Teacher Answer Key

Case Study

1. ChatGPT hallucinated because its knowledge cutoff meant it did not have access to current sources and it generated plausible-sounding citations that did not exist. Claude handled the long document well because of its strong long-context processing capability. Copilot in Word was effective for editing because it is embedded directly in the word processor, making it suited for in-workflow tasks like polishing prose.

2. Students should ask: does this task require real-time or recent information (which would favor Gemini's search integration), does it involve a long document (which would favor Claude), am I working inside a Microsoft Office document (which would favor Copilot), and does the tool cite its sources so I can verify claims. No single tool is best for every academic task.

Multiple Choice

1. D

2. A

3. C

Matching

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

Fill-in-the-Blank

1) months, 2) ecosystem, 3) safety

Short Answer (Sample Responses)

Q1: The model layer is the underlying AI system trained on data, while the product layer is the user interface and safety guidelines built on top of it. This matters because the same model can power multiple products with different features — for example, OpenAI's models power both ChatGPT and Microsoft Copilot. Knowing this helps you understand why two products might seem similar and whether switching tools actually changes the underlying AI you are using.

Q2: Claude would be the best choice for a 50-page legal document because the reading specifically identifies it as strong at processing long documents with extended context. ChatGPT would be a weaker choice for this task because it has shorter context windows in its standard mode, and using it for a long document might cause it to lose information from earlier pages when responding about later ones.

Q3: For research, hallucination is dangerous because AI-generated citations and statistics can sound authoritative while being entirely fabricated. Students who do not verify AI-generated facts may submit work with false information, cite nonexistent sources, or build arguments on invented data. The habit to develop is treating every specific claim, date, statistic, or citation from an AI tool as unverified until confirmed against an independent source.