



**PLANETARY POSITIONS IN THE SOLAR SYSTEM<sup>10</sup>**

A view of the solar system as seen FROM ABOVE THE NORTH ECLIPTIC POLE with the sun in the center is shown below. The line from the Earth (🌍) to the Sun (☀️) represents the planetary longitude of the sun. For each of the five visible planets,

- 1) **Center a protractor on the Earth**, measure the elongation angle from the sun's longitude.
- 2) Use a ruler to determine **where this crosses the orbit of the planet** you're plotting, and mark the planet's position on its orbit.

**Special Note:** Can you be certain where Mercury and Venus are in their orbits? How many positions for each planet are possible? What information will help you figure this out?

