

(1) On the average over full year, how does the sun angle at solar noon depend on latitude?

(A) As latitude increases, average sun angle at solar noon *decreases*.

(B) As latitude increases, average sun angle at solar noon *increases*.

(C) Averaged over a full year, sun angle at solar noon is the *same at all latitudes*.

(2) Averaged over a whole year, the farther a place is from the equator, the lower the sun angle is at solar noon. Why?

- (A) At higher latitudes, the sun is lower in the sky at solar noon.
- (B) At higher latitudes, the sun's rays strikes the earth at a lower angle.
- (C) The earth is a sphere, and it's surface curves away from the sun at higher latitudes.

(3) Averaged over a whole year, how does *insolation* at the earth's surface depend on latitude?

- (A) Insolation *decreases* with increasing latitude.
- (B) Insolation *increases* with increasing latitude.
- (C) Averaged over a full year, insolation is the *same at all latitudes*.