



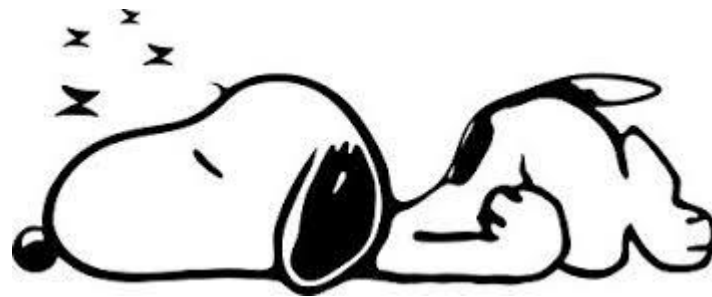
Balanced diet – lots of fruit and veg... not too much sugar and fat

How can we keep our bodies healthy?



Exercise: we spend too much time sitting down. Outside is best.

Get enough **sleep**. Time for relaxing.



Activity 1

(10 minutes)

- Draw a person getting ready for a good nights sleep
 - What are they thinking?
 - What are they doing?
 - How are they feeling?
- Draw or write anything that is helping them to sleep well.
- Draw or write anything that is making it hard for them to sleep well.



Learning Outcomes

- Explain why sleep is important
- Describe bedtime routines that help improve sleep
- Identify how sleep patterns might change during puberty



Activity 2

Facts about sleep

(20 minutes)

- Around the classroom are 4 different posters about sleep.
- Use the information on the posters to complete the sleep fact file.

Question	Answer
How much sleep do children need each night?	
Find 3 things that help someone get a good nights sleep:	
Find 3 things that stop someone get a good nights sleep:	
What happens during sleep when someone starts puberty?	
Why is it important to get good sleep?	
CHALLENGE question: Why is it more important to get sleep during puberty?	

Activity 3: Discussion

(5 minutes)

- What activities do you do after school?
- What can get in the way of trying to get to sleep?



Activity 4

What can get in the way of getting to sleep? (10 minutes)

In pairs find the solutions

Its difficult to get to sleep when	A solution to this might be
My room is too hot	<i>Open the window, have a sheet and a blanket so you can make yourself cooler or warmer.</i>
I don't feel sleepy	
My mum can't read me a story tonight	

Activity 5

(5 minutes)

In a different colour pen make any additions or changes to your original drawing

- Draw a person getting ready for a good nights sleep
 - What are they thinking?
 - What are they doing?
 - How are they feeling?
- Draw or write anything that is helping them to sleep well.
- Draw or write anything that is making it hard for them to sleep well.



Sleep



Top ten tips for getting a good nights sleep

Share your ideas

Sleep resources

- Childline: 8 tips for better sleep

<https://www.childline.org.uk/info-advice/your-feelings/feelings-emotions/problems-sleeping/#8tipsforbettersleep>

- Why is sleep important?

<https://www.youtube.com/watch?v=3mufsteNrTI> – science video Y5 /Y6

- Sleep games

<http://www.sleepforkids.org/html/games.html>

- Relaxation techniques

<https://www.nosleeplessnights.com/sleep-hygiene/relaxation-techniques/>



Sleep

Why is sleep important?

Sleep boosts immunity - Helps you fend off bugs

Sleep can slim you - Studies have shown that people who sleep less than 7 hours a day tend to gain more weight and have a higher risk of becoming obese than those who get 7 hours of slumber. It's believed to be because sleep-deprived people have reduced levels of leptin (the chemical that makes you feel full) and increased levels of ghrelin (the hunger-stimulating hormone).

Sleep boosts mental wellbeing - Given that a single sleepless night can make you irritable and moody the following day, it's not surprising that chronic sleep debt may lead to long-term mood disorders like depression and anxiety.

Sleep prevents diabetes - Studies have suggested that people who usually sleep less than 5 hours a night have an increased risk of developing diabetes.

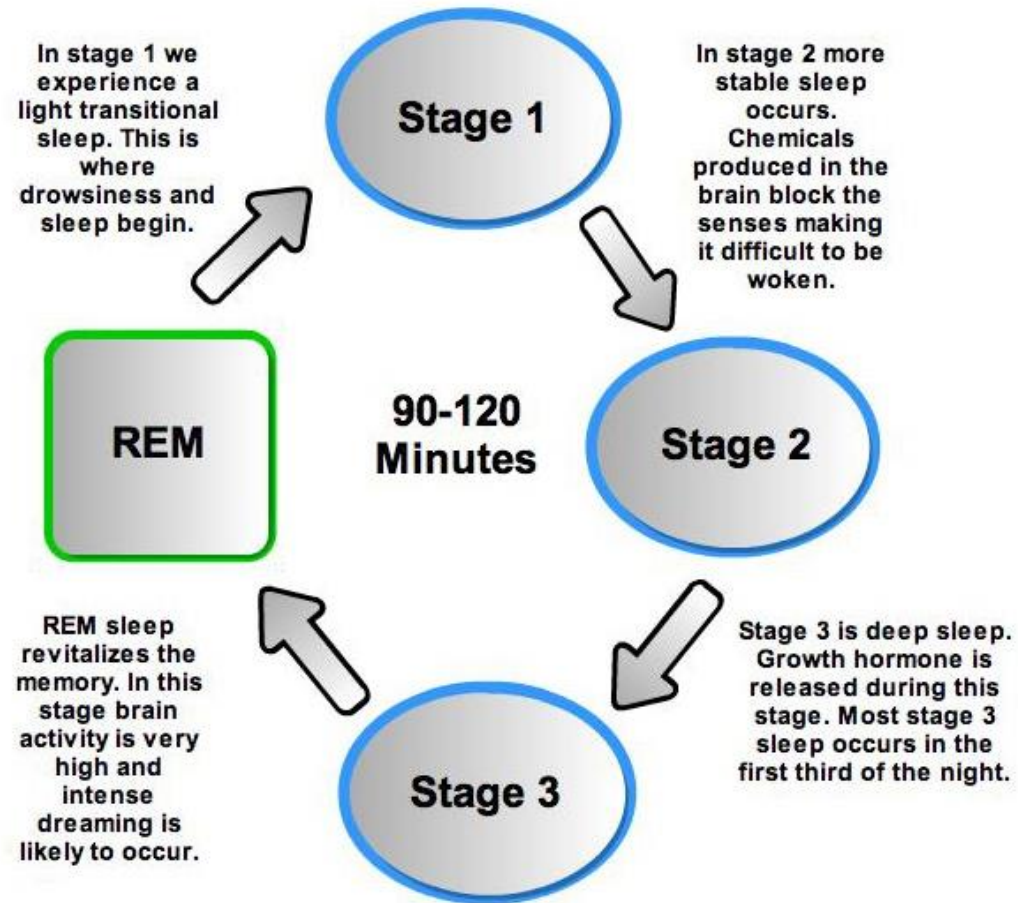
Sleep wards off heart disease - Long-standing sleep deprivation seems to be associated with increased heart rate, an increase in blood pressure and higher levels of certain chemicals linked with inflammation, which may put extra strain on your heart.

Sleep helps us grow and mend our body.

Sleep helps our brains develop. Helps us concentrate.

Sleep

The Science of Sleep



Sleep

The Science of Sleep

What happens when we sleep?

Sleep occurs in a recurring cycle of 90 to 110 minutes and is divided into two categories: non-REM (which is further split into three stages) and REM sleep.

Non-REM sleep

Stage one: light / transitional sleep

Your eyes are closed, but it's easy to wake you up. This phase may last for 5 to 10 minutes.

Stage two: more stable sleep

Your heart rate slows and your body temperature drops. Your body is getting ready for deep sleep.

Stage three: deep sleep

It's harder to rouse you during this stage, and if someone woke you up, you would feel disoriented for a few minutes. During the deep stages of NREM sleep, the body repairs and regrows tissues, builds bone and muscle, and strengthens the immune system.

As you get older, you sleep more lightly and get less deep sleep. Aging is also linked to shorter time spans of sleep, although studies show you still need as much sleep as when you were younger.

REM sleep

Usually, REM sleep happens 90 minutes after you fall asleep. The first periods of REM typically lasts 10 minutes. Each of your later REM stages gets longer, and the final one may last up to an hour. Your heart rate and breathing quickens. You can have intense dreams during REM sleep, since your brain is more active. Babies can spend up to 50% of their sleep in the REM stage, compared to only about 20% for adults.

Sleep

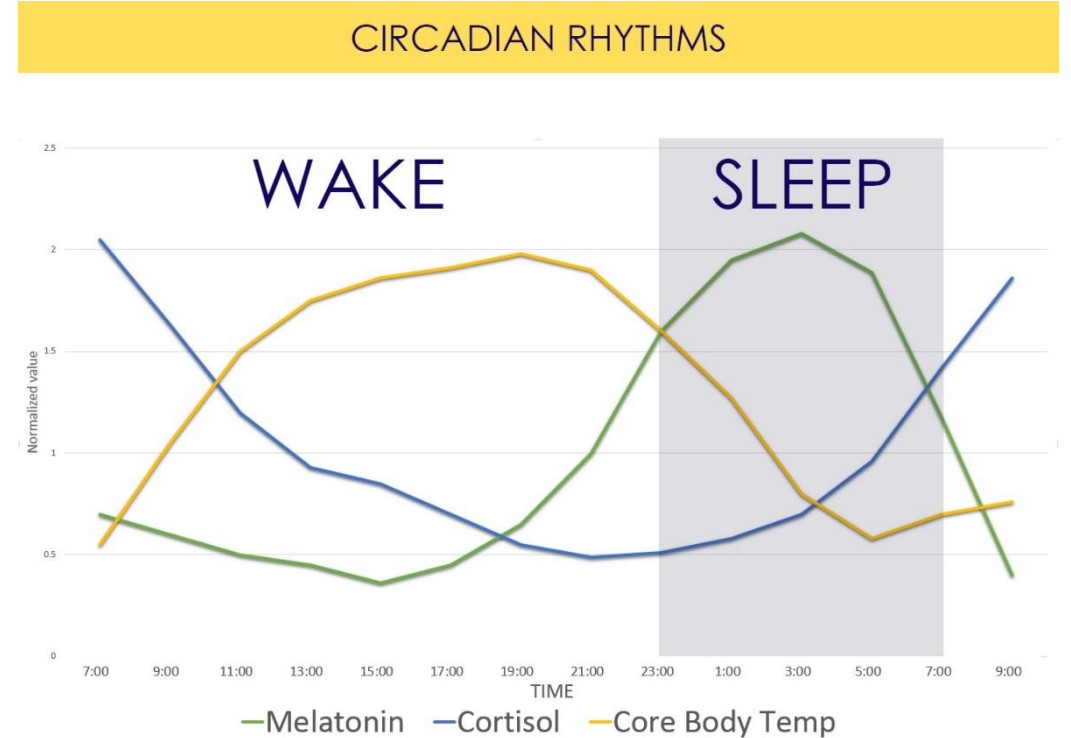
The Science of Sleep

Melatonin is a hormone that regulates sleep-wake cycles

Melatonin's main job in the body is to regulate night and day cycles or sleep-wake cycles. Darkness causes the body to produce more melatonin, which signals the body to prepare for sleep. Light decreases melatonin production and signals the body to prepare for being awake.

Cortisol is a hormone linked to stress

Cortisol should be low at night when we sleep. In the morning we want cortisol levels to be high, waking us up and giving us the energy to get through the day. Cortisol production should gradually decrease through the day, until it reaches its lowest levels late in the evening, when you are ready for bed.



Sleep

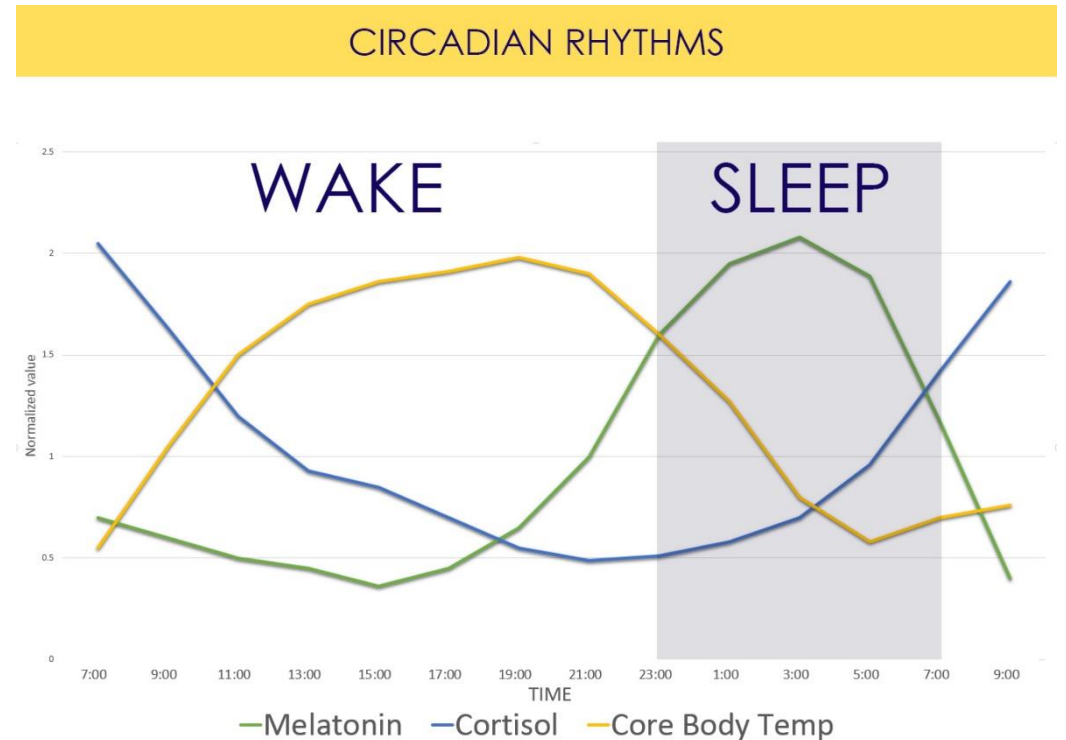
The Science of Sleep

What are circadian rhythms?

Circadian rhythms are physical, mental, and behavioral changes that follow a daily cycle. They respond primarily to light and darkness in an organism's environment. Sleeping at night and being awake during the day is an example of a light-related circadian rhythm. Circadian rhythms are found in most living things, including animals, plants, and many tiny microbes.

What are biological clocks?

Biological clocks are an organism's innate timing device. They're composed of specific molecules (proteins) that interact in cells throughout the body. Biological clocks are found in nearly every tissue and organ. Researchers have identified similar genes in people, fruit flies, mice, fungi, and several other organisms that are responsible for making the clock's components.



Sleep

The Science of Sleep

Why do we dream?

The human brain is a very mysterious thing. Most people dream, even if they can't remember them. We know this because scientists have tracked the brainwaves of loads of people when they're sleeping and it's normal to have a long period of REM – that's "Rapid Eye Movement" which shows their brains are busy doing something.

One idea is that dreams are a way of processing and filing away all the sights, smells, sounds, tastes and events of the day. Perhaps your brain works out which parts to remember and which to forget. If you have a problem, sometimes dreams can appear to reflect what's going on – so if you have a music exam and are a bit worried, you might dream about being chased by pianos.

Others think dreams are made of much more random collections of thoughts caused by the brain randomly firing as you sleep.

Sleep

The Science of Sleep

What is a nightmare?

A nightmare is a bad dream. Almost everyone gets them once in a while — adults and children. It can make you feel scared, anxious, or upset. But nightmares are not real and can't harm you.

Why do I get nightmares?

Stressful things that happen during the day can turn dreams into nightmares. Nightmares may be a way to relieve the pressures of the day. This usually means dealing with things most children have to face at one time or another: problems at home, problems at school, and stress from sports or schoolwork. Sometimes major changes, such as moving or the illness or death of a loved one, can cause stress that leads to nightmares.

Another thing that may cause nightmares is watching scary movies or reading scary books, especially before you go to bed.

Sometimes if you are sick, especially with a high fever, you may have nightmares. Some medicines also can cause nightmares.

Sometimes you might have a nightmare for no reason at all!