

EXTRA CREDIT

Name:

Date:

Period:

Movie – “October Sky”

(**Cast:** Jake Gyllenhaal as **Homer Hickam**, Chris Cooper as **John Hickam**, Chris Owen as **Quentin Wilson**, Laura Dern as **Miss Freida J. Riley**, William Lee Scott as **Roy Lee Cooke**, Chad Lindberg as **Sherman O'Dell**, Natalie Canerday as **Elsie Hickam**, Randy Stripling as **Leon Bolden**, Chris Ellis as **Principal Turner**, Elya Baskin as **Ike Bykovsky**, O. Winston Link as **Railroad engineer**, Andy Stahl as **Jack Palmer**)

https://en.wikipedia.org/wiki/October_Sky

Instructions:

- After seeing the movie in 2D, write a paper.
- Have your parents or guardian sign off that you indeed did see the movie.
- Your word processed paper must be at minimum 2 – 3 pages, double spaced, and spell checked. Use good writing skills and grammar. Staple your paper and all answers to the back of this handout.
- **Outline the movie:** What was the movie about? Quickly outline the story from beginning to end. (Don't worry about a “spoiler alert,” you're not spoiling it for me, since I've already seen the movie multiple times.) Some helps: https://en.wikipedia.org/wiki/October_Sky

<http://www.google.com>

- **Specific follow-up Questions about the movie:**
 - 1) Q: Why is this movie called *October Sky*? (Hint: What is the Month/Day/Year that the Russians launched the satellite Sputnik? Were the Russians the first nation into space?)
 - 2) Q: What is **the title of the Book** that this true-life movie *October Sky* is based on?
 - 3) Q: After WW2, what was the US government program – “Operation Paperclip” all about?
 - 4) Q: Could the USA have developed the NASA space program: Mercury, Gemini, and Apollo as successfully without these German scientists working for the USA within NASA?
 - 5) Q: Who was Werner Von Braun? Why is he so famous? Was Werner Von Braun a German Nazi?

- 6) Q: If the total “hang-time” of a model rocket without a recovery parachute (in “ideal world conditions”) from launch – to the top of the projectile motion – then back to the ground is equal to 1.0 minute = 60.0s, then how high did the rocket go in meters (m) and in miles? (Hints: What is the amount of time it takes to go from the ground to the top of the projectile motion (or from the top back to the ground)? How far will an object free-fall in this amount of time? That is how high the rocket will go. Show all your work and calculations below.
 $d = 1/2 gt^2$, $g = 9.8\text{m/s}^2$)

- Also read the article published on the ASME website: *The Man Who Lived October Sky*
<http://www.asme.org/engineering-topics/articles/aerospace-defense/the-man-who-lived-october-sky>
- Specific questions to answer from reading the article:
 - 1) Q: What does ASME mean?
 - 2) Q: What are all the different specific jobs that Homer Hickam has done for NASA?
 - 3) Q: What parts of the movie were changed and made different from the actual true story and the book?
- Also answer the following 3 questions:
 - 1) Q: Did you like the movie?
 - 2) Q: Would you recommend the movie to others?
 - 3) Q: Would you like to work for NASA or the space industry and go to space after seeing this movie?