Teacher's Key

The Power of Napping: What the Research Actually Shows (Level B2)

Vocabulary Matching

1 slump = **N**
2 willpower = **A**
3 sleep-deprived = **H**
4 alertness = **L**
5 impaired = **G**
6 sleep inertia = **M**
7 groggy = **I**
8 power nap = **E**
9 control group = **D**
10 consolidate = **O**
11 recall = **J**
12 association = **K**
13 tolerated = **B**
14 insomnia = **C**
15 drawbacks = **F**

Fill in the Blank

1 slump
2 willpower
3 sleep-deprived
4 alertness
5 impaired
6 groggy
7 power nap
8 control group
9 consolidate
10 recall
11 association
12 tolerated
13 insomnia
14 drawbacks

True or False

1 **False.** The reading says a second coffee does not seem to help.
2 **True.** They were sleep-deprived after only five hours of sleep.
3 **False.** People first showed impaired performance and only improved later.
4 **True.** Waking from deeper sleep can leave you groggy and confused.
5 **False.** The control group kept working as usual.
6 **True.** Twelve crew members rested and nine did not.
7 **True.** This was the result on the visual task.
8 **False.** It says the result does not show this.
9 **False.** It found an association, and its authors said more studies were needed.
10 **True.** The current advice says 20 to 30 minutes, and an earlier version said 10 to 20.

Language Focus: Reporting Verbs

Example answer: A Harvard experiment **found** that naps of 60 to 90 minutes improved performance on a visual task.

Comprehension Questions: Model Answers

1 Many people hit a slump: their eyes feel heavy, their concentration fades, and a second coffee does not seem to help.

2 People first showed impaired performance and only improved later.

3 Sleep inertia is the groggy, confused state after waking from deeper sleep. It matters because a longer nap can lead into deeper sleep and leave people feeling worse at first, which is why short naps are often recommended.

4 12 crew members on long-haul flights took a planned 40-minute rest during the quiet cruise phase. Nine others kept working as a control group. The researchers compared alertness and performance.

5 The groups were small (12 and nine) and the setting was unusual, so the results may not apply to students or office workers. Accounts of the study also give different alertness figures.

6 Volunteers who napped for 60 to 90 minutes improved about as much as people do after a full night of sleep on a visual task. Limits (any two): it was one specific task; the naps that worked included deep sleep and dreaming sleep; it does not show a nap can replace a night of sleep.

7 The study observed people's habits and found a link between regular napping and a lower risk of dying from heart disease, but it cannot show that napping caused the lower risk. Its authors said more studies were needed.

8 Inemuri, or “sleeping while present,” is often tolerated and can suggest dedication, because it implies the person worked to exhaustion. Unwritten rules: senior workers have more freedom, and the sleeper must still look present.

9 The Mayo Clinic's current advice calls 20 to 30 minutes ideal, but an earlier version said 10 to 20 minutes. It matters because no single number should be treated as final, and readers should check the source and its date.

10 False. After the 30-minute nap, people first showed impaired performance and improved only later.

11 No. The writer describes benefits, drawbacks, and the limits of the studies. The writer does not say napping is harmful for most people.

12 Best answer: to show the limits of each study. They studied different people in different situations (sleep-deprived young adults, flight crews, Greek adults), so none of them answers the question for everyone. Accept a reasoned answer about caution.

Notes on the Evidence

- Flinders experiment: Brooks and Lack, 2006, Sleep 29:831-840. Twenty-four young adults limited to five hours of sleep took naps of 0, 5, 10, 20, and 30 minutes on different days. In the authors' summary the 10-minute nap was the most effective overall; the reading reports the results without ranking the naps.
- NASA study: Rosekind and colleagues, NASA Technical Memorandum 108839. The rest group (12) had a planned 40-minute rest and slept about 25.8 minutes; the no-rest group had nine. The report abstract gives no percentages. The 34 percent (performance) and 54 percent (alertness) figures come from Rosekind's own later accounts. Some websites give 100 percent for alertness, and the original draft of this unit used that figure.
- Learning experiment: Mednick, Nakayama, and Stickgold, 2003, Nature Neuroscience 6:697-698 (a visual texture task, naps of 60 to 90 minutes with deep and dreaming sleep). The original draft of this unit credited a similar result to Matt Walker; it comes from Mednick's group.
- Greek study: Naska, Trichopoulos, and colleagues, 2007, Archives of Internal Medicine. 23,681 adults, followed for an average of 6.3 years. The 37 percent lower risk applied to people who napped at least 30 minutes three or more times a week, and the link was strongest in working men. It is an observational study.
- Inemuri: Brigitte Steger's research on sleeping in public in Japan (for example, Social Science Japan Journal, 2003). The Mayo Clinic advice changes between versions; the reading reflects the page as checked in September 2026, so check the current text before class.