**Video Study Guide: Earth Revealed  
Episode 21: Groundwater**

Read the questions first. Then answer them while watching this episode of "Earth Revealed". If you miss it in class you are still responsible for the viewing this segment and answering the questions. The video is available online at <http://www.learner.org/vod/video.html?sid=78&po=21> . The index for these programs is online at [**http://www.learner.org/resources/series78.html#**](http://www.learner.org/resources/series78.html) . If you do not have an internet connection at home, view it after school or during study hall in the media center. Each segment is 30 minutes long.

1. Why is groundwater such an important natural resource?
2. What is the source of most groundwater?
3. Describe porosity and permeability.
4. What is an aquifer?
5. What happens when groundwater reacts with limestone?
6. How do stalactites and stalagmites form?
7. What is the water table?
8. How does surface topography affect the shape of the water table?
9. What is effluence, and how does it help maintain year-round flow in many rivers?
10. Describe an open aquifer.
11. Describe a closed aquifer, and the formation of an artesian well.
12. What can happen when too much groundwater is removed from an aquifer?
13. What factors can lead to groundwater contamination?
14. How do engineers attempt to limit groundwater contamination from landfills?
15. How quickly does groundwater recharge in a natural setting?
16. How is groundwater recharged?
17. What problems need to be addressed in terms of groundwater management?
18. What is the role of the hydrogeologist?