Teacher Answer Key

Case Study

1. El Niño weakens or shuts down upwelling, reducing nutrient input.

2. Human overuse combined with natural variability can cause ecological and economic collapse.

Multiple Choice

1. D

2. A

3. C

Matching

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

Fill-in-the-Blank

1) Cold, nutrient-rich, 2) El Niño (or: overfishing), 3) Pump

Short Answer (Sample Responses)

Q1: Winds blow parallel to the shore, and the Coriolis effect pushes surface water away, causing upwelling.

Q2: Nutrient-rich waters fuel phytoplankton, which form the base of food webs supporting fish and higher predators.

Q3: Because they produce so much food for humans, overfishing or climate disruptions can cause massive losses.