


Keep a Sleep Diary

Name _____

Fill in data and observations about your sleep for five nights in a row (make sure to include one weekend night). Then, design a research question and hypothesis to test in Week 2.

 Sleep Diary		DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	
		/	/	/	/	/	
EVENING	I consumed caffeine today. (Examples: soda, chocolate, tea, coffee, sports/energy drink)						
	Morning						
	Afternoon						
	Evening						
	I exercised for 20 or more minutes.						
	Morning						
	Afternoon						
	Evening						
	I took a nap today. Y/N						
	I felt tired today. Y/N						
	Morning						
	Afternoon						
	Evening						
	NIGHT	My mood today: (G) good (O) OK (B) bad					
		Activities I did 1–2 hours before bed: (Examples: took a shower, messaged with friends, watched a video, finished homework, read a book, etc.)					
I went to bed at:		AM PM	AM PM	AM PM	AM PM	AM PM	
MORNING	I woke up this morning at:	AM PM	AM PM	AM PM	AM PM	AM PM	
	I got out of bed this morning at:	AM PM	AM PM	AM PM	AM PM	AM PM	
	Falling asleep last night was: (E) easy; (O) OK; (D) difficult						
	I woke up during the night. Y/N						
	I slept for a total of ____ hours.						
	I woke up feeling: (R) refreshed; (T) a little tired; (VT) very tired						

Turn over this sheet to record additional details. For example: It was too hot to sleep; I stayed up late to finish a movie; I felt stressed before bedtime because I had a test the next day; etc.

Name _____

Organize Your Argument

Ready to use your sleep-diary data and research to craft a persuasive argument? Choose a prompt below. Then organize your position, claims, and evidence with this planner.

A. How should schools use the science of circadian rhythms to improve students' lives?

B. How will YOU apply the science of circadian rhythms to improve your life?

You might want to consider ideas like school start times; breaks for exercise, nutrition, stress relief, or rest; strategies and supports for flagging energy; homework expectations; scheduling of extra-curricular activities; and blue light from electronic devices.

Persuasive Argument Planner

Introduction

- ▶ Hook/get reader's attention (e.g., introduce a stat or a question)
- ▶ Explain your chosen topic
- ▶ State your position

Claims

Craft two or more claims to support your position (your argument). For example:
Schools should _____ because that would help students who _____ to _____.

Claim 1

Claim 2

Claim 3

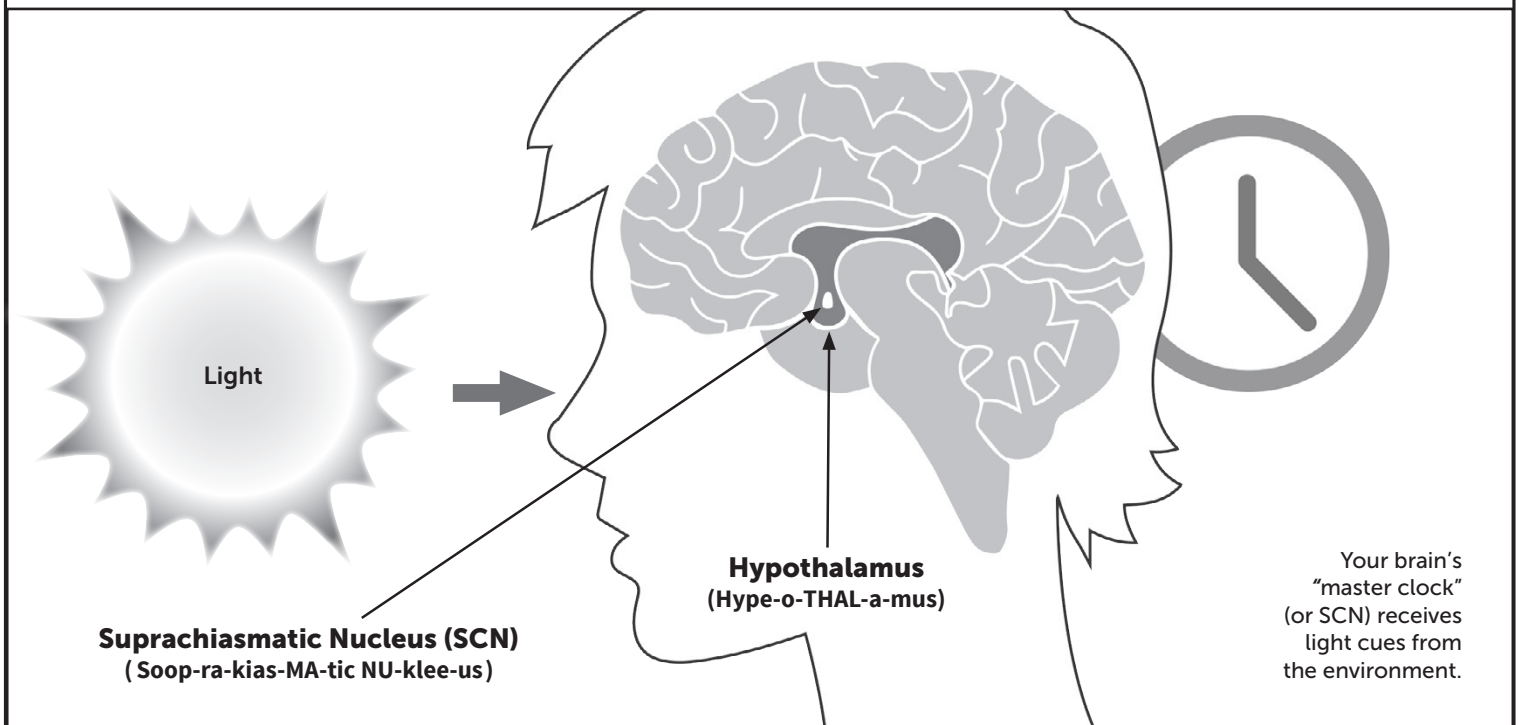
Supporting Evidence

Provide research, facts, and scientific findings to support each claim.

Conclusion

- ▶ Restate your position
- ▶ Summarize your argument and supporting evidence
- ▶ Write a concluding statement and call to action

VOCABULARY LIST



biological clocks (*noun*): an organism's innate timing devices. Most human cells and organs have a clock. Biological clocks produce circadian rhythms and regulate their timing.

caffeine (*noun*): a chemical substance, found in products like coffee, tea, and cocoa, which stimulates your brain and body and makes you feel more awake and alert for a little while.

chronotype (*noun*): the internal circadian rhythm of a person that influences the 24-hour cycle of sleep and activity (aka your "sleep personality," or when you like to go to sleep).

circadian rhythms (*noun*): physical, mental, and behavioral changes that follow a 24-hour day-night cycle.

gene (*noun*): a small section of DNA that contains the

instructions for making a specific protein.

hypothalamus (*noun*): a small area in the center of the human brain. It plays an important role in hormone production and helps to stimulate many important processes in the body.

jet lag (*noun*): a disruption of a person's circadian rhythms from long-distance travel, causing extreme tiredness and other physical effects.

melatonin (*noun*): a hormone in your body that plays a role in sleep. The production and release of melatonin in the brain is connected to the time of day, increasing when it is dark out and decreasing when it is light out.

neuron (*noun*): a cell within the nervous system that

transmits information to other nerve, muscle, or gland cells.

proteins (*noun*): large, complex molecules that are essential for all life processes, playing a key role in the structure, function, and regulation of the body's tissues and organs.

sensory receptor (*noun*): a nerve ending that reacts to a physical stimulus in the internal or external environment.

suprachiasmatic nucleus (*noun*): a tiny region of the brain in the hypothalamus. It acts as the "master clock," controlling the clocks throughout the body and driving various circadian rhythms adapted to Earth's 24-hour day-night cycle.

synchronize (*verb*): to occur at the same time.