Teacher Answer Key

Case Study

1. Basketball players who extended their sleep to ten hours a night improved in speed, shooting accuracy and reaction time, and their mood and fatigue levels improved as well.

2. Athletes place heavy physical demands on their bodies, and sleep is when recovery happens. The study links longer sleep to better physical performance, faster reactions and steadier mood.

3. Students who slept after studying remembered significantly more words the next day than students who stayed awake with the same list.

4. School depends on holding on to what was studied, and sleep is when memory consolidation happens, so a student who sleeps after studying keeps more of the material.

Multiple Choice

1. D

2. B

3. D

Matching

1-D, 2-C, 3-A, 4-B

Fill-in-the-Blank

1) Memory consolidation, 2) Evolutionary, 3) Restorative

Short Answer (Sample Responses)

Q1: REM sleep supports memory consolidation, problem-solving, and emotional processing, which are essential for cognitive health and adaptability.

Q2: Athletes who slept longer showed improved physical performance and faster recovery, suggesting sleep aids in physical and mental recovery.

Q3: Sleep helps regulate emotions; without adequate REM sleep, people often experience mood instability, irritability, and higher stress levels.