**Chapter 8, Mining – pp. 226-230, p. 390**

1. Describe the differences between ores and minerals. Be sure to discuss the uses and formations of each.
2. Identify the two must abundant elements in Earth’s crust.
3. What is the difference between an ore vein and a disseminated deposit? Which ones are easier to mine and why?
4. Consider the estimated meal reserves remaining on Earth and in the U.S. Describe three pieces of information that stand out to you from this table.
5. What are the 3 techniques used for surface mining, and what are the environmental dangers of each?

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| **Surface Mining Techniques** | **Environmental Issues** |
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1. Explain what tailings are, describe their environmental impacts, and discuss solutions for minimizing tailings.
2. Discuss the environmental and social (e.g., health) impacts of subsurface mining.
	1. Environmental impacts –
	2. Health –
3. Draw a diagram to illustrate the causes and effects of acid mine drainage (p. 390).
4. In general, why does the impact of extracting deposits of a certain mineral resource increase over time?
5. What legal requirements did the Surface Mining Control and Reclamation Act of 1977 introduce?
6. Create a timeline or illustration depicting the steps involved in reclaiming a mined area.

**Chapter 8 Vocabulary List**

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| **Term** | **Description** | **Example** | **Illustration** |
| Ores |  |  |  |
| Metals |  |  |  |
| Known reserves |  |  |  |
| Strip mining |  |  |  |
| Tailings |  |  |  |
| Open-pit mining |  |  |  |
| Subsurface mining |  |  |  |
| Acid mine drainage |  |  |  |
| Mountain top removal |  |  |  |
| Black lung disease |  |  |  |
| Fracking |  |  |  |
| Reclamation |  |  |  |
| SMRCA law |  |  |  |