Natural Water Quality: Formal Lab Background Questions

Answer all of the questions below to prepare for your formal lab report. Be sure to paraphrase the information!

**Physical Factors:**

**Temperature:**

1. What are three (3) reasons that temperature is important to water quality?

**Turbidity:**

1. What does turbidity measure?
2. What are three (3) causes of turbidity?

**Chemical Factors:**

**Phosphate:**

1. Why is phosphate important for aquatic life?
2. Excessively high levels of this nutrient can lead to what?
3. What are three (3) sources of phosphates that can enter the aquatic system and cause problems?

**pH:**

1. What is the normal range of pH for aquatic systems?

**Nitrate:**

1. Why is nitrate important for aquatic life?
2. An excess of nitrate can lead to what?
3. What are three (3) sources of manmade nitrates that enter the aquatic system and cause problems?

**Chemical Factors (continued):**

**Dissolved Oxygen:**

1. Why is dissolved oxygen important to the health of aquatic ecosystems?
2. Which can hold more dissolved oxygen: cold or warm water?
3. A) How can high levels of bacteria from sewage pollution affect dissolved oxygen?  
     
   B) How does this affect aquatic life?

**Biological Factors:**

**Coliform Bacteria:**

1. Since coliform bacteria themselves are not dangerous to our health, why do we test for them?