Teacher Answer Key

Case Study

1. Devon's situation reflects the substitution effect. The evidence is specific: over the same five months of heavy AI companion use, Devon canceled plans with friends three times, did not join activities Devon had been considering, and stopped calling Devon's grandmother. These are all declines in real-world relationship investment happening alongside AI use that provides daily relief. Devon even notes feeling like the data describes something true about their own experience — the symptom of loneliness is being managed while the conditions for genuine connection are atrophying.

2. The loop would work like this: Devon continues using the AI companion nightly, which relieves the acute feeling of loneliness. That relief reduces the urgency Devon feels to join activities or maintain human relationships. Those relationships and opportunities continue to decline. Devon's underlying loneliness — the real social and emotional kind — worsens as a result, even though Devon does not feel it acutely because the AI keeps managing the symptom. The worsened underlying loneliness increases Devon's reliance on the AI for relief. The AI use increases. Real-world investment declines further. The loop reinforces itself with nothing breaking it unless Devon does something different.

Multiple Choice

1. B
2. D
3. C

Matching

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

Fill-in-the-Blank

1) epidemic, 2) oxytocin, 3) nourishment

Short Answer (Sample Responses)

Q1: The reading distinguishes between social loneliness (not having a network — someone to talk to) and emotional loneliness (not having deep, intimate connection — being truly known). AI companions are effective at addressing social loneliness: they provide someone to talk to at any hour. But they cannot address emotional loneliness because they cannot genuinely know you, invest in you, or provide the reciprocal

vulnerability of deep human connection. If a person uses AI to relieve the acute discomfort of social loneliness, that relief may reduce the urgency they feel to build the real relationships that would address emotional loneliness — treating one symptom while allowing the deeper condition to persist or worsen.

Q2: The reading compares heavy AI companion use to eating high-calorie food in response to hunger: it addresses the sensation of the need without providing the full nutritional content that need actually signals. The analogy captures the core logic well — in both cases, you are relieving the discomfort of a signal without meeting the actual need that generated the signal. Where the analogy is imperfect is that social connection is more complex than nutrition: the specific kind of connection the brain needs is harder to specify, harder to measure, and harder to replace through alternative means than specific nutrients. But the structural point — that symptom relief and need satisfaction are not the same thing — is well-captured.

Q3: The research most consistently supports calibrated use — approaching AI companions with clear understanding of what they can and cannot do, so that they supplement rather than substitute for real human connection. This framing is more useful than abstinence because it engages honestly with the real value AI companions provide for many users, particularly those with limited social access, while still addressing the mechanism of harm. Abstinence advice fails because it does not address why people use AI companions in the first place; calibration advice addresses the use itself, helping people change what they do with AI rather than simply stopping. It also shifts the frame from individual willpower to informed understanding — which the research suggests is a more effective lever.