POLLUTION QUIZ

Procedure:

Determine if the answers are true or false.

- 1. _____ If groundwater gets contaminated, then surface water like lakes and streams can become polluted also, since the two are often connected.
- 2. ____ Since groundwater lies far below the land surface, the soil fully protects it from contamination.
- 3. ____Contaminants that enter the groundwater may remain there for decades.
- 4. ____ Most groundwater contamination is caused by big business and industry.
- 5. _____ There is little that individual residents can do about water contamination.
- 6. _____ If water makes a good tasting cup of tea, it is safe.
- 7. _____ Household animals may contribute to the pollution of my water.
- 8. _____ We can always treat our water to make it drinkable.
- 9. _____ Fertilizing my lawn does not pollute the water.
- 10. ____ Rural areas do not have water problems.

Quiz taken from NDSU Extension Service, North Dakota State University in Fargo, ND 58105

Answers:

- 1. **True**. Most surface water interacts with underground water sources. Thus, if groundwater is contaminated, connecting springs, streams, and lakes may suffer the consequences as well.
- 2. False. Although the soil does filter out many contaminants, it does not protect the groundwater entirely.
- 3. **True**. Groundwater moves very slowly through the aquifers at a rate of only inches per day. Some contaminants that reach the groundwater break down slowly or not at all, and move slowly with the water. Therefore, groundwater may contain these contaminants for many years.
- 4. **False**. Business and industry contribute to the problems in the water pollution however, municipal, agricultural, and household sources of contamination must be recognized.
- 5. **False**. Individuals can alter their lifestyles to reduce their impact on water use and quality (recycling solid waste, water conservation). The government at all levels has a major responsibility to protect our water supply but it is also up to individuals to help solve the problems.
- 6. **False**. Many pollutants are odorless, tasteless, and colorless. If any are present, even boiling might not remove them. Testing by a laboratory is the best assurance of quality. State and federal laws require the testing of public water supplies, but testing of a private well is up to the homeowner. If your family uses a private well as a source of household water, find out when the most recent test was performed and what the results indicated.
- 7. **True**. When many animals are concentrated in an area, such as a livestock yard, animal wastes can be a problem if not properly managed.
- 8. **True**. In theory, we can always treat our water to make it drinkable. However, in reality there is a point reached where it can no longer be feasible or affordable to purify our water. Prevention of contamination through careful land use and educating the public can protect us from costly treatment.
- 9. False. Lawn fertilizer may increase the nitrate level in groundwater and rain washes nitrates into the soil.
- 10. **False**. Rural areas can have problems of pesticide, fertilizer, and petroleum contamination, as well as problems of water shortages.