

Name \_\_\_\_\_

## Galileo's Galactic Adventures

### Open-Ended Response Answer Key

1. Galileo's early fascination with the heavens began when he would lie in the fields of Pisa and gaze at the night sky. This early interest in the stars and celestial bodies inspired him to become an astronomer. His observations of the night sky as a youth influenced his later discoveries by instilling in him a deep curiosity about the cosmos.
2. Galileo's determination to seek truth and knowledge led to conflicts with the church and society. His support for the heliocentric model of the solar system, which challenged the geocentric views held by the church at the time, brought him into conflict with religious authorities. Despite facing opposition and even house arrest, Galileo remained steadfast in his pursuit of knowledge and his belief in the scientific method.
3. Galileo's discovery of the phases of Venus was significant because it provided empirical evidence for the heliocentric model of the solar system proposed by Copernicus. The observation of Venus going through phases, similar to the moon, showed that Venus orbited the sun and not the Earth. This was a direct contradiction to the geocentric model supported by the church, which held that all celestial bodies revolved around the Earth.
4. Galileo hoped to leave behind a legacy of scientific exploration and a spirit of curiosity about the night sky. He wanted future generations to view the night sky with wonder and curiosity, just as he did throughout his life. His observations and writings aimed to inspire others to continue exploring the cosmos and seeking knowledge about the universe.

