

Name _____ Date _____ Period _____

Space Exploration and Technology

Directions – Use your assigned Chromebook and go to the following links to help you research more about how technology has helped our understanding of the Universe.

Task 1 – Electromagnetic Spectrum

- Click on the each type of wave from the electromagnetic spectrum to learn the basic characteristics. Describe what each type of wave can do.

Type of EM Wave	Description
Radio	
Microwave	
Infrared	
Visible	
Ultraviolet	
X-ray	
Gamma ray	

Task 2 – International Space Station

- When was the space station launched?
- Who has contributed laboratory modules?
 -
 -
 -
 -
- Why is the Space Station Important?

Task 3 – Rockets

5. What are two definitions of the word “rocket?”
6. Define thrust and missile in your own words
 - a. Thrust-
 - b. Missile –
7. Which of Newton three laws explain how a rocket works?
8. _____ were the first to use rockets in the 1200s.
9. In 1926, _____ flew the first liquid-fuel rocket.
10. What missions sent men to the moon?

Task 4 – Satellites

11. Read and then click on and play “Play "Missions to Planet Earth"!” In order for this to work on the Chromebook, click on “here” where it says “If you’re on a PC or Mac, you can download [here](#)”, then allow. MAKE SURE YOU READ THE DIRECTIONS TO KNOW HOW TO PLAY!! You need to complete 3 of the 5 missions.

Mission #	Rocket	Orbit	Spacecraft	Science Objective	Outcome

12. Describe the characteristics of one of the satellites you created and explain why it was successful.

Task 5 – Space Probes

13. What two space probes NASA launched in 2003?

- a.
- b.

14. What do space probes do in space?

15. T or F: Most space probes safely return to Earth and are picked up in the Pacific Ocean.

Click on “Show me the level 2 version of this page” at the bottom of the page.

16. Choose 2 Space Probes and tell about their missions and discoveries. (Should be 1 to 2 complete sentences each)

- a.
- b.

Task 6 – Telescopes

Click on **Launch the Game! (for smaller monitors)** - This is just below the picture – Then click on “enable adobe flash player” and finally, allow **Start at level zero and answer the following questions as you complete each level**

17. What are the two types of telescopes?

- a.
- b.

18. _____ invented the reflecting telescope.

19. What are the seven parts on the Webb telescope?

- a.
- b.
- c.
- d.
- e.
- f.
- g.

20. What are the seven parts on the Hubble telescope?

- a.
- b.
- c.
- d.
- e.
- f.
- g.