Teacher Answer Key

Case Study

1. Amir stayed up much later than usual, used screens long past midnight, and slept in very late, all of which delayed melatonin and shifted his circadian rhythm.

2. His internal clock shifted later, but school still required an early wake-up, so he felt groggy and unfocused—similar to social jet lag, where your body thinks it's a different "time zone" than your schedule demands.

Multiple Choice

1. D

2. D

3. A

Matching

1-C, 2-E, 3-B, 4-A, 5-D

Fill-in-the-Blank

1) circadian rhythm, 2) blue light, 3) light

Short Answer (Sample Responses)

Q1: Students might mention late-night blue-light exposure delaying melatonin, big shifts in bedtime and wake time, or midnight eating confusing body rhythms.

Q2: Good answers will connect Amir's 3:00 a.m. bedtime and noon wake-up to his later difficulty falling asleep and his exhaustion once school resumed.

Q3: Examples include keeping a consistent wake-up time, getting bright morning light, limiting screens before bed, or shifting bedtime gradually; explanations should note that these cues help the SCN reset and stabilize the circadian rhythm.