Teacher Answer Key

Case Study

1. Amara's case illustrates two specific failure modes: (1) the formal academic writing false positive — her writing in a third language likely produced lower lexical diversity and more uniform sentence patterns, which triggers detection algorithms not because of AI use but because of second/third-language writing characteristics; (2) the documented bias against non-native speakers and specific linguistic communities, which the reading identifies as an equity problem with AI detection tools. Her case is a textbook example of the harm the reading describes.

2. Amara's ability to produce drafts, annotated bibliography, research notes, and browser history showing her process is exactly the 'process documentation' approach the reading identifies as more reliable than automated detection. This evidence demonstrates actual engagement with the research and writing process in a way that no detection tool can measure — and in a way that would be very difficult to fabricate. It validates the reading's argument that process-based assessment is more informative than statistical pattern analysis.

Multiple Choice

1. B

2. A

3. D

Matching

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

Fill-in-the-Blank

1) predictable, 2) evasion, 3) flagging

Short Answer (Sample Responses)

Q1: Perplexity measures how predictable a word sequence is — AI text tends to be more predictable because AI models select statistically likely word sequences. Burstiness measures variability in sentence structure — AI text tends to be more uniform. Formal academic writing by skilled native English speakers already tends toward low perplexity and more uniform structure because that's the convention of the genre, making careful academic writers vulnerable to false positive flags.

Q2: Students who copy-paste AI output without editing are penalized while students who thoughtfully edit AI output to sound more personal escape detection. This

penalizes careless behavior — which might reflect a less sophisticated student — while rewarding more sophisticated engagement with AI tools. The result is that students with less AI literacy or less time to refine their AI use face greater academic risk than students with more resources, time, and skill — a deeply unfair distribution of consequences.

Q3: Answers will vary. Strong responses might agree that understanding is more fundamental than tool-use, since the educational goal is knowledge and competence. They might note that even AI-assisted writing can involve genuine understanding if the student critically engaged with and shaped the output. Students who disagree might argue that the process of writing itself builds understanding, making the question 'did you write this?' still meaningful. Accept well-reasoned positions in either direction.