

- Glossary -

Altitude:	The distance a heavenly body appears above the horizon as measured in degrees.
Annual Motion:	The Earth's orbital motion around the Sun every year.
Asteroid Belt:	The area between the inner and outer planets that is filled with asteroids.
Asteroids:	Chunks of rock that vary in size from very large (approximately 1030 km in diameter) to quite small. They orbit the sun between the orbits of Mars and Jupiter. About 3000 asteroids have been discovered.
Asterism:	Stars that form patterns but are generally smaller than or part of a constellation. The Big Dipper is an asterism and forms part of the constellation Ursa Major.
Astronomy:	The study of the Universe and all of the bodies that appear in the skies.
Atmosphere:	A layer of air between the Earth and outer space.
Axis:	A straight line that an object or body rotates, or seems to rotate around.
Binary Stars:	When two relatively close stars revolve around each other, often appearing as single stars because they are so far away from the Earth.
Black Hole:	An intense gravitational field created when a star runs out of fuel and collapses. Nothing, not even light can escape its pull.
Blue Moon:	The second full moon in the same calendar month.
Calibrate:	To determine, check or adjust a scale of any measuring instrument.
Celestial Equator:	An imaginary line in the sky directly above the Earth's equator.
Celestial Hemisphere:	The heavens surrounding the Earth, split into two parts directly above the Earth's equator, can be identified as the northern and southern celestial hemispheres.
Celestial Sphere:	The heavens surrounding the Earth.

Comet:	A large ball of ice, dust, rock and gas that orbits the Sun, circling the dark edges of the Solar System.
Constellations:	Bright stars grouped according to the patterns they make in the sky (such as Orion or Ursa major). There are 88 constellations or star clusters that cover the sky; many of their names coming from characters in ancient mythology.
Copernicus, Nicolaus (1493-1543):	A Polish scientist who was the first to re-introduce the idea originally stated by some radical Greek philosophers 2000 years earlier, that the Sun and not the Earth, was the center of the solar system.
Crater:	A hole created on the surface of an object or body, made by falling meteorites or by erupting volcanoes.
Emit:	To send or give out.
Eclipse:	Of two types, solar and lunar. A solar eclipse is when the moon passes in front of the Sun, covering the Sun's disk, either partially or totally. A lunar eclipse is when the full moon passes through the Earth's shadow, and sunlight is prevented from falling onto the moon's surface. From Earth, The moon appears to grow dark.
Ecliptic:	The apparent great-circle annual path of the Sun, as seen from the Earth. It is called the <i>ecliptic</i> because eclipses occur only when the moon is on or near this path.
Equator:	An imaginary circle around the centre of the Earth, perpendicular to the axis of rotation.
Equinox:	During the Sun's annual path in the sky it crosses the celestial equator at two points – the equinox points. On these two days on or about March 21, September 23, of every year, the day is divided between twelve hours of sunlight and twelve hours of darkness.
Galaxy:	A spiral island of stars in space. Our galaxy is called the Milky Way.
Gibbous:	A phase in the Moon's cycle when more than half of the moon, but not the entire face of the Moon, is illuminated.
Gravity:	A force that attracts and holds the universe together. It gives objects weight.

Hemispheres:	Either the north or the south half of the Earth divided by the equator, or the east or west half divided by the prime meridian.
Inner Planets:	The four hard rocky planets – Mercury, Venus, Earth, Mars – closest to the Sun.
Latitude:	The distance of a point on the Earth's surface north or south of the equator, measured in degrees. For example, Edmonton's latitude is 53.5° North. The latitude of the Canada – USA border in western Canada is 49° North.
Light Year:	The distance light travels in a year. This unit is used to measure distances in space. One light year is about 9.5 trillion km.
Longitude:	This distance of a point on the Earth's surface measured parallel to the equator west from the 0° Greenwich Meridian. Edmonton's longitude is 113.4° west.
Lunar Eclipse:	When the moon moves into the Earth's shadow, preventing sunlight from falling onto the moon's surface.
Lunar Month:	The time it takes the moon (27 1/3 days) to go around the Earth.
Lustre:	Sheen or shine.
Magnitude:	A six class scale used to measure the brightness of stars. The brightest stars in the sky are of the 1st magnitude; the faintest ones are of the 6th magnitude.
Meteor:	When a meteoroid enters the Earth's atmosphere, creating a bright streak of light, it is called a meteor or a shooting star.
Meteorite:	Larger meteors that fall to the surface of the Earth.
Meteoroids:	These rocks, usually not much bigger than grains of sand, may have been swept off asteroids and comets. They also orbit the Sun, sometimes entering the Earth's atmosphere.
Midnight Sun:	On June 21st from a point on the <i>Arctic Circle</i> , the Sun will appear to descend into the north-west, but instead of setting it will appear to skim the northern horizon and rise up again in the north-east. This never-setting sun known as the <i>Midnight Sun</i> . The further north you go the more days of Midnight Sun you experience during the year.

Moon:	The name of the satellite that orbits the Earth.
Moon Phases:	A cycle in which the Moon appears in different forms as it orbits the Earth.
Orbit:	The path of a planet or other heavenly body as it revolves around another body in space.
Outer Planets:	The four giant, gaseous planets – Jupiter, Saturn, Uranus, Neptune – that orbit the Sun.
Planets:	Large bodies that can only be seen by reflected light, as they revolve around the sun. The word planet comes from the Greek word wanderer.
Pole Star:	A bright star, also known as North Star or Polaris, that appears in the sky in the northern hemisphere. A useful bench mark as it always stays in the same position in the northern sky.
Revolution:	The motion of a planet along its orbit around the Sun. For example, the Earth takes one year to “revolve” around the Sun.
Rotation:	The motion of a planet satellite, or the Sun around its north-south axis. It takes 24 hours for the Earth to rotate once on its axis.
Satellite:	A man made or heavenly body (Moon) that orbits around a larger object.
Solar Eclipse:	When the Moon passes in front of the Sun, partially or totally covering it.
Solar Noon:	The time of the day when the Sun casts its shortest shadow and shadows face true north.
Solar System:	The Sun and all of the bodies – planets, satellites, asteroids, comets, etc. that orbit around it.
Solstices:	Once a year the Sun reaches it highest and lowest points in the sky at noon. In the northern hemisphere, the lowest point and least number of daylight hours takes place on or about December 21st. It reaches its highest point and greatest number of daylight hours on or about June 21st. In the Southern Hemisphere the dates are reversed.

Star:	A gaseous body that produces its own energy, releasing it as light and heat.
Stellar Astronomy:	The study of the stars.
Sublimate:	To turn directly from a solid into a gas.
Sun:	The closest star to the Earth, measuring more than a million kilometers across.
Sundial:	A device that uses shadow to tell time.
Texture:	The surface look or feel of something.
Universe:	Everything that exists: the Earth, the Sun, the Moon, satellites, stars, asteroids, all the galaxies and the space in between them.
Waning Moon:	When the Moon grows gradually more illuminated when passing from new to full moon.
Waxing Moon:	When the Moon grows gradually more illuminated when passing from new to full moon.
Year:	The time it takes for a planet to go all the way around the Sun i.e., on Earth a year is 365 days. One year on Uranus is 84 earth years.