**Aurora**
Light radiated by ions and atoms in the Earth's upper atmosphere, mostly in polar regions, the result of bombardment by energetic electrically charged particles from the magnetosphere.

**Bow Shock**
The shock wave that flanks the magnetosphere on the day side, and partially deflects the solar wind. It causes the solar wind to become more turbulent through sudden changes in temperature and density.

**Chromosphere**
The part of the Sun (or another star) between the photosphere and the corona.

**Corona**
The Sun's outer atmosphere.

**Coronal Mass Ejection (CME)**
A vast magnetic bubble of plasma that erupts from the Sun's corona and travels through space at high speed. Coronal mass ejections may cause intense geomagnetic storms and accelerate vast quantities of energetic particles.

**Heliosphere**
The outer edge of the heliosphere, where the solar system ends and the interstellar space begins. At the heliosphere, the pressure of the solar wind balances that of the interstellar medium.

**Interstellar Medium**
Electrically charged gas and dust between the stars.

**Ionsphere**
The highest region of the Earth's atmosphere containing free electrons and ions.

**Magnetometer**
A device used to measure the Earth's magnetic field and changes that may be caused by solar storms.

**Magnetopause**
The boundary of the magnetosphere, lying inside the bow shock, usually about 10 Earth radii toward the Sun.

**Magnetosheath**
The region between the bow shock and the magnetopause, characterized by very turbulent plasma. For Earth, along the Sun-Earth axis, the magnetosheath is about two Earth radii thick.

**Magnetosphere**
The region surrounding a planet within which the planetary magnetic field is the dominant force on electrically charged particles that can be trapped within it.

**Magnetotail**
A cometlike extension of a planet's magnetosphere formed on the planet's dark night side by the action of the solar wind. It can extend hundreds of planetary radii away from the Sun.

**Photosphere**
The visible portion of the Sun.

**Plasma**
A low-density gas in which the individual atoms are charged and which contains an equal number of electrons.

**Spectrum**
A particular distribution of wavelengths, frequencies, or energies.

**Solar Flare**
An explosive release of energy of the Sun.

**Solar Wind**
The charged particles (plasma), primarily protons and electrons, that are continuously emitted from the Sun and stream outward throughout the solar system at speeds of hundreds of kilometers per second.

**Sunspot**
A region of the solar surface that is dark and relatively cool; it has an extremely high magnetic field.