During the Movie: October Sky

Name: __________________________ Period: ___ Date: ____________________

1. What country launched the world's first man-made satellite, Sputnik, into Earth orbit on October 4, 1957?

2. Because Sputnik travels at 18,000 mph, it can make an orbit of Earth every ___ minutes.

3. Satellites passing overhead are visible in a clear dark sky one hour after _______ and one hour before _______.

4. Sputnik travels at a height of _____ miles above the Earth.

5. Describe what Sputnik looked like passing through the sky:

6. What did Homer use as the fuel for his first rocket?

7. What happened to the Vanguard rocket launched by Dr. Werhner Von Braun?

8. Rocketry was invented by the ____________, as early as 1000 AD.

9. Homer learns about potassium chlorate and sulfur to use as ________ for his rockets.

10. What is Homer’s motivation for building these rockets?

11. The purpose of the nozzle in a rocket is to direct the flow of ______________.

12. Miss Riley says, "Science requires __________." 

13. What do the boys build at Cape Coalwood to use for launching rockets?
14. When potassium chlorate and sugar are combined with heat, oxygen and expanding gases are produced, making an effective rocket __________.

15. What lab safety equipment do the students use in the classroom?

16. When the rockets exploded, heat from the exhaust was melting the __________.

17. When rocket fuel combusts, the nozzle directs a hot river of gas that reaches the speed of __________.

18. If the mass of the propellant compared to the mass of the rocket is too little, increase the __________ of the rocket.

19. The properties of alcohol are that it is stable and dilutes __________.

20. What measurement do the rocket boys make during the rocket flights to calculate the height of the rocket?

21. Who told Homer at the national science fair "Congratulations and good luck"?

22. What happened to Miss Riley during the science fair?

23. What career did Homer end up having?
Discussion Questions for Reflection

After Watching the Movie – Write a reflection for each question listed below in your October Sky Folder. Be sure to number them as Reflection 1, 2, etc. Use a separate piece of paper for each reflection.

You must write each response by restating the question and cite specific evidence from the movie or other outside sources. Your citations should be written as quotations in a formal tone with command of the English language showing correct punctuation, grammar and capitalization.

1. Which of the characters did you relate to the most? Which characters did you like? Which characters did you not like? Why?

2. Homer's friends, the "rocket boys," were at first skeptical of Homer's interest in rockets. However, they quickly came to encourage his dream. Do we tend to encourage or discourage the dreams of our friends and peers? Why?

3. In the 1950s, Homer's dream was considered far-fetched. Space exploration was only a thing of comic books and a few movies. Do you know anyone who has a "far fetched" dream today? Maybe it is you! What is your dream, your vision for your future?

4. Homer's dad is well respected by the miners. At one point, his father says to Homer, "I was born for this (working in the mines)." Do you believe that? Do you believe that we are called to certain occupations because of certain gifts and talents that we are "born with" and which lead to certain careers? Do you have friends who have certain talents and gifts, which make you say that they would be good teachers, mathematicians, social workers, lawyers, doctors, or whatever? What gifts have people identified in you?

5. At the end of the movie, Homer and the rocket boys launch one final rocket in honor of the mentors in their lives. If you were firing a rocket in honor of the mentors in your life, who would those mentors be? Why? How could you be a mentor to your siblings or your friends?