

Right Side / Left Side

BACKGROUND:

In 96% of the population, the side of the brain that contains the area important for language is the left side. People have a dominant part of the bodies for the other jobs too. For example, about 90% of the population is right-handed. In other words, the right hand is dominant. Right-handed people prefer to use their right hand for most tasks. What about the foot, eye and ear? Which foot is dominant? Which eye? Which ear? The following set of experiments will help you find out if people have a dominant hand, foot, eye and ear.

MATERIALS:

- Scrap paper
- Scissors
- Coin
- Tape

PROCEDURE:

1. Choose a partner to complete the following activities
2. Observe your partner in each activity and record whether he/she is using their right or left side (hand, foot, eye, ear) Circle either R or L
3. Change duties and have your partner observe you and record results.
4. When you complete all four parts complete the data table and answer the conclusion questions.

Part 1: Right Hand / Left Hand

1. Ask your partner to write his/her name on a piece of scrap paper and see which hand they use? (R / L)
2. Have your partner cut out a circle out of a piece of scrap paper. Which hand do they hold the pair of scissors in when cutting? (R / L)
3. Ask your partner to throw a small piece of crumpled up paper to you. Which hand do they use? (R / L)
4. Have your partner scratch his/her nose. Which hand do they use? (R / L)

Part 2: Right Foot / Left Foot

1. Does your subject kick a ball (scrap of paper) with his/her right or left foot? (R / L)
2. Find a line on the floor or make one with a piece of tape. Have your partner step over the line. Which foot goes over the line first? (R / L)
3. Put a small object on the floor such as a coin. Ask your subject to step on the coin. Which foot does your partner use to step on the coin? (R / L)

Part 3: Right Eye / Left Eye

1. Have your partner construct a small tube out of a piece of paper and tape (see teacher's example). Have you partner look through the tube. Which eye does your partner put up to the tube? (R / L)
2. Which eye does your partner "sight" with? Ask your partner to look at a distant object across the room (like the clock on the wall). Tell your partner to quickly line up one finger with the distant object so that this finger is blocking the object. Now ask your partner to close one eye, then the other. When your partner closes one eye, the object will remain blocked. However, with the other eye, your subject's finger will "jump" out of the way. Record which eye that still blocked the object. For example, if the object remained blocked when the right eye was used, mark right eye (R). (R / L)
3. Another sight test. Cut a small circle out of the middle of a piece of paper. The circle should be the size of a small coin. Give the paper with the hole to your partner. Ask your partner to use both eyes and to look through the hole in the paper at a distant object (like the clock on the wall). Ask your partner 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? (R / L)

Part 4: Right Ear / Left Ear

1. Tell your partner that you are going to whisper something very quietly and that you want them to "cup one ear" to make the sound louder. Speak quietly and see which ear they decide to use. (R / L)
2. Ask your partner to try and listen through the wall. Which ear do they use? (R / L)

QUESTIONS AND CONCLUSIONS:

DATA TABLE: % of Men and Women who use the Right Side

	Your Class Data Men	Your Class Data Women	Survey Data Men	Survey Data Women
Hand			86	90
Foot			77	86
Ear			55	65
Eye			73	69

1. How did the results in your class compare with the existing data? _____

What do you think accounted for the differences? _____

2. Were there any instances in which you had mixed data in any of the 4 parts of this activity? (used right hand for some things and left hand for others) _____

If so, do you have a possible explanation? _____

3. Did you or your partner consistently use either your right or left side for all activities? (i.e. hand, feet, eyes and ears all right or all left) _____

If not what was different? _____

4. What is meant by the term ambidextrous? _____

5. What are some 'negative' consequences for being "left-handed" in today's world? _____

6. Looking at the survey data that was given, which 'ability' seemed to be the least related to either the right or left side? _____

Why do you think? _____

Which 'ability' seemed to be most linked to either the right or left side? _____

Why do you think? _____
