

★ On January 3rd, Saturday, Earth reaches “**perihelion**” - closest approach to the Sun for the year.

★ The word “*perihelion*” is from the Greek: “*peri*” meaning *near* and “*helios*” meaning *Sun*.

★ Earth is some 3 million miles closer (or one part in 30 closer) at perihelion than at the farthest point (aphelion) in its **elliptical orbit** in early July.

★ Yet we usually experience our coldest weather in the northern hemisphere during January.

★ It's the Earth's $23\frac{1}{2}^{\circ}$ axial tilt combined with its orbital motion, not its distance from the Sun, that causes the seasons.

★ In January, the northern hemisphere is pointed away from the warmth of the Sun.

