

## 3.2: Motions of Objects

---



Public Domain | Image courtesy of Pixabay. com.

There are several basic motions of bodies. Rotation is the spinning of an object around its axis. Earth rotates once approximately every 24 hours, whereas Jupiter rotates once approximately every 10 hours.

At any moment, half of the Earth is illuminated by the Sun, because of the fact that most of our light comes from the Sun. As the Earth rotates from west to east, your location moves from the dark (night) hemisphere into the illuminated (day) hemisphere and back again. The diurnal (daily) motion of the stars, the Sun, and the Moon is a consequence of Earth's rotation.

Another motion is Revolution; that is, one object orbiting a second. Earth revolves around the Sun approximately every 365. 24 Earth Days (1 Earth year), and Jupiter revolves around the Sun approximately every 11. 86 Earth Years (1 Jovian year). As the Earth revolves or orbits around the Sun, the nighttime side of the Earth (or any other body orbiting the Sun) gradually turns toward different parts of the night sky.

---

This page titled [3.2: Motions of Objects](#) is shared under a [CC BY 4.0](#) license and was authored, remixed, and/or curated by [Lumen Learning](#) via [source content](#) that was edited to the style and standards of the LibreTexts platform.