

Brain Health: It's SPECtacular

Sleep Basics (A Physical Health Story) (3rd Grade – 8-9 yrs.) Experiment: REM Detective

STORY CONNECTION-SLIDE 12 (Approx Time: 10-15 mins)

The amount of REM sleep in babies and toddlers is greater than any of the other age groups. The brains of babies and toddlers are much more immature than the other age groups and so there is more work that needs to be done in making all the connections that we make the brain ready to do all the thinking and learning that children start to do when they go to school. People of all ages then need the same amount of REM sleep so that they can continue to learn about the world around them. This information is then stored so that people can continue to learn new things rather than relearning things they have already learned.

Materials needed:

- Video link: <u>https://www.youtube.com/watch?v=ORo-nbJ-F18</u> (1:29)
- Equipment to play online video
- Observation sheet (included below)

Preparation needed:

- Preview the video prior to the activity
- Determine appropriate places during the video to discuss content.
- Print observation sheets (1 per student)
- Determine how student(s) will pair up

Instructions:

- 1. In this activity, student(s) will watch a video of someone sleeping and make observations as they are in REM sleep mode.
- 2. Show the video.
- 3. As the video plays:
 - Read the text.
 - Discuss the content as you go.
 - Answer any questions the student(s) might have.
- 4. Pass out the observation sheet.
- 5. Explain that they will work with a partner for the first part of the activity and watch the video again for the second part.
- 6. Next, partner up the student(s). They will first observe each other's eye movements by asking their partner to close their eyes.

- 7. Then ask the person to move their eyeballs from side to side with their eyes still closed.
- 8. Have the student(s) record what they notice for #1 on the observation sheet.
 - **NOTE: They should notice a small bulge moving behind the person's eyelids.**
- 9. After all partner groups have observed their partner's closed eyes, tell them they will watch the video again.
- 10. As they watch the video, they are going to write down everything they notice about the person sleeping. Remind them that good detectives pay close attention to details.
- 11. Ask student(s) if they have any questions or need any clarification. Clear up any misunderstandings.
- 12. Play the video.

NOTE: The video can be played again as it might be difficult for the student(s) to observe and write. Do what is best for the student(s).

- 13. Go over observations the student(s) made. Were there any commonalities or differences among the observations? If so, discuss.
- 14. In closing, remind student(s) that after the baby stage, people of all ages then need the same amount of REM sleep so that they can continue to learn about the world around them. This information is then stored so that people can continue to learn new things rather than relearning things they have already learned. Getting enough rest, including REM sleep will help keep the body and brain happy and healthy.

REM Detectives Credit: https://faculty.washington.edu/chudler/chsleep.html

Observation Sheet

Name:

Part 1: Person being observed:

1. Have your partner close their eyes and move their eyeballs from side to side. What do you observe?

2. What did you observe about the person in the video during the REM sleep mode? Write as many observations as you can.