<u>Fact Book</u>

You will need a cover page (2pts), with your name and title (2pts). Your book will contain the 3 chapters listed below. Include a table of contents (3pts). Below each chapter is the information that should be contained in that chapter. Each chapter must contain at least 3 illustrations with a caption describing the illustration (9pts). Number each page (5 pts).

Chapter 1: Minerals and Mineral Resources (18pts)

- 1. Introduction (2pts)
- 2. What are native elements (meaning as well as examples). How are they different from other minerals? (2pts)
- 3. Create a table that describes what the 5 characteristics are that a mineral must have in order to be called a mineral. (5pts)
- 4. Ore Minerals (2pts)
- 5. Illustrate the basic three ways in which minerals are formed. Extra credit: include the forth (3pts)
- 6. Why are minerals so important economically and industrially speaking? (2pts)
- 7. What is the difference between precious gemstones and semiprecious gemstones? (2pts.)

Chapter 2: Mineral Exploration and Mining (18pts)

- 1. Introduction (2pts)
- 2. "Did You Know" section about mineral exploration (2pts)
- 3. Explain subsurface mining. Include explanations for: room-and-pillar mining; longwall mining; solution mining (4pts)
- 4. Explain surface mining. Include explanations for: open-pit mining; surface coal mining; quarrying; solar evaporation (5pts)
- 5. Explain placer mining. (1pt)
- 6. Explain hydraulic mining. (1pt)
- 7. Explain smelting (include flux). (2pts)
- 8. Explain undersea mining (1 pt)

Chapter 3: Mining Regulations and Mine Reclamation (18pts)

- 1. Introduction (2pts)
- 2. What are the environmental impacts of mining? Include explanations for: land subsidence; erosion; soil degradation; air and noise pollution; water pollution wildlife destruction and displacement; mine fires; human health issues (8pts)
- 3. Reclamation and its law (2pts)
- 4. State regulations for mining (2pts)
- Make a table with the following "Acts" include a column explaining how the "Acts" relate to mining: Clean Water Act; Safe Drinking Water Act; Endangered Species Act; Comprehensive Response Compensation and Liability Act; Surface Mining Control and Reclamation Act (4pts)

Extra Credit (5pts)

Super cool index page with extra information not covered above and not in your Environmental Science book - teach me something new! © - I can't wait!!! ____/75=____ A B C D F