





Wednesday, April 1

2:00pm Blue Sky Metropolis "Part 3 – a Space Odyssey" – 4th thru 8th grade

The triumphant and tragic Space Race unfolds in first-hand accounts of those who pioneered the technology and built the hardware that made possible mankind's greatest achievement. Meanwhile, the military-industrial-complex expands unchecked.

After watching this episode, choose from the following questions and/or tasks to extend your learning

- What drives the aeronautic industry into space?
- How does the United States prepare for the space race? What is their goal?
- What are the military plans that are closer to home?
- What is the importance of both endeavors?
- What are the cons of each of these endeavors?
- What does this mean for our country as we move forward?
- What details from this episode support the title?
- Why do you think the Space Race is referred to as "triumphant and tragic?"
- What do you think mankind's greatest achievement is?
- Why do you think the military-industrial-complex was not being monitored? Use convincing reasons: (ELD) First of all, Second, In addition, Furthermore, In conclusion
- The USSR was thought to have spent \$6-10 billion dollars on their space race in 1964, while the US spent \$16 billion. Given that the dollar in 1964 is approximately equivalent to \$8.3 dollars, what is that equivalent to in today's terminology?
- Record the triumphant and tragedy of the Space Race from first-hand accounts
 of those who pioneered the technology and built the hardware that made
 possibly mankind's greatest achievement.
- Create a timeline that includes elements of the development of aviation, or changes to the industry, and the costs related to those developments. Add to your timeline as you explore all the episodes of *Blue Sky Metropolis* this week.

Continued on the next page...







- Design a blueprint for a spacecraft that would support astronauts living in space for a period of time.
- You are the chief engineer for an important NASA mission, and you are going to design the latest and greatest satellite using items found in your home. Your satellite could help study things happening on Earth, take pictures of planets in our solar system, keep an eye on our sun, or even find planets elsewhere in the universe!
- Keep in mind that your satellite must have a couple of basic things:
 - Container: Your satellite needs some sort of container to hold all
 of the gizmos together and keep its instruments safe.
 - **Power Source:** You will need something to give your satellite electricity so that it can run all of its high-tech gizmos.
 - Scientific Instruments: Instruments can take pictures of faraway galaxies or planets right here in our Solar System, measure chemicals in Earth's atmosphere, or keep a close eye on our Sun's activity. It's your decision!
 - Communication Device: You will need some way to communicate with Earth. Antennas (shaped like dishes or poles and rods) are a good way to do this.
 - Orientation Finder: Make sure you have something that lets your satellite know where it's pointed and which way is 'up.' Something that looks at the stars (a star tracker) or the sun (a sun tracker) would work.