

GE BODY SYSTEMS : BRAILLE LAB

MS-LS1-3: Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.

BEFORE THE LAB:

Print a copy of braille cards with data sheets (5 pages total) for each group of 2. If you can read some of the article before class it will help with their understanding and appreciation for the activity.

RUNNING THE LAB (55 MIN)

1. Show the in-class movie (3 min).

2. Demonstrate and allow students to make the braille cards (15 min) - Each group should have 3 braille sheets, and data sheets. They will be making the 3 sets of braille cards. It is best to punch out the braille before they cut up the individual cards. It works best if students can place the sheet down on a soft hard surface such as a carpeted floor, or a jacket spread flat over a table. Make sure each braille dot is punched through with a pencil or mechanical pencil. Each sheet has a certain difficulty so keep the cards from each sheet together in a pile. You should have 3 piles of cards for each group at the end. Students love making the cards!

3. Braille card activity (35 min) - Each group of two chooses one person to put on the blind fold or close their eyes. The other person puts out the cards and tally the responses with and x or a check mark. After each set is complete the students switch roles until all the braille test cards have been done. Enjoy walking around and encouraging the students to keep a good record remind them that this is a real scientific study.

4. Graphing time (5 minutes) - Encourage students to fill in the graph with their data to see how they compare to blind students. It's also fun to make a class graph in Google Sheets.

Scientific Method Discussion

Emphasize that if you have a question and want to know something like Karen who, wondered, "can blind people feel braille patterns better than sighted people", all you have to do is set up a study and collect data. This is called The Scientific Method. First think of a question you would like to answer then make a hypothesis. Then set up your study and collect your data. What you did in class today was a real study and you collected real data. Taking your data and drawing your conclusions is the last step. But not really ;). A good scientist always asks more questions.

