

Introduction to Water Chemistry Worksheet

Vocabulary Definitions

1. contamination: The presence of a minor component in another chemical or mixture.
2. purification: To make something pure or to cleanse.
3. remediation: To correct something that has gone bad or defective.

Questions

1. List three processes that happen during the water cycle:

- condensation
- evaporation
- infiltration
- sublimation
- precipitation
- evapotranspiration

2. List three large-scale methods for purifying drinking water:

- reverse osmosis
- ultra-filtration
- electro-deionization

3. Describe how activated carbon works:

As contaminants pass through the activated carbon, they adsorb onto the pores so only clean water passes through.

4. List five major sources of water contamination:

- leaking sewage
- underground fuel storage tank leaks
- pesticides
- landfills and dumps
- industrial waste

5. Of the three remediation options discussed in the presentation (pump-and-treat, permeable reactive barrier, and nanoparticle injection), which do you think is the best and why?

This is more of an opinion than a right or wrong answer. There are advantages and disadvantages to all of the different methods.