Teacher Answer Key

Case Study

1. The smell test detects spoilage organisms, which announce themselves, but pathogens generally leave appearance, smell, and taste unchanged. Smell is a quality check, so it could not tell her whether the chicken was safe.

2. Cooking only kills the bacteria present at that moment; it does not protect food afterward. Once the chicken cooled into the danger zone, growth restarted and continued for about thirteen hours, far past the four-hour cumulative limit.

Multiple Choice

1. B

2. A

3. A

Matching

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

Fill-in-the-Blank

1) infant, 2) one, 3) smell (or: appearance, taste)

Short Answer (Sample Responses)

Q1: Spoilage organisms produce the odors and slime people notice, but they rarely cause illness. Pathogens usually leave smell, taste, and appearance unchanged, so bad-smelling food may be safe and normal-smelling food may not be.

Q2: Date labels are quality estimates set by manufacturers, not safety deadlines, so they say nothing about how the food was handled. Time in the danger zone is what actually makes food unsafe, so it is the question that decides the outcome.

Q3: Mold spreads microscopic hyphae well past the visible spot, and dense foods like hard cheese resist that spread so an inch of margin removes it. Bread and lunch meat are soft and moist, so the threads travel throughout and the whole item must be discarded.