

GOES-R

Understanding Satellite Orbits

In this activity you will be exploring satellite orbits.

Activity 1

Please write your answers on a separate piece of paper.

Activity 1.1 Satellites

1. Define satellite in your own words.
2. Explain how satellites may aid us on a daily basis.



Activity 1.2 Orbits

Use the [Why do satellites have different orbits?](#) link to help complete the following:

1. Compare and contrast polar satellite orbits to geostationary satellite orbits.
2. Explain why there is a need for both polar and geostationary orbiting satellites.
3. GOES is an acronym for what device?

Activity 1.3 GOES Satellite

Use the [How does a satellites job dictate its orbit?](#) link to complete the following:

1. Explain the relationship between the altitude of a satellite above the surface of the Earth and the rate at which it travels around the Earth.
2. Describe the type of orbit the GOES has.
3. How often does the GOES orbit the Earth?
4. Compare the rate of the GOES orbit to the rate at which the Earth rotates.

Additional Activities:

Visit the [CIMSS](#) website to learn more about satellites and to play educational games.

