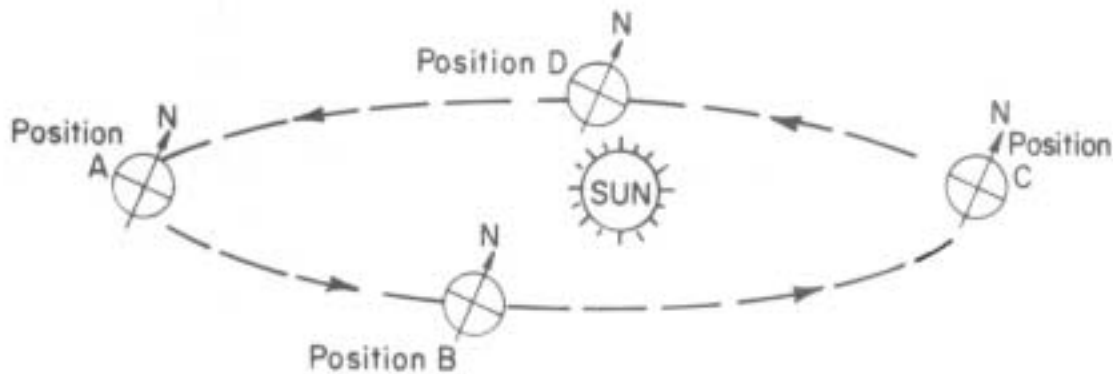


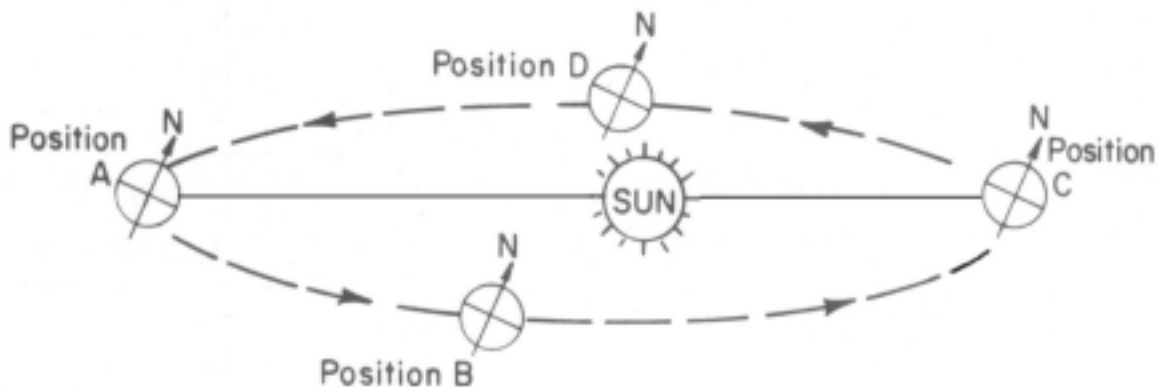
## How to Interpret an Orbital Diagram:



This is the diagram the way it originally appeared on a Regents. Please note the following:

1) The sun is not at the center. It is at one of the foci of the earth's slightly elliptical orbit. Diagrams are not always drawn this way, but when they are it's easy to tell which season goes with each position if you remember that when we are closest to the sun it is winter in the northern hemisphere. In this diagram we are closest to the sun at position C so that must be winter.

2) If you draw lines from the center of the sun to the earth, those lines intersect the earth at the point where the sun's rays are directly overhead (90 degrees). See diagram below:



Notice that the direct rays of the sun are striking the southern hemisphere at position C. This means that it is summer in the southern hemisphere at position C (Dec. 21<sup>st</sup>) and it must also be winter in the northern hemisphere at position C. This method always works.

If C is winter in the northern hemisphere, then position A must be our summer (June 21<sup>st</sup>). You can confirm this by noting that the direct rays of the sun (line) are striking the northern hemisphere at position A. This happens when it is our summer.

How about spring and fall? Look at the arrows indicating which way the earth is moving in it's orbit. If A is summer and C is winter, B must be the season in between, fall. This means that position D must be spring.