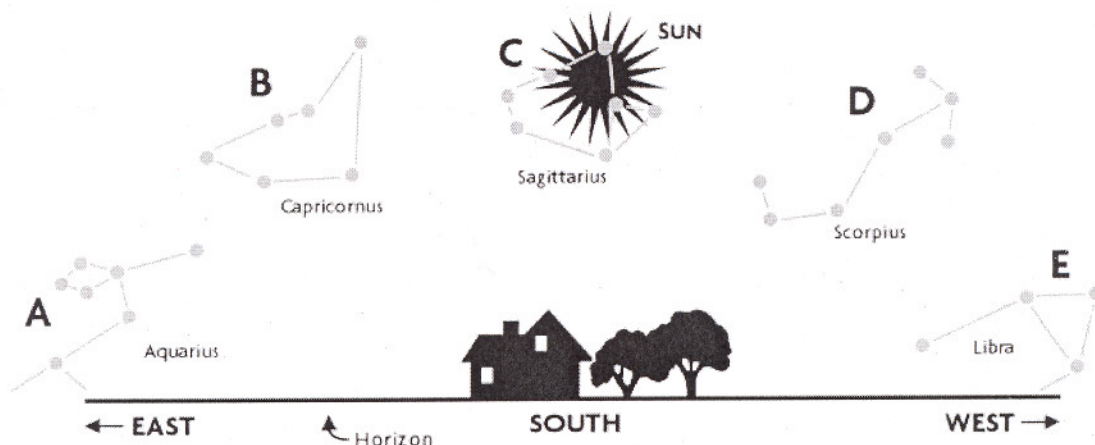


Astronomy Ranking Task: Motion of the Sky

Exercise #1

Description: If you could see both the Sun and the other stars during the day, this is what the sky would look like looking south at noon on January 1 for an observer in the northern hemisphere. The Sun would appear in the sky next to the more distant stars in the constellation Sagittarius, (labeled constellation C). Also shown are other constellations (named and labeled A, B, D, and E) that will be visible above the horizon at this time when facing south.



Ranking Instructions: Starting with how the sky would appear at sunrise (6am), rank the order that the Sun will appear next to each constellation (if at all) over the next several hours until sunset (6pm). For simplicity, refer to the constellations by letter (A, B, C, etc.) rather than the actual name.

Ranking Order:

Constellation next to the Sun at sunrise (6am) 1 ___ 2 ___ 3 ___ 4 ___ 5 ___ Constellation next to the Sun at sunset (6pm).

Or, the Sun will appear next to the same constellation from sunrise to sunset. (indicate with check mark).

Carefully explain your reasoning for ranking this way:

The Sun moves across the sky at about the same rate as the more distant stars. So it appears to be in the same constellation all day long.