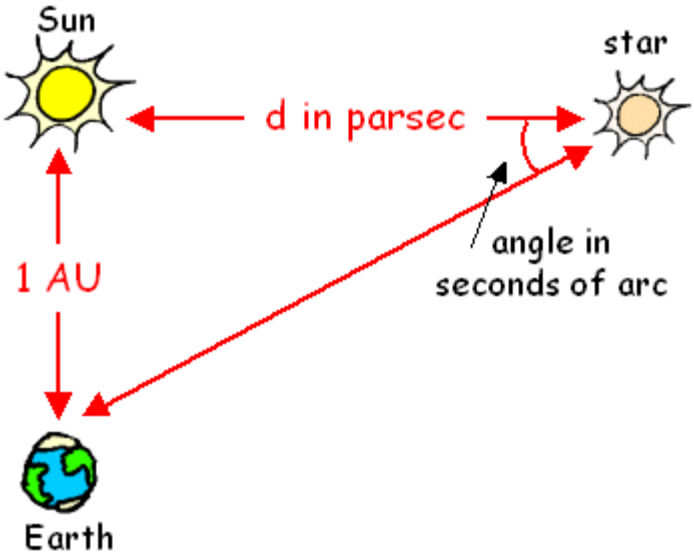
PARSEC

Distances to the closest **stars** can be determined through measurement of their **trigonometric parallax**. The **parsec** was defined to be the **distance** at which 1 **AU** (perpendicular to the line of sight) subtends an **angle** of 1 **arcsecond**:

1 parsec (pc) = distance d when angle is 1 arcsecond = 3.086 10^{13} km = 3.26 ly



Using the Earth's **orbit** as a **baseline**, the distance (in parsecs) to a **star** can be calculated using:

$$d = 1/p$$

where *p* is measured in **arcseconds**.