Introduction reading questions

1. Why is the Chesapeake Bay considered an estuary?
2. What are 3 sources of nitrogen and phosphorus that feed into the bay?
3. Why are sediments on the rise? Why is that an issue?
4. What is the definition of anthropogenic?
5. What is believed to be the cause of male bass developing into hermaphrodites?
6. What were the goals of the Chesapeake Bay Action Plan?

Water Pollution –

Nonpoint Sources -

Point Sources -

Why is it important to learn about water pollution?

Give two examples of point source pollution and explain why they are point sources.

Give two examples of nonpoint source pollution and explain why they are non point sources.

Wastewater -

Oxygen-demand waste -

Biochemical Oxygen Demand (BOD) -

Dead Zones -

Eutrophication -

Cultural Eutrophication -

What are some disease causing organisms?

Indicator Species -

Fecal Coliform Bacteria –

How does high BOD influence water quality?

Explain what a ‘dead zone’ is and how nitrogen and phosphorus contribute to them.

Describe some pathogens common in poorly treated wastewater. Where are they the biggest threat and why?

Technological Treatments of Wastewater

Septic Systems -

Septic Tank -

Sludge -

Septage -

Leach Field -

Sewage Treatment Plants -

Manure Lagoons -

What problems are associated with sewage?

Describe and contrast the two most common ways to treat wastewater.

Describe the advantages and disadvantages of both septic systems and sewage plants.

What is the role of bacteria in the treatment of human and animal waste?

Water Legislation and its Enforcement -

Clean Water Act -

Safe Drinking Water -

Maximum Contaminant Levels (MCL) -

**Working Toward Sustainability**

Explain the process of how the ‘green’ wastewater plants work.

What are some benefits of treating water in this way?

Why is this type of facility better suited for warmer climates?