

Video Questions for October Sky

This film and the novel on which is based has had a great impact on literature and science. Mr. Hickam's website is full of info at <http://www.homerhickam.com/new1.htm> also, a learning guide can be found at the Random House website. The link from Mr. Hickam's site to this learning guide is: <http://www.randomhouse.com/catalog/display.pperl?isbn=0440235502&view=tg>

1. How fast was the Sputnik Traveling?
2. What was Sputnik?
3. What inspired Homer Hickam to investigate rocketry? ~
4. Did Homer have a larger vision for himself at this time?
5. What motivated his friends to join him in his endeavors at "Cape Coalwood"?
6. Who does Homer Write to and why?
7. What benefits can students get from the science fair?
8. What was the impact of a rocket's exhaust nozzle on its trajectory? How did he address this problem?
9. What other problem plagued Homer's first few rockets? How was the problem solved?
10. What do we discover about Homer during this period of test and failures?
11. How does the video depict Homer using the Scientific Method?
12. Describe the significance of scene as Homer, descending into the mine, looks up at the sky.
13. How Far did the alleged fire starting rocket go? What made the rocket land in a different location?
14. What equation did Homer use to prove to the principle that their rocket did not start the fire?
15. What life attitudes did John (Homer's Dad) model for Homer that helped him as a person and as a scientist?
16. Who is Homer's real hero?
17. Why are chemicals used in rocketry, explain using Newton's Third Law.
18. A propulsive force of 4 000 N will cause what acceleration in a 12 kg model rocket?
19. How does friction affect the performance of a rocket?