

# JUST FOR U.S.\*

GRADES 4-5

\* Understanding Science

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## What is sleep?



Why do you need sleep?  
Why do all animals sleep?  
Do you sleep enough?

## What is sleep?

When you sleep, your brain works differently than when you are awake. There are two kinds of sleep, REM Sleep and Quiet Sleep. Both kinds are important for good health.

### In REM sleep

- Your eyes move
- You dream
- Most of your muscles do not move

### In Quiet Sleep

- Your eyes do not move
- You do not dream
- Your muscles move
- Cells repair themselves

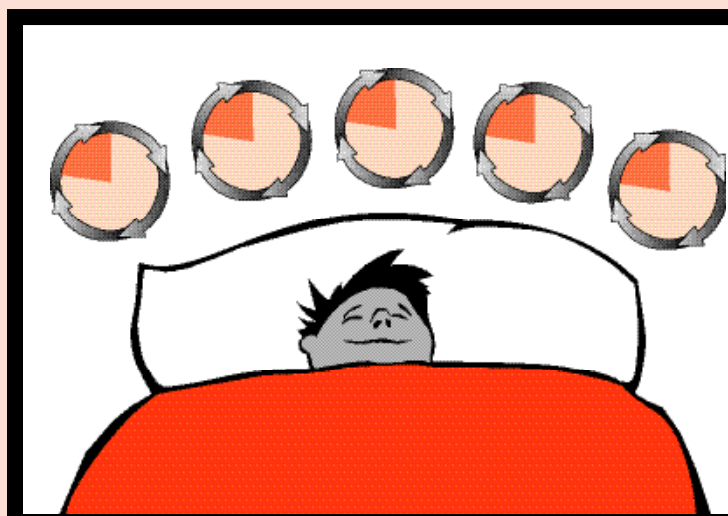
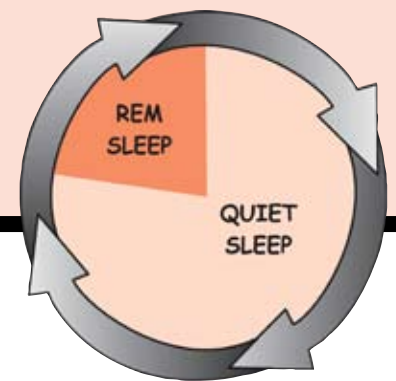


In REM sleep, your eyes move back and forth while you dream. You might have seen your dog's eyeballs moving under its eyelids as it dreams.

You dream every night, but you don't always remember your dreams.

## A Sleep Cycle

When something happens over and over again in the same way, it is called a cycle.



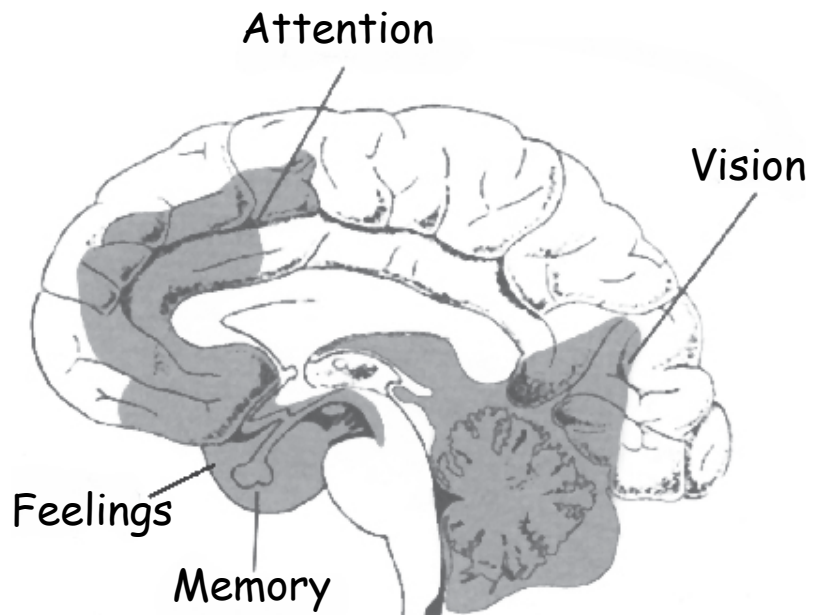
At night, your brain goes through sleep cycles. You start out in Quiet Sleep, then go into REM sleep, then back again to Quiet Sleep.

## What happens when you sleep?

Your body is quiet, but your brain is working hard.



The shaded areas of this picture are the parts of your brain that work hardest when you sleep.



## Why Do Animals Sleep?

Animals need sleep to stay alert while they are awake. A sleeping animal might be eaten!



The body's cells need a "tune-up" after hard work.









Animals  
have ene

When animals don't sleep enough, they start forget things!



All animals sleep. Some animals sleep more than others.

Here are some animals and the number of hours they sleep in a 24-hour period.

Animal	Hours of sleep a day
 Giraffe	2
 Human	8
 Dog	10
 Squirrel	15
 Opossum	18
 Bat	20



Small mammals usually sleep longer each day than large mammals... but not always.





# Sleepy Numbers

*Time flies...*



September

October

November

December

January

February

March

April

May

June

July

August

MONDAY

TUESDAY

WEDNESDAY

THURSDAY

FRIDAY

SATURDAY

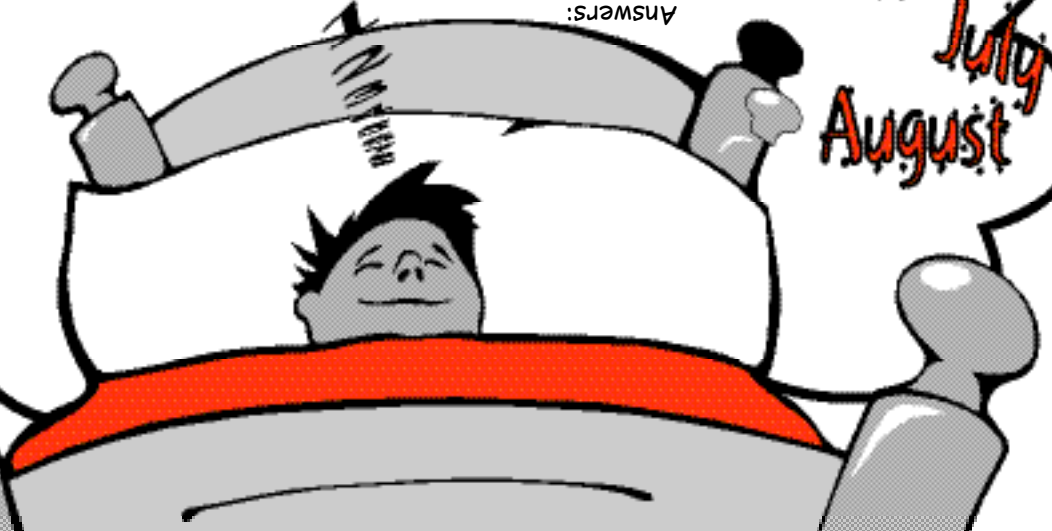
SUNDAY

If you sleep 10 hours each night...  
You sleep \_\_\_\_\_ hours each week...  
And \_\_\_\_\_ hours each year.

If you are 10 years old...  
You have slept \_\_\_\_\_ hours...  
Which is the same as \_\_\_\_\_ years.

You have 5 dreams each night...  
Or \_\_\_\_\_ dreams in a week...  
Or \_\_\_\_\_ dreams in a year.

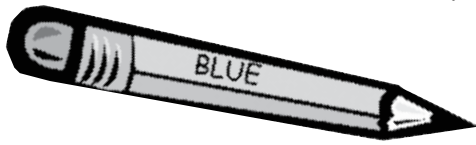
Answers:  
If you sleep 10 hours a night, you sleep 70 hours a week,  
and 3,650 hours a year.  
If you are 10 years old, you have slept 36,500 hours  
which is the same as 100 years.  
You have 5 dreams each night or 35 dreams a week and  
1,820 dreams in a year.



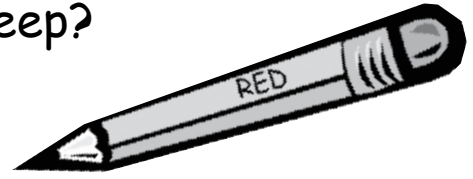
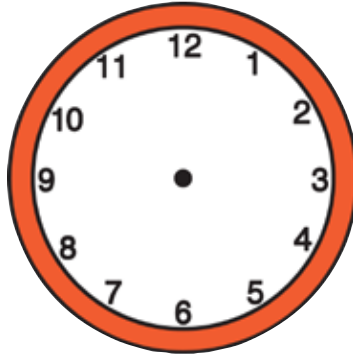
# Do You Sleep Enough?

Children need to sleep at least 10 hours every night.

How much do **you** sleep?



Use a blue pencil to mark the time you go to sleep.



Use a red pencil to mark the time you wake up.

Count the hours between the blue and red pencil marks to see how long you sleep!

Here are some things that help you sleep.

Bedtime at 8 PM



A dark, quiet room



Reading

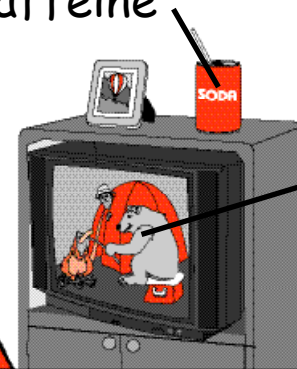
Here are some things that make it harder to sleep.

Bright light



Too late!

Drink with caffeine



TV on

This newsletter addresses QCC Grade 5 Standards 21, 22.

Written by Linda Lögdberg. Layout, illustrations and graphics are by Sheila Ward. Source for sleep cycle illustration: <http://www.sleepforkids.org/html/cycles.html>.

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