## Teacher Answer Key

**Case Study**

1. Because warming reduces oxygen solubility while increasing metabolic demand.

2. Respiration continues at night, consuming oxygen without replenishment from photosynthesis.

**Multiple Choice**

1. D

2. B

3. A

**Matching**

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

**Fill-in-the-Blank**

1) Gas solubility, 2) Less, 3) Salinity

**Short Answer (Sample Responses)**

Q1: Warmer water holds less oxygen, while higher metabolism increases oxygen demand.

Q2: They absorb large amounts of oxygen and $CO_2$ due to cold, low-salinity waters.

Q3: Cold, fresh water holds the most gases; warm, salty water holds the least.