



My Brain Keeps Me Alive (🧠 A Brain Facts Story)
(2nd Grade – 7-8 yrs.)
Experiment: Heart Your Brain



STORY CONNECTION – SLIDE 6 (Approx Time: 15-20 mins)

Your heart sends the blood to where it is needed, and it sends the right amount so that you can do what you need to do to stay alive. Your brain figures out where and how much blood is needed to do what you need to do. It is your **brain** that tells your heart to pump the blood.

Materials needed:

- Stopwatch or clock
- Paper
- Pencils
- *OPTIONAL*: Jump Ropes
- *OPTIONAL*: Video: <https://youtu.be/tF9-jLZNM10> (3:35)
- *OPTIONAL*: Equipment to play online video

Preparation needed:

- Determine if you will show the video.
- Determine which physical activity you will ask student(s) to do.

Instructions:

1. The heart is a vital organ, and we need it to live; however, the heart cannot work without the brain telling it what to do. In this activity, student(s) will learn about their pulse, see how movement changes their pulse, understand that movement and exercise is one way to keep their heart healthy.
2. First, talk with student(s) about activities they do and what they notice about how their heart beats during those activities.
For example: "Let's think about our hearts and how they work. When I am sitting down and reading a book my heart is beating slowly. When I am playing tag with friends, my heart is pounding rapidly. Can you share an activity and how your heart feels while you are doing that activity?"
3. When we can feel our hearts beating, it is called a pulse. Our pulse can be found on our wrists or on the side of our neck.
OPTION: You can show the optional video to give student(s) a better understanding of this concept.
4. Tell student(s) that they will now try and find their own pulse. Remind student(s) that they must be still and quiet to make it easier to find their pulse. Help any student(s) who are struggling.
5. While the student(s) are sitting still, tell them you are going to time them for 30 seconds. During those 30 seconds they are going to count how many times they feel their pulse and write it on a piece of paper.

6. Now, have student(s) double that number or add the number together twice—this is a second-grade math skill. This is their heart beats per minute at rest.
7. After everyone has their number recorded, have the student do some type of physical activity for one minute. This can be running in place, jumping rope, jumping up and down, jumping jacks, etc.
8. At the end of the one minute, have student(s) check their pulse for another 30 seconds, write it down, and double this new number. This is their heart beats per minute after vigorous exercise or activity.
9. Talk about the comparison between the two heart rates by asking student(s) the questions below and have them respond.

- How does your first number compare to your second number?

The second time they checked their pulse, the number should have been higher.

- Why do you think your number was higher after doing the physical activity?

This is because the heart needed to work faster and harder to pump more oxygen-rich blood to your body since you were working harder.

10. In closing, remind student(s) that our hearts and our brains work together to keep us healthy. It is important to take care of our heart by eating right and exercising so it is healthy and able to do what our brain tells it to do. This makes our heart and our brain happy.

Experiment Idea Credit: <https://classroom.kidshealth.org/classroom/prekto2/body/systems/cardiovascular.pdf>