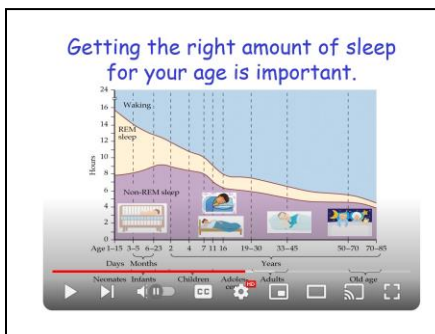




## What to do TODAY Grade 3 (🌈 A Physical Health Story)

This story describes sleep, what it is, how it changes over time and most importantly, why you do not act out your dreams.

- 🌈 There are actually different stages of sleep that do different things.
  - 🌈 People have different sleep needs based on their age. Babies sleep up from 14-17 hours a day (and there are only 24 hours in a day!), while older people, like your grandparents, may only sleep between 6-8 hours a day.
  - 🌈 We have 2 kinds of dreams, the ones that are more realistic and occur during SWS (slow wave sleep) and the ones that are more bizarre and occur during REM (rapid eye movement). Your brain has a way to protect you from acting out your dreams that occur during REM sleep.
- 🌈 For this presentation, you need to have the “Sleep Basics” Story Video set to ~14.49 to start. You will also need a copy of the “game cards” for each classroom and you need to cut out the individual “cards”.



Remind the students that last time they learned about sleep.

Then say...let's see what we remember...

- 🌈 Discuss the following questions.

Remind the students...last time they learned that there were 2 stages of sleep.

Does anyone remember what those 2 stages are??? Say “right” if you get the correct answer and “let me remind you” if you don't. Either way, reiterate...(Point the 2 stages out on the video.)

SWS (slow wave sleep) is when the growth and repairing gets done to your body. It is also the time when your body's defense system is strengthened.

During REM (rapid eye movement), the brain is storing information that you need to survive.

Remind the students...one of the ways that we **know** that we have 2 stages of sleep is by putting electrodes on your head and recording what is going on in your brain.

Does anyone remember **HOW** we know you are in REM sleep if there are no electrodes on your head??? Say “right” if you get the correct answer and “let me remind you” if you don’t. Either way, reiterate...

We can watch a person sleeping and watch their eyes. REM stands for Rapid Eye Movement.


- It is called this because your eyeballs literally go back and forth very quickly when you are in the REM sleep cycle.
- Remember, we also learned that during this part of your sleep cycle, the muscles in your arms and legs get limp meaning they are not working. This is why you can lift up someone’s arm while they are in REM and just drop it.

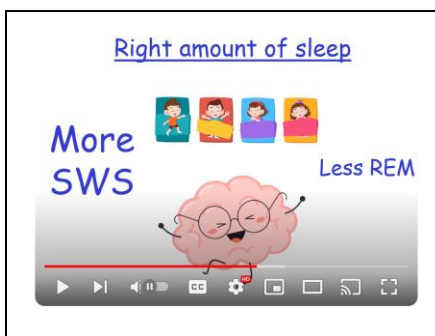
Remind the students that you need different amounts of sleep at different ages (babies, children, adolescents, adults and elderly – old age).

Does anyone remember **who** needs the MOST sleep??? Babies

Does anyone remember **who** needs the least amount of sleep??? Elderly – old age

Ok...let’s see what else we can learn about sleep.

 Start the Story Video and stop after the following slide.



So, it is important to get the right amount of sleep for your age. That way you are getting the right amount of SWS and REM sleep to take care of your body and your brain and make sure it is healthy.

Who remembers how much sleep children (which includes 3<sup>rd</sup> graders -8 to 9 yrs) should get? Between 8 and 10 hours of sleep.

Now, I want you to think about what time you normally go to bed and what time you normally wake up.

Count the number of hours you sleep. (Give an example...if you go to bed at 9:00 at night and wake up at 6:00 in the morning – if a clock is accessible stand in front of it and - count on fingers (if no clock, just count on your fingers)...10, 11, 12, 1, 2, 3, 4, 5, 6 = 9 hours.)

Ok...now you count how many hours you sleep.

You now know that sleeping is SOOOOOO important for your brain health.

- SWS helps with the growth and repair of your body and brain and it is when your body’s defense system is strengthened. REM (rapid eye movement), the brain is storing information that you need to survive.

If you are not getting at least 8 hours of sleep a night, you may need to change your sleep habits. Let’s see how to do that.

- Continue the Story Video and stop after this screen.



Good sleep habits are important...so let's play a game to see if you understand what good sleep habits are all about.

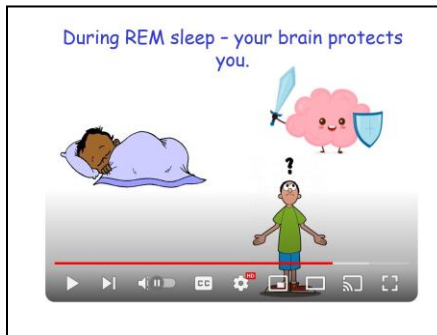
- We are now going to play the game "Is a Good Night's Sleep in the Cards?". This game will challenge you to think about good sleep habits versus bad sleep habits. (You will need at least 6 minutes to finish the Story Video).

Before you begin:

- Lay the "cards" face down on a desk in random order. (The # on the card is the points for the behavior – "+" means it is a good habit "-" indicates a bad habit. If the Team labels the behavior correctly, they get the points added to their total. If they do not label the behavior correctly, they lose the points from their total.) NOTE – a team can have negative points.
- Separate the students into 2 teams - Team Slumber Party and Team Snooze Cruise – or any name they choose that is sleep related).
- Put the name of the 2 Teams on the Board (or a piece of paper). Tell the students that you will be keeping track of the number of points. The team with the most points at the end of the game (based on finishing cards or time) wins.
- Explain the rules...
  - a. There are cards laid out on the desk and the teams will alternate having a team member come up and choose a card. One the cards is a behavior and points (between 1 and 6 points).
  - b. Tell the students you will then read the card and the number of points it is worth. The team – as a group – has to decide if the behavior is a good habit for your sleep or a bad habit for your sleep. If they guess correctly, they GET the points. If they guess incorrectly, then they lose the points.
  - c. The team with the most points at the end of the game – WINS – they are the SLEEP SPURTS (which means SLEEP EXPERTS) because they know more about good habits for sleep.

In closing, remind the students that good sleep habits will lead to better sleep. Better sleep means that our brains can do what they need to do to help us be our best for the following day.

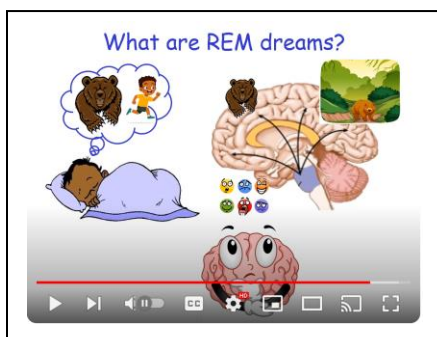
- Continue playing the video and stop after the following slide when the question “WHAT???” is raised.



So, we talked about 2 things that happen during REM sleep. The first is that your eyes move back and forth – which is why it is called Rapid Eye Movement sleep.

Does anyone remember what the 2<sup>nd</sup> thing was??? Your muscles in the rest of your body – that you can move by yourself – DON'T WORK!!! That is why if a person is in REM sleep, you can lift up their arm and drop it – and they just let it fall. Let's see how why this might happen.

- Continue playing the video and if time permits, there is only ~2 minutes of the video left, you can stop after this slide and discuss the types of dreams students might have. If time does not permit, continue the Video to the end.



First, ask the students to raise their hand if they have ever had a dream they can remember. (Remind them that everyone dreams, but not everyone **remembers** their dreams.)

Have them think about a dream and then decide if probably happened during SWS or REM sleep. Remind them that SWS dreams are more realistic and REM dreams are more unrealistic.

See if anyone wants to share.

- Continue playing the video to the end OR just end the presentation.

Tell the students that you had fun talking with them today and ask them if they had fun learning.

Remind the students that during the last 2 sessions we learned more about sleep – which is so important for our Physical Health.

We learned...

- while we sleep the activity in the brain cycles between Slow Wave Sleep (SWS) and Rapid Eye Movement (REM) Sleep.
- during SWS sleep our brains are busy repairing and cleaning up our brains and during REM sleep our brains store all the things we learned during the day.
- people have different sleep needs based on their age and to get the right amount of sleep that we need, we have to have good sleep habits.
- that we have 2 kinds of dreams, the ones that are more realistic and occur during SWS (slow wave sleep) and the ones that are more bizarre and occur during REM (rapid eye movement). Your brain has a way to protect you from acting out your dreams that occur during REM sleep.

Be sure to thank them for listening and the Brain Health Team of JHU students will see them soon.

Drink a glass of milk before bed.



+1

Drink a soda with caffeine before bed.



-1

Read a book in bed.



+2

Play on your tablet in bed.



-2

Running and playing outside.



+3

Playing video games inside all day.



-3

Having a small snack before bed.



+4

Having a large meal before bed.



-4

Going to bed on time.



+5

Going to bed very late.



-5

Have a dark, quiet room.



+6

Have a loud, bright room.



-6