Teacher Answer Key

Case Study

1. The saucepan's tall, narrow sides trap the steam the meat releases, so moisture stays against the surface and the meat effectively steams. A wide skillet with low sloped sides lets that moisture evaporate, the surface dries, and only a dry surface can brown and form a crust.

2. Shape decides whether moisture escapes, which is why a skillet browns and a saucepan simmers, so the two are built for opposite jobs. Material decides how heat moves, since cast iron holds heat for searing while thin stainless heats unevenly and nonstick cannot take the high heat a sear needs.

Multiple Choice

1. D

2. C

3. B

Matching

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

Fill-in-the-Blank

1) serrated, 2) metal, 3) unplug

Short Answer (Sample Responses)

Q1: Improvised tools force a cook to apply force in a direction the tool was never built to take, which is where lab injuries cluster. A cook peeling a carrot with a paring knife instead of a peeler is drawing a blade toward the hand holding the carrot, so a slip cuts the hand.

Q2: A skillet's wide, low, sloped sides let the moisture food releases evaporate away, and a surface must be dry before it can brown. A saucepan's tall sides trap that steam against the food, so the surface stays wet and the food effectively simmers and turns gray.

Q3: In a dishwasher, knives knock against other items, which chips and dulls the edge, and the prolonged moisture and heat damage handles. A dull knife then requires more force and is more likely to slip, so dishwashing a knife eventually makes it dangerous as well as useless.