

Review Sheet for Freshwater Test

Vocabulary to Know

freshwater	aquifer	pH	flocs
surface water	water cycle	DO	aeration
watershed	permeable	synergistic	chlorination
river basin	impermeable	nitrates	point pollution
hydrosphere	runoff	phosphates	nonpoint pollution
tributary	collection /	turbidity	pollutant
percolation	accumulation	bioindicators	acid rain
infiltration	condensation	hardness	sedimentation
topography	evaporation	coagulation	
estuary	transpiration	filtration	
groundwater	precipitation	alum	

Be sure you know the following concepts:

- Percentages of water distribution on Earth (saltwater vs. freshwater, types of freshwater)
- Be able to explain and identify the steps in the water cycle
- Water quality standards:
 - o What are the healthy levels for each standard?
 - o Which standards are related to each other and affected by each other? (How does temperature affect DO? How do nitrates affect turbidity? How does turbidity affect temperature? How does pH amplify the effect of other pollutants? Etc.)
- What are the major steps in the water treatment process?
- What is the purpose of each step in the water treatment process?
- Know the difference between point and non-point pollution and be able to recognize examples of point and non-point pollution
- Be sure you know the pH of pure water, and why pure water is not usually found on Earth.
- Study the word sets on Quizlet.com related to water and water quality: Freshwater and Water Cycle, Water Quality (Username: kmidkiff Password: voyager8)

Sample Review Questions

1. Which example illustrates a point source of water pollution?
 - a. Runoff from roads
 - b. Runoff from farms
 - c. An oil tanker spilling oil into an ocean
 - d. Adding sand to icy roads instead of salt
2. Which of the following is NOT a major source of water pollution?
 - a. Human wastes
 - b. Industrial wastes
 - c. Chemical energy
 - d. Chemical runoff

3. The step in the water treatment process in which alum is added to cause sticky globs to form is called
- a. Aeration
 - b. Coagulation
 - c. Chlorination
 - d. Filtration
4. The process of passing water through a series of screens that allows the water through, but not larger solid particles is called
- a. Filtration
 - b. Chlorination
 - c. Aeration
 - d. Coagulation
5. Chlorine is added to drinking water in order to
- a. Kill disease-carrying microorganisms
 - b. Help form sticky globs that are caught during filtration
 - c. Screen the water for large particles
 - d. Reduce unpleasant odors and tastes
6. The use of fertilizers to grow crops can sometimes lead to
- a. a decrease in insect populations.
 - b. an increase in groundwater temperature.
 - c. an increase in nitrate levels.
 - d. a decrease in dissolved oxygen levels.
7. Plants return water to the atmosphere in a process called
- a. condensation
 - b. photosynthesis
 - c. transpiration
 - d. evaporation
8. Which statement *best* describes a difference between an estuary and a tributary?
- a. An estuary has freshwater and a tributary has salt water.
 - b. An estuary leads into a tributary.
 - c. An estuary leads into an ocean and a tributary leads to a river.
 - d. An estuary contains groundwater and a tributary contains surface water.
9. What are the healthy levels for surface freshwater for each water quality standard? Give the range, or tell whether it should be "low" or "high" for healthy water.

pH: _____

dissolved oxygen: _____

nitrates: _____

phosphates: _____

ammonia: _____

turbidity: _____