right Foot or Left Foot

1. Explain to student(s) they will be completing a set of activities with their feet.
2. While one partner completes the activities, the other partner will mark the data sheet based which foot their partner uses to do the following activities:
 - Kicking a ball
 - Stepping up a stair
 - Stepping on things.

***NOTE: If necessary, model each for your student(s), pointing out which foot is being used. ***

3. Ask student(s) if they have any questions or need any clarification. Clear up any misunderstandings.
4. Give student(s) an allotted amount of time to complete the three tasks.
5. Have them switch roles.
6. When time is over, confirm that all student(s) are finished and recorded which foot was used.

Test #2: Right Eye or Left Eye

1. Explain to student(s) they will be completing a set of activities with their eyes.
2. While one partner completes the activities, the other partner will mark the data sheet based on which eye their partner uses to do the following activities:
 - Looking through a tube
 - Two tests determining which eye they "sight" with
 - Have your partner look at a distant object across the room (such as a clock on the wall). Tell them to quickly line up one finger with the distant object so that this finger is blocking the object. Now ask them to close one eye, then the other. When your subject closes one eye, the object will remain blocked. However, with the other eye, your subject's finger will "jump" out of the way. Mark your data sheet with the eye that still blocked the object. For example, if the object remained blocked when the right eye was used, mark the right eye.
 - Cut a small circle out of the middle of a piece of notebook paper. The circle should be the size of a small coin. Give the paper with the hole to partner. Ask your partner to use both eyes and to look through the hole in the paper at a distant object (like a clock on the wall). Ask your subject to bring the paper closer and closer to his or her face while still looking at the distant object. Which eye does the hole in the paper finally reach? The right or left eye?

***NOTE: If necessary, model each for your student(s), pointing out which foot is being used. ***

3. Ask student(s) if they have any questions or need any clarification. Clear up any misunderstandings.
4. Give student(s) an allotted amount of time to complete the three tasks.
5. Have them switch roles.
6. When time is over, confirm that all student(s) are finished and recorded which eye was used.

Test #3: Right Ear or Left Ear

1. Explain to student(s) they will be completing a set of activities with their ears.
2. While one partner completes the activities, the other partner will mark the data sheet based on which eye their partner uses to do the following activities:
 - Listening to a whisper
 - Whisper something to your partner, mark which ear they "cup" to listen to what you say.
 - Listening to a sound from a box

- Put a small object into a small box and mark which ear your partner holds the box up to to try to determine what is in the box.
- Listening through a wall
 - Have your subject try to hear what is happening in the next room. Mark the ear they put up to the wall.

***NOTE: If necessary, model each for your student(s), pointing out which foot is being used. ***

3. Ask student(s) if they have any questions or need any clarification. Clear up any misunderstandings.
4. Give student(s) an allotted amount of time to complete the three tasks.
5. Have them switch roles.
6. When time is over, confirm that all student(s) are finished and recorded which foot was used.

Part II: Analyzing the Data:

1. Have each person calculate the number of right and left responses.
***NOTE: Right brained would be more right responses and left brained would be more left responses. ***
2. As a group, discuss the following:
 - a. How many people are right-handed? Left-handed?
 - b. How many people are right footed? Left footed?
 - c. How many people are right eyed? Left eyed?
 - d. How many people are right eared? Left eared?
 - e. How many people are right brained? Left brained?
3. In closing, review the frontal lobe and discuss surprises, questions, or clarifications student(s) have.

Activity Credit: <https://faculty.washington.edu/chudler/rightl.html>

Right/Left Side Data Table

Name of Recorder: _____

Name of Person Completing Tests: _____

What hand does the person completing the tests usually use to write? _____

Body Part	Test	Right Side	Left Side
Foot	Kick a ball		
	Step up stairs		
	Step on object		
Eye	Look through tube		
	Sight a finger		
	Look through hole		
Ear	Listen to whisper		
	Listen to box		
	Listen through wall		
		Total Right	Total Left

Would you say your partner is more right brained or left brained? _____