**Video Study Guide: Earth Revealed
Episode 12: Minerals**

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=12> . The index for these programs is online at <http://www.learner.org/progdesc/index.html?uid=78> . 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. What five characteristics are required for a substance to be considered a mineral?
2. What are rocks?
3. How are minerals like fossils?
4. What are some of the common rock forming minerals?
5. How can the growth of a mineral be compared to the construction of a block wall?
6. Why is quartz harder than steel?
7. What is cleavage?
8. How does the cleavage of feldspar differ from the cleavage of mica?
9. What is one easy way to distinguish calcite from quartz?
10. What happens when you drop acid on a carbonate mineral (or rock)?
11. What is luster (this is very important)?
12. What is streak?
13. How deep in the crust were the granitics of the Whipple Mountains formed?
14. Discuss diamonds and graphite. What makes them so different?
15. Discuss hydrothermal solutions and the precipitation of metallic minerals.
16. What is the origin on most hydrothermal solutions?
17. Discuss the formation of ore minerals.
18. Discuss the importance of the silicate minerals (also very important)