Teacher Answer Key

Case Study

1. The family discovered that the Echo had recorded a private kitchen conversation that was triggered not by the actual wake word but by a similar-sounding phrase. This directly illustrates the reading's point that always-on devices are designed to record only post-wake-word audio, but research and real user experience confirm they sometimes activate on similar sounds and capture unintended private conversations — exactly the trade-off the reading describes.

2. Yes, this represents responsible AI use because the family made an informed decision after understanding the actual risk rather than ignoring it or panicking. The reading frames the always-on microphone as a 'privacy trade-off worth consciously understanding' — not a reason to refuse all AI, but a reason to make deliberate choices. The family's response (moving the device, disabling features, setting deletion schedules, establishing behavioral norms) is precisely what conscious trade-off management looks like.

Multiple Choice

1. C

2. A

3. B

Matching

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

Fill-in-the-Blank

1) nuance, 2) human, 3) advertising

Short Answer (Sample Responses)

Q1: Voice assistants are well-suited for brief, task-focused requests with predefined answers: setting timers, controlling smart home devices, getting weather or sports scores, navigation, and playing music by voice. They struggle significantly with nuanced, conversational, or context-dependent requests — asking Siri for help processing a personal conflict, or asking Alexa a follow-up question that requires remembering context from earlier in the conversation, typically produces poor or useless results.

Q2: The privacy trade-off is that always-on devices continuously process ambient audio to detect the wake word, meaning a microphone in your home is always active.

Amazon, Apple, and Google have all acknowledged that human reviewers sometimes listen to interaction recordings for quality review. Research has shown these devices sometimes activate on similar-sounding words and record unintended conversations, a risk the reading says is worth consciously understanding rather than assuming away.

Q3: Each assistant is optimized for its own company's ecosystem — Alexa for Amazon services, Siri for Apple devices, Google Assistant for Google services and Android. Choosing one means routing your purchase history, searches, location, home environment, and communication through that company's data infrastructure. These data streams inform advertising, product development, and business operations, which means the choice of voice assistant is also a decision about which company receives and profits from your behavioral data.