

OCTOBER SKY

| | | |
|--|---|---|
| <input type="checkbox"/> Grade Level: Middle/High School | <input type="checkbox"/> Subject Areas: English, Literature, History, Science | <input type="checkbox"/> Setting: Classroom |
| <input type="checkbox"/> Duration: 3 hours | <input type="checkbox"/> PA Academic Standards: 1.4.8B; 1.4.11B; 1.5.8A,B,C,D; 1.5.11A,B,C,D;1.6.8D,E; 1.6.11D,E; 3.8.10A; 4.3.10A; 4.3.12A; 8.2.9D; 8.2.12D; 8.3.12A; 8.3.9D; 8.3.12D; 8.4.9D; 8.4.12D | <input type="checkbox"/> Keywords: Mining, company towns, unions, John L. Lewis, rockets, labor relations |

SUMMARY

By viewing the movie October Sky, students can observe the life of a coal miner and several social impacts of living in a coal town. Students will discover what the mineworkers experience by “owned” by the mine owners.

OBJECTIVES

- After watching the movie “October Sky”, the student will describe the conditions the miners experienced while working in the mine.
- After watching the movie, the student will discuss how mining companies owned the town and essentially the workers.
- After watching the movie, the student will summarize the hardships faces by young men, especially the son of a miner in a mining town to “get out” and become something else.
- After watching and discussing the movie, the student will complete a project required by the teacher.

MATERIALS

- A. October Sky movie (108 minutes)
- B. TV/VCR
- C. Discussion materials

BACKGROUND

The movie is based on a true story is set in Coaltown, (Coalwood in the movie), West Virginia in 1957, where coal mining is king and no one can escape life underground. But when high schooler Homer Hickman, Jr. sees the Soviet satellite Sputnik streak overhead, he aims for the stars and a new destiny in the incredible true story of hope, determination and triumph. With the help of his teacher and three buddies, Homer sets out to build his own rocket and get out of Coalwood. His father is a coalminer and expects Homer to follow in his footsteps because; no one from Coalwood ever goes to college unless they receive a sports scholarship, like his brother. With a limited education and a series of misfires that threaten to flatten his dreams and the town, Homer overcomes seemingly impossible odds to fulfill his vision. Homer wins a scholarship and eventually works for NASA.

PROCEDURE

Warm Up

Miner’s gear - hard hat, lamp, long sleeve shirt

Mining Town - The Company owned the stores, the schools and the houses, and if anything needed fixed, the company carpenter had to fix it and you might have to wait several weeks/months.

How they mined – Room and Pillar Method

The Activity – October Sky

Have students watch the video and take notes and observations about living in a coal-mining town and working in a coal mine.

OBSERVATIONS TO BE MADE:

- The mining towns of West Virginia existed for the sole purpose of mining coal. The coal company owned everything in the town: the stores, the church, the schools and the houses in which the miners lived. If a miner was incapacitated and could no longer work, his family was forced to move out of the company owned house, which meant leaving town. Often, when the father was injured, the children had to work in the mines to pay the rent and remain eligible to live in company owned housing. If a

miner died in the mines, his family had a very short time (usually two weeks) to move. The coal company didn't want the grim reminders of the dangers of the mine to be around too long. Coaltown (Coalwood in the movie), where Homer lived, was one of the better company towns, but it was still subject to harsh practices by the mine owners.

- The film does not present a sympathetic view of the United Mine Workers local in Coalwood. This is a departure from the book. While Homer's father was the manager of the mine and a company man through and through and while he thought that the reasons for the strike were trivial, the truth of the matter was not so clear. Moreover, the Union men supported the Rocket Boys long before Homer's father did and they were instrumental in facing down the company's representative when he wanted to shut down the boys' test firing range (it was on a massive expanse of tailings from the mine). For a film that shows the difficulties the miners had in organizing the United Mine Workers Union and in gaining recognition from the mine owners, see Matewan.
- There are two principal methods of mining coal. Strip-mining coal close to the surface is the most economical, but also the most environmentally destructive. Power equipment of various kinds (power shovels or drag lines) removes the earth and rock to expose the coal. The coal is then broken up and loaded onto trucks or railroad cars. When the coal is not located close to the surface, the second method, underground or deep mining is used. A shaft is dug to the location of the coal seam, either vertically, on a slant or, if the coal is located in a mountain, horizontally. The coal is cut, using machines or controlled explosions. The key to deep mining is controlling cave-ins, dispersing methane gas and carbon dioxide, and suppressing coal dust. Pillars of coal are left to help support the roof. Steel beams are laced across the roof to prevent the rock from coming down onto the heads of the miners. In some mines the roof behind the coalface is allowed to collapse as the face moves forward along the seam. Huge fans and complicated ventilation systems are used to draw out the gases and bring in clean air. Coal dust is highly combustible and must be strictly controlled. Limestone dust is sprayed in the mine to keep the coal dust in check. The work in the deep mines is automated as much as possible. Continuous mining machines combine the separate steps of cutting, drilling, blasting and loading the coal at rates as high as 10.8 metric tons of coal per minute. The coal is then transferred by electric trolley to the surface where it is taken to preparation plants to be screened, washed, sorted by size and crushed before shipment.
- In a mine, coal dust pollutes the air and literally covers everything. A common ailment among miners is black lung disease (pneumoconiosis) caused by inhaling coal dust. Homer's father was suffering from this disease. The mine owners failed to compensate miners for this occupational hazard. The Federal Government has stepped in and set up a health and worker's compensation plan for the miners.
- The book is better than the movie and contains a number of wonderful vignettes that are not in the film. For example, as the boys proceeded to build more complex rockets Homer realized that they needed to learn calculus to take the next steps in rocket design. Homer and the science teacher convinced the principal of the high school to offer a new course in calculus. The enrollment was limited to six people, the exact number of boys involved in the effort to make the rockets. No one expected anyone else at the school to sign up for the class. However, the girl that Homer had a crush on signed up too, and since Homer's grades in math were the worst of any of the applicants, he was excluded from the class. The principal at this point was not sure that the Rocket Boys were really up to any good and called them "bombers," a reference to their first effort which had blown up Homer's mother's fence. The principal would not increase the enrollment in the class by one person to allow Homer to take it. Initially, Homer felt that his dreams of a career in rocketry were over, but in the depths of his depression, he found a calculus text on the bookshelf at home. There were notes in the book in his father's handwriting showing that his father, who had never gone to college but who was called upon to supervise engineers, had taught himself calculus. Homer began to study the text and the other members of the club helped him. Homer learned calculus without the class, to his own amazement and that of his teachers and the principal.
- Also in the book, and not in the film, is a clear explanation of how the Rocket Boys got the precision nozzles necessary to fly their rockets. After Homer's father had sent the first machinist to help them, Mr. Bikovsky, into the mine as punishment, the town coalesced behind the Rocket Boys. Homer then convinced the supervisor of another mine machine shop to make the nozzles and Homer's father

permitted company time and company materials to be used. A fundamental truth shown by this story is that to perform amazing feats, not only do people need to be committed and work hard, they often need the support of their community. In addition, they need to seek out and get that help. This is especially true in today's complex environment.

- The sequence in which Homer goes to work in the mine is fictional and not in the book. This event rings true, however, because if a man was injured or died, the mine owners provided no benefits for the miner and his family.

WRAP UP

1. Discuss, as a class, the impact of the movie using the questions below.

Discussion Questions:

1. What was the first thing that the miners did on their way down the elevator to the mine?
 2. A reference was made to the company carpenter in the film, who made the reference and what did it refer to?
 3. What happened when someone "pulled" a pillar too close?
 4. Where could you make the most money, by working underground or by working above ground in the machine shops?
 5. Where was the launch pad at, and what was it?
 6. What was the theme of this film? What were the filmmakers trying to tell us? Were they successful? Justify your answer.
 7. What did you learn about the life and times of a coal miner in the 1950's from this movie?
 8. Did all of the events portrayed in the film ring true? Describe the scenes that you found especially accurate. Which sequences didn't seem to match reality? Why?
 9. How big is the coal industry today? To what extent does the United States still rely on coal for power and for coke for the steel mills? Are there still coal towns today?
 10. Why did Homer's father want him to work in the mine? Was his father being a good parent in wanting Homer to follow in his footsteps?
 11. Describe how Homer's father felt about his youngest son at the beginning of the film, when Homer first started experimenting with rockets, after Homer had gone to work in the mine, when Homer quit the mine, and at the end of the film.
 12. Why did Homer volunteer to work in the mine when his father was ill? What would have happened to the family if no one had been working in the mine even though his father was still recuperating from injuries he had received saving miners' lives?
2. Have the students complete one of the projects below.

Possible Projects

- Students can be asked to write an essay on any of the discussion questions described above.
- The class can be asked to take positions on and to debate any of the discussion questions.
- Change the ending of the film. (This can be done by the teacher describing a new ending or permitting the class or different groups of students to choose their own ending.) Break the class into groups to create a storyboard or a script of an altered version of the film accommodating the new ending, if necessary, changing the order of the scenes.

Bibliography: Classroom Cinema, by Richard A. Maynard, 1977, Teachers College Press, New York.

ASSESSMENT

- Teacher will evaluate the student participation during the discussion of the film and check notes taken during the film. **(Objective 1)**
- Teacher will verbally check during the discussion the student will discuss how mining companies owned the town and essentially the workers. **(Objective 2)**
- Teacher will check the summaries for the student understanding of the hardships faced by young men in a mining town to “get out” and become something else. **(Objective 3)**
- Teacher will evaluate student understand through the correctness/participation of the project assigned. **(Objective 4)**

EXTENSIONS

- Students can research unions and the benefits they provided to the miners.
- Students can research John L. Lewis, one of the most important figures in the formation of mine unions.
- Students can also read the book the movie was based on Rocket Boys or more recently renamed October Sky after the success of the movie.
- A rocket lesson could enhance the movie.

RESOURCES

Many of the questions and facts have been compiled from teachwithmovies.org.

OCTOBER SKY

Discussion Questions:

1. What was the first thing that the miners did on their way down the elevator to the mine?
2. A reference was made to the company carpenter in the film, who made the reference and what did it refer to?
3. What happened when someone "pulled" a pillar too close?
4. Where could you make the most money, by working underground or by working above ground in the machine shops?
5. Where was the launch pad at, and what was it?
6. What was the theme of this film? What were the filmmakers trying to tell us? Were they successful? Justify your answer.
7. What did you learn about the life and times of a coal miner in the 1950's from this movie?
8. Did all of the events portrayed in the film ring true? Describe the scenes that you found especially accurate. Which sequences didn't seem to match reality? Why?
9. How big is the coal industry today? To what extent does the United States still rely on coal for power and for coke for the steel mills? Are there still coal towns today?
10. Why did Homer's father want him to work in the mine? Was his father being a good parent in wanting Homer to follow in his footsteps?
11. Describe how Homer's father felt about his youngest son at the beginning of the film, when Homer first started experimenting with rockets, after Homer had gone to work in the mine, when Homer quit the mine, and at the end of the film.
12. Why did Homer volunteer to work in the mine when his father was ill? What would have happened to the family if no one had been working in the mine even though his father was still recuperating from injuries he had received saving miners' lives?

COPY ME



One Per Group