Build A Satellite Cover Sheet

NASA missions collect scientific data to help scientists and engineers better understand our planet or other objects in our solar systems. One way to do that is with satellites. A satellite is a spacecraft that orbits a celestial body (like a planet or moon). You will make a satellite model to learn more about the Moon or Mars and include a few key satellite features.

5 Basic Things Your Satellite MUST Have (you can add more!):

1. Container: Your satellite needs some sort of container to hold all of the parts together and keep some of its instruments safe.

2. Power Source: You will need something to give your satellite electricity so that it can run all of its high-tech parts. Solar panels or fancy batteries are two options.

3. Scientific Instruments: This is the why you launched your satellite in the first place! Instruments can take pictures, measure temperatures, locate good landing zones, and more – it's your choice!

4. Communication Device: You will need some way to talk with Earth. Antennas (shaped like dishes or poles and rods) are a good way to do this.

5. 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.

Activity adapted from NASA JPL's Build a Satellite Activity and NASA Space Place's Build Your Own Spacecraft!

Activity: Build a Satellite

Materials:

The materials you need for this activity have been provided for you in this kit. You do not have to use them all if you don't want to, but make sure you have the 5 basic things. If you have permission to use other items from around your household that you would prefer, you are encouraged to use them!

We have left out pictures of what a satellite looks like to encourage your imagination! Try to avoid looking up pictures of satellites until AFTER you've created yours.

If you need more guidance: Reach out to Ms. Holmes, **look for a video introduction of this activity on our website and in an email soon**, *OR tune into a future Google Meet.*

Activity adapted from NASA JPL's Build a Satellite Activity and NASA Space Place's Build Your Own Spacecraft!