Teacher Answer Key

Case Study

1. Food cooks from the outside in, so the time a piece needs is set by its thickness, and Tyler's pieces ranged from a quarter inch to nearly an inch. No single temperature or time can finish both, so the thin pieces burned while the largest were still firm.

2. The oven applied the same heat to everything on the pan, which means it treated every piece identically and cannot explain a difference between them. The only variable that differed was the size of each piece, and size was decided entirely by how he cut, so the cause was the knife work.

Multiple Choice

1. B

2. D

3. C

Matching

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

Fill-in-the-Blank

1) rocks, 2) claw, 3) mince

Short Answer (Sample Responses)

Q1: The guiding hand curls its fingertips back so the knuckles form a flat wall, and the side of the blade rides against that wall like a fence. The knuckles retreat a small distance between cuts, and whatever distance they move back becomes the exact thickness of the next slice.

Q2: Heat travels from the outside of a piece inward, so a thick piece needs more time than a thin one and there is no setting that serves both. On one pan the thin pieces reach doneness and keep going until they scorch, while the thick pieces are still raw in the center.

Q3: Honing uses a steel to push a rolled edge back into alignment without removing any metal, and it should be done briefly and often, ideally each time the knife is used. Sharpening grinds metal away on a stone to form a new edge and is needed only every few months.