

So Tired in the Morning... The Science of Sleep

Anticipation Guides

Anticipation guides help engage students by activating prior knowledge and stimulating student interest before reading. If class time permits, discuss students' responses to each statement before reading each article. As they read, students should look for evidence supporting or refuting their initial responses.

Directions: *Before reading*, in the first column, write "A" or "D," indicating your agreement or disagreement with each statement. As you read, compare your opinions with information from the article. In the space under each statement, cite information from the article that supports or refutes your original ideas.

Me	Text	Statement
		1. Light exposure affects release of melatonin, a chemical that signals our bodies to sleep.
		2. Melatonin production occurs at the same time in the sleep cycle for everyone, including children, teens, and adults.
		3. The pineal gland is found in the brain.
		4. High schools that have switched to later start times have seen measurable benefits.
		5. Melatonin is an amino acid.
		6. The only elements found in melatonin are carbon, hydrogen, oxygen, and nitrogen.
		7. Artificial sources of light interfere with melatonin production.
		8. Circadian rhythms are found only in humans.
		9. Caffeine affects melatonin production.

		10. Sleeping late on the weekends is a good idea if you want to catch up on sleep lost during the week.
--	--	---

So Tired in the Morning... The Science of Sleep

As you read the article, complete the graphic organizer below to describe the structure and role for each molecule in governing your sleep schedule.

Molecule	Structure	Role
Melatonin		
Tryptophan		
Serotonin		
Caffeine		
Adenosine		

Research:

Investigate and collect internet research on the myths surrounding the importance of sleep. One place to begin is the Sleep Foundation web site: "Myths-Facts-About Sleep" (<http://sleepfoundation.org/how-sleep-works/myths-and-facts-about-sleep>).

Investigate 2 of the following myths:

- Snoring is a common problem, especially in men, but it isn't harmful.
- You can "cheat" on the amount of sleep you get.
- Turning up the radio, opening the window, or turning on the air conditioner are effect ways to stay awake when driving.
- Teens that fall asleep in class have bad habits and/or are lazy.
- Insomnia is characterized by difficulty falling asleep.
- Daytime sleepiness always means a person isn't getting enough sleep.
- Health problems such as obesity, diabetes, hypertension, and depression are unrelated to the amount and quality of a person's sleep.
- The older you get, the fewer hours of sleep you need.
- During sleep, your brain rests.
- If you wake up in the middle of the night, it is best to lie in bed, count sheep, or toss and turn until you eventually fall back asleep.

Please provide at least ½ page on each of the myths. Research. Cite your sources in APA format. You may use <http://www.citationmachine.net/> to help you with citations. You may also use <https://owl.english.purdue.edu/owl/resource/560/01/> for more information on APA style. You will find these links on your website.