**Video Study Guide: Earth Revealed
Episode 17: Sedimentary Rocks – The Key to Past Environments**

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=17> . 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. How many years of earth history are represented in the Grand Canyon?
2. What are sedimentary rocks?
3. How are sediments formed?
4. How do weathering and erosion influence the composition of sediments?
5. Describe mechanical weathering and the formation of clastic sediments.
6. Describe chemical weathering and the formation of solutions.
7. How can sediments be transported?
8. How does energy relate to the transportation and deposition of sediments?
9. Why do you usually find sand at the beach?
10. What is sorting?
11. What are "facies changes" and how do they relate to sedimentary rocks?
12. Describe the process of lithification.
13. Describe chemical sedimentation, and how it takes place in the ocean.
14. What are sedimentary structures, and why are they important?
15. What is a bedding plane, and what do they represent?
16. How is cross-bedding used by geologists to interpret geologic history?
17. Describe the formation of symmetrical and asymmetrical ripple marks.
18. How are sedimentary rocks important to economics?
19. Summarize the geologic history of the Grand Canyon.