

The Miners are Reclaiming

ACTIVITY 11

Objective:

To understand some of the goals and challenges associated with mining reclamation.

Vocabulary:

overburden, contamination, beneficial, subsidence, impacted

Materials:

- One copy of *The Miners Are Reclaiming* reading and worksheet for each student
- *The Miners Are Reclaiming* song

Check for Understanding:

Correct the worksheet.

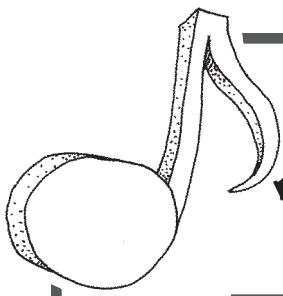
Introduction:

Mining reclamation is defined as the process of returning mined land to productive and beneficial use. It involves the responsible reuse of lands through planning, management and technology. This reading is meant to introduce students to some of the concerns a mining company has to deal with when considering opening a new mine.

Procedures:

1. Ask the students the following questions:
 - What would happen if a bed of coal were discovered about ten miles from your community in an uninhabited part of your county?
 - Would you be willing to have a company come in and mine the coal? What changes would it make in your area?
2. Play *The Miners Are Reclaiming* song and have the students sing along. Discuss what reclamation means with the students.
3. Have the students read *The Miners are Reclaiming* reading and complete the worksheet.





The Miners are Reclaiming

THE MINERS ARE RECLAIMING

Have you ever thought about what happens when a coal mine runs out of coal? Or a gold mine runs out of gold? It depends! In the past, mines were abandoned and often became hazards to people and wildlife in the area. Today the outcome is different. The land is reclaimed.

Mining reclamation is defined as the process of returning mined land to productive and beneficial use. How this happens varies greatly depending upon the type of mine, its location, and how much the land was changed by the mining process.

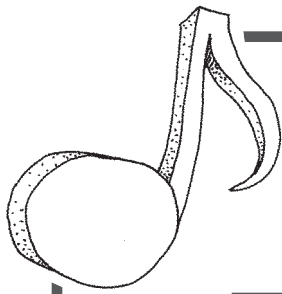
Before a company can gain a permit to open a mine, they must have a detailed plan of how they will reclaim the land that will be disturbed during the mining process. Government agencies require the mining company to look at how the mine will impact land, water, plants, animals, humans, and other natural resources in the area. The company then develops a plan that provides the least disruption possible.

Some of the challenges mining companies face when creating a reclamation plan are dust, erosion, subsidence (sinking down of the earth's crust), wildlife and habitat disruption (on land, in the air, and in the water), effects on plants, and the contamination of open and underground water sources. The reclamation plan has to provide a way for the company to deal with these and other problems before the plan will be approved by the government.

During the time the mine is open, companies can help the reclamation process by taking care of waste storage properly, managing water so that the water quality is protected, and making sure they are not putting pollution into the air. They can also make sure they are not leaving added chemicals that come from the mining process in the soil and the water.

When the mines are closed there are several procedures which take place. Overburden can be used to fill mine shafts and tunnels. The land is recontoured (reshaped) and the topsoil is replaced. A cover of plants is re-established. The final result should be an area that is usable, pretty to look at, and safe.





The Miners are Reclaiming

WORKSHEET

Main Idea

1. Choose another title for this story.
___ Changing the Land
___ How a Mine Can Be Reclaimed?
___ Mines and Pollution

Sequencing

2. Number the events below in the order that they are mentioned in the article.
___ the mine is opened
___ the reclamation plan is approved by the government
___ overburden is used to fill mine shafts
___ the mining company makes plans to deal with dust and erosion
___ the mining company has to develop a reclamation plan

Reading for Details

3. Scan the article to answer these questions.
 - a. What are some of the challenges mining companies face when they plan to reclaim the land? _____

 - b. Name three things a mining company may do after the mine is closed.

 - c. What is mining reclamation? _____

 - d. How are animals impacted by the creation of a mine? _____

 - e. What changes might people see in an area if no reclamation were to take place?

Reading for Understanding

4. Match the vocabulary words with their definitions.

| | |
|-------------------|---|
| ___ beneficial | A. a sinking down of a part of the earth's crust |
| ___ reclamation | B. helpful; to the good |
| ___ subsidence | C. the soil or rock that covers a mineral deposit |
| ___ contamination | D. returning mined land to beneficial use |
| ___ overburden | E. when something is made impure or unclean |

