

## CHAPTER OVERVIEW

### 10: General Relativity

Chapter 10 presents Einstein's General Theory of Relativity, in which the force of gravity is a natural consequence of curved spacetime due to the presence of mass and energy. You will investigate properties of curved spacetime including time dilation, gravitational redshifts, and gravitational lensing. You will also build a mathematical construct for describing curvature and apply it to two- and three-dimensional models.

[10.0: General Relativity Introduction](#)

[10.1: Einstein's Equivalence Principle](#)

[10.2: Gravity and Curvature](#)

[10.3: What is Curvature?](#)

[10.4: Tests of General Relativity](#)

[10.5: The Source of Gravity](#)

[10.6: Wrapping It Up 10 - Curved Spacetime Around Astronomical Objects](#)

[10.7: Mission Report 10- Curved Spacetime Around Astronomical Objects](#)

[10.8: Formulae, Constants, and Conversion Factors for Chapter 10](#)

Thumbnail: Artist concept of Gravity Probe B orbiting the Earth to measure space-time, a four-dimensional description of the universe including height, width, length, and time. (Public Domain; NASA).

---

This page titled [10: General Relativity](#) is shared under a [CC BY-NC-SA](#) license and was authored, remixed, and/or curated by [Kim Coble](#), [Kevin McLin](#), & [Lynn Cominsky](#).