



## Grade 7 Explanatory Performance Task: Napping

### **Task:**

There has been much discussion in the news recently about the role of sleep and the role of napping. How many hours of sleep is enough? What is too much sleep? What is too little sleep? How do naps fit into sleep cycles? The journalism club advisor has asked you to research the roles of sleep and napping. As part of your research, you have found three sources about sleep and napping.

After you have reviewed these sources, you will answer some questions about them. Briefly scan the sources and the three questions that follow. Then, go back and read the sources carefully so you will have the information you will need to answer the questions and complete your research.

In Part 1, you will answer questions about the reading passages. In Part 2, you will write an explanatory article using information you have read.

### **Directions for Beginning:**

You will now examine several sources. You can re-examine any of the sources as often as you like.

### **Research Questions:**

After examining the research sources, use the remaining time in Part 1 to answer three questions about them. Your answers to these questions will be scored. Also, your answers will help you think about the research sources you read and reviewed, and should help you write your explanatory article.

Answer the questions in the spaces below the items.

Sources for Performance Task:

**Source #1**

Here is an article based on scientific research about sleep.

**How Much Sleep Is Enough?**

The amount of sleep you need each day will change over the course of your life. Although sleep needs vary from person to person, the chart below shows general recommendations for different age groups.

<b>Age</b>	<b>Recommended Amount of Sleep</b>
Newborns	16–18 hours a day
Preschool-aged children	11–12 hours a day
School-aged children	At least 10 hours a day
Teens	9–10 hours a day
Adults (including the elderly)	7–8 hours a day

If you routinely lose sleep or choose to sleep less than needed, the sleep loss adds up. The total sleep lost is called your sleep debt. For example, if you lose 2 hours of sleep each night, you'll have a sleep debt of 14 hours after a week.

Some people nap as a way to deal with sleepiness. Naps may provide a short-term boost in alertness and performance. However, napping doesn't provide all of the other benefits of nighttime sleep. Thus, you can't really make up for lost sleep.

Some people sleep more on their days off than on work days. They also may go to bed later and get up later on days off.

Sleeping more on days off might be a sign that you aren't getting enough sleep. Although extra sleep on days off might help you feel better, it can upset your body's sleep-wake rhythm.

Bad sleep habits and long-term sleep loss will affect your health. If you're worried about whether you're getting enough sleep, try using a sleep diary for a couple of weeks.

Write down how much you sleep each night, how alert and rested you feel in the morning, and how sleepy you feel during the day.

Sleeping when your body is ready to sleep is also very important. Sleep deficiency can affect people even when they sleep the total number of hours recommended for their age group.

For example, people whose sleep is out of sync with their body clocks (such as shift workers) or [is] routinely interrupted (such as caregivers or emergency responders) might need to pay special attention to their sleep needs.

**Source Used:**

How much sleep is enough? (2012, February 22). The National Heart, Blood, and Lung Institute. Retrieved from <https://www.nhlbi.nih.gov/node/4606>

**Source #2**

This article appeared in a consumer health magazine and uses historical accounts, career-specific research, and current attitudes to discuss napping.

**The Secret Truth about Napping**

by Maria Allegra

**Napping: Only for Kids?**

In general, Americans regard napping as an unproductive habit. They think that only little children should take naps. However, there is evidence that napping can benefit people of all ages.

**Famous Nappers**

Many famous historical figures have been nappers. American presidents John F. Kennedy, Ronald Reagan, and Bill Clinton all took frequent naps to help them deal with the pressures of leading a powerful nation. Napoleon Bonaparte, a French emperor, often gave rousing speeches at a moment's notice. Perhaps this was due to his habit of taking frequent naps. Winston Churchill, who helped lead the Allied Powers to victory during World War II, slept for at least an hour every afternoon. He stated that a nap could renew a person's energy.

Other famous historical nappers include the brilliant scientist Albert Einstein and the world-changing inventor Thomas Edison. The amazing artist Leonardo Da Vinci also took naps. They all had unusual sleep patterns that allowed them to work in a focused and creative way. Maybe if Edison had skipped his naps, he would never have invented the light bulb. Maybe Leonardo would have been too sleepy to paint the Mona Lisa.

**Naps for Certain Careers**

Scientific studies show the benefits that naps can provide for individuals with unusual work schedules. Examples include astronauts and certain medical personnel. The human body operates according to an internal clock. This clock operates in relation to the Earth's pattern of darkness at night and bright light

during the day. When a person's internal clock is in sync with her or his habits, the person can most likely sleep well at night and remain awake and alert all day. But if the person's job makes for interrupted sleep—or sleep at odd hours—the internal clock can become confused. Then the person has trouble getting enough sleep.

Astronauts traveling in space are not exposed to regular patterns of light and darkness. As a result, astronauts average two hours less sleep than usual during every night they spend in space. They often have trouble concentrating. They also become grumpy. NASA decided to study whether astronauts should take naps. They did research with volunteers. The researchers found that napping improved memory, but not alertness. NASA researchers also concluded that longer naps worked better than shorter ones. Mark Rosekind of NASA, who conducted the research, stated that even a 26-minute nap boosted a pilot's mental performance by 34%. A 45-minute nap gave roughly the same mental boost but the boost lasted more than 6 hours.

Doctors in training, known as residents, work very long hours. As a result, they are often sleep-deprived. Emergency-room doctors working at night also have problems sleeping. Sleep experts recommend that these health workers take short naps on the job. A team of researchers led by David F. Dinges, a professor at the University of Pennsylvania, found that letting subjects nap for as little as 24 minutes improved their mental performance. So even short naps can reduce the number of mistakes a tired person makes.

The main takeaway seems to be that a deep sleep, whether it is nighttime sleep or a daytime nap, primes the brain to function at a higher level, allowing us to come up with better ideas, find solutions to puzzles more quickly, identify patterns faster, and recall information more accurately.

### **Siesta Tradition**

There is a word in the Spanish language to describe the habit of taking a nap in the mid-afternoon: siesta. However, taking a midday nap is common not only in Spain, but it is also common in Greece, where people traditionally take a break in the middle of the day. They eat a large meal and then take a nap.

It is not the big noontime meal that makes Greeks sleepy. Evidence suggests that people, in general, become drowsy between 2:00 p.m. and 4:00 p.m. In fast-paced America, workers and students usually fight to stay awake during this so-called "nap zone."

After a nap, people tend to be happier and more alert. They do better work and avoid mistakes. Nappers may even have better long-term health than non-nappers. In 2007, a study by the Harvard School of Public Health discovered that people who took 30-minute naps at least three times a week were 37% less likely to die of heart disease. Furthermore, the study found that even people who napped for less than 30 minutes or napped only one or two times per week were 12% less likely to die from heart disease. In a 2011 study, researchers at Allegheny College found that napping was a factor in lowering blood pressure after mental stress. The

people in the study who took a daily 45-minute nap on average had lower blood pressure after taking a mental stress test than those who didn't have a nap.

### **Finding Time to Sleep**

But finding time to sleep—or to nap—can be challenging. Students involved in sports or other extracurricular activities after school aren't often able to find time to nap before evening sleep time. And finding places to nap during the day at school is challenging. However, Anton Anderson, an English teacher at Greenwich (Connecticut) High School, decided to do something to help the waves of weary teens he was seeing every day. In 1998, he founded the Power Napping Club, which allows students to nap for about 20 minutes at the end of the day before going on to extracurricular activities. Its motto: *Veni, Vidi, Dormici* (Latin for “I came, I saw, I slept”).

The Power Napping Club co-president emphasizes the boost that naps provide. “Obviously, it's no substitute for sleep, but I definitely feel more relaxed afterward,” she says.

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### Source #3

Here is a letter asking for advice on the subject of sleep. The doctor who responds is the editor of a medical advice column for a newspaper.

#### Ask the Sleep Doctor

Dear Dr. Vessler,

I'm a 12-year-old middle school student who usually gets about eight hours of sleep a night. I often feel tired when I get home from school at 3:30, and I want to be alert and energetic in the evening so I can focus on all of my homework. However, when I tried taking a nap, I slept for two or three hours. Then I woke up groggy. What can I do so I will have more energy in the evening?

Sincerely,  
Too Sleepy

Dear Too Sleepy,

Good for you for thinking of ways to increase your productivity for schoolwork. The first thing I would like to point out is that you are not getting enough sleep at night for someone your age. I recommend that you go to bed earlier. Remember, the most important thing you can do is to sleep more at night.

On nights when you don't get enough sleep, napping can help to recharge your body and increase your mental alertness. Did you know that 85% of animals sleep in short periods throughout the day? Humans are one of the few species that do most of their sleeping at night. Introducing a catnap into your day may be very helpful. In fact, studies show that taking a short nap after learning new information may help you remember that information better!

I do not, however, recommend a two-or three-hour nap because napping for several hours during the day can make it hard for you to fall asleep at night. It can also be difficult to wake up after a long nap. According to research by David F. Dinges, napping for as little as 24 minutes improved mental performance. Short naps also don't cause the post-nap groggy feeling that accompanies longer naps.

Another important issue to consider is when to take your nap. You don't want to nap too late in the day. Why? Doing so can make it harder for you to fall asleep at night.

I recommend that if you decide to take a nap, you should do so right after you get home from school. Set a timer for about 24 minutes so that you don't oversleep. You will most likely wake up refreshed and have more energy to focus on your homework in the evening.

Sleep well!

Dr. Daniel Vessler, M.D.

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**Part 1: ASSESSMENT ITEMS**

1. Explain how the table in Source #1 supports information provided in the **two** other sources. Cite evidence and identify the source of each piece of information by title or number.

(Students will be provided with space to answer this question.)

2. People whose sleep is routinely interrupted might need to pay special attention to their sleep needs. Provide **two** pieces of evidence from different sources that support this claim and explain how each example supports the claim. Cite evidence for each piece of information and identify the source by title or number.

(Students will be provided with space to answer this question.)

3. Click on the boxes to show the claim(s) that each source supports. Some sources will have more than one box selected.

	Source #1: How Much Sleep Is Enough	Source #2: The Secret Truth about Napping	Source #3: Ask the Sleep Doctor
If you take too long of a nap, you might feel sleepy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If your sleep patterns interrupt your body's internal clock, you might have trouble getting enough sleep.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A deep sleep helps the brain to operate at a higher level.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Part 2: Napping Explanatory Performance Task

### 4. Student Directions

You will now review your notes and sources, and plan, draft, revise, and edit your writing. You may use your notes and refer to the sources. Now read your assignment and the information about how your writing will be scored; then begin your work.

#### **Your Assignment:**

Now that you have completed research on the topic of sleep, the journalism club advisor has asked you to write an explanatory article about sleep and naps for the next issue of the school newspaper. The audience for your article will be other students, teachers, and parents.

Using more than one source, develop a thesis/controlling idea to explain about sleep and naps. Once you have a thesis/controlling idea, select the most relevant information from more than one source to support your thesis/controlling idea. Then, write a multi-paragraph explanatory article explaining your thesis/controlling idea. Clearly organize your article and elaborate your ideas. Unless quoting directly from the sources, use your own words. Be sure to reference the source title or number when quoting or paraphrasing details or facts from the sources.

#### **Explanatory Article Scoring:**

Your explanatory article will be scored using the following:

- 1. Organization/purpose:** How well did you state your thesis/controlling idea, and maintain your thesis/controlling idea with a logical progression of ideas from beginning to end? How well did you narrow your thesis/controlling idea so you can develop and elaborate the conclusion? How well did you consistently use a variety of transitions? How effective was your introduction and your conclusion?
- 2. Evidence/elaboration:** How well did you integrate relevant and specific information from the sources? How well did you elaborate your ideas? How well did you clearly state ideas using precise language that is appropriate for your audience and purpose?
- 3. Conventions:** How well did you follow the rules of grammar usage, punctuation, capitalization and spelling?

**Now begin work on your explanatory article.** Manage your time carefully so that you can

1. Plan your multi-paragraph explanatory article.
2. Write your multi-paragraph explanatory article.
3. Revise and edit the final draft of your multi-paragraph explanatory article.

For Part 2, you are being asked to write a multi-paragraph explanatory article, so please be as thorough as possible.

(Students will be provided with space to answer this question.)