Teacher Answer Key

Case Study

1. The attending means that Nathaniel can recognize medical terms and identify disease names, but he has not fully developed the reasoning process needed to think through a diagnosis independently. "Thinking like a doctor" means generating, explaining, and narrowing a differential diagnosis based on evidence from the patient. This connects to skill atrophy because Nathaniel relied on AI to do the reasoning for him, so he did not build the independent diagnostic judgment the reading describes.

2. Yes, Nathaniel's case supports the argument that medical skill atrophy has higher stakes. In the case, Nathaniel cannot fully explain why he included or excluded certain diagnoses, which could become dangerous if an AI tool were wrong or unavailable. The reading explains that a confidently wrong AI diagnosis, followed by a practitioner without strong independent reasoning, could cause irreversible patient harm.

Multiple Choice

1. A
2. D
3. C

Matching

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

Fill-in-the-Blank

1) evidence, 2) history, 3) pattern

Short Answer (Sample Responses)

Q1: The pattern is different because reports since 2022 are consistent and specific across several fields, including education, law, finance, and medicine. Instead of vague complaints that young people are unprepared, educators and employers are describing similar gaps in writing, research, reasoning, and independent problem-solving. This matters because the repeated pattern across sectors makes the concern harder to dismiss as simple generational criticism.

Q2: The inability to recognize what you do not know is serious because it prevents people from checking their own understanding. In research, a person who relies too heavily on AI may accept a polished summary without realizing that important

sources, context, or contradictions are missing. This weakens judgment because the person cannot identify gaps, question results, or verify whether the information is reliable.

Q3: The responses all create restricted environments where students or trainees must complete cognitive work without AI assistance. Examples include in-class writing, oral defenses, AI-exclusion training periods, and clinical restrictions during medical training. The common goal is to preserve deliberate practice in foundational skills while still allowing people to learn appropriate AI use.