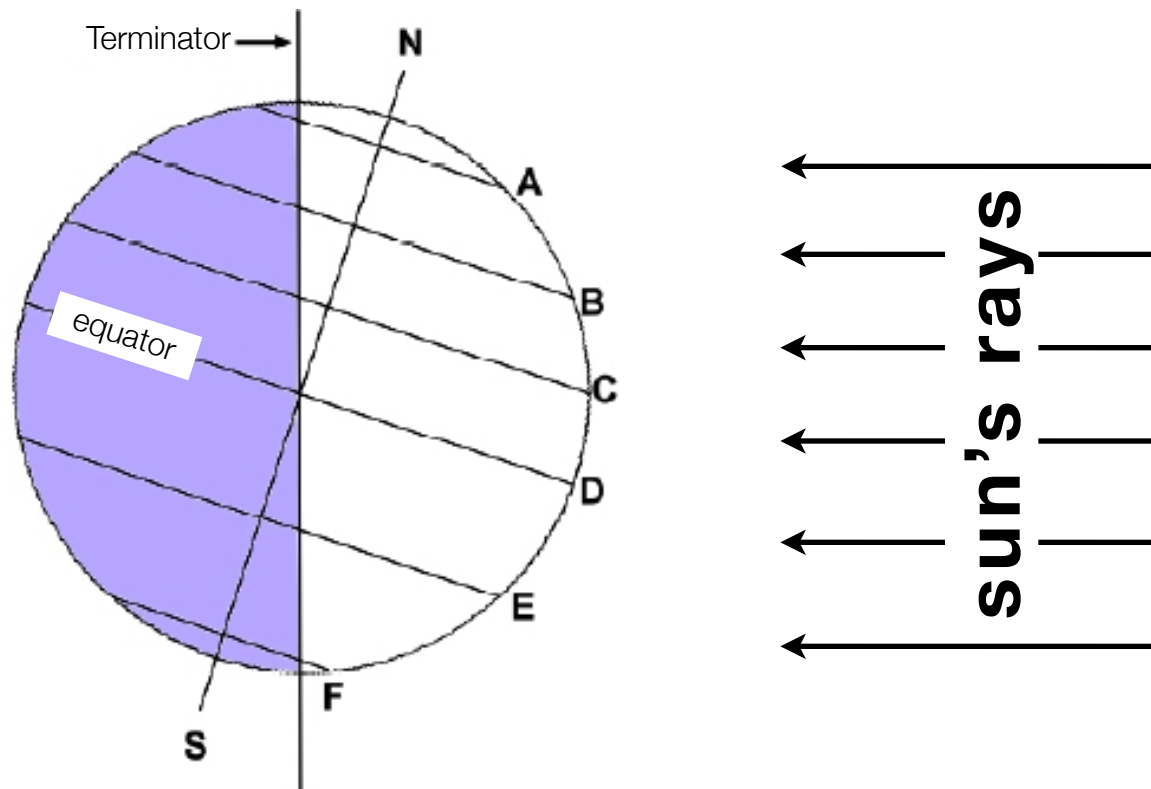


Hours of Daylight



The diagram shows the Earth and 6 locations, A - F, on the surface. The sun's rays are also shown. The 'terminator' is the line that divides day from night. In the diagram the nighttime side of the Earth is shaded.

Which location in the diagram will receive the most number of hours of daylight on the day of the year this diagram represents?

How to get the answer:

- 1) Look at the line of latitude at which a letter is located.
- 2) Ask yourself "What percent of this line is in the daylight?"
- 3) That is the percent of the 24 hours in a day that will be daylight at that location.

IMPORTANT: The percent of the line in daylight has nothing to do with the length of the line. For example, about 90% of line A is in daylight and only 50% of line D is in the day. This is true even though line D is much longer than line A.

- ▶ Since about 90% of line A is in the daylight, location A will receive about 22 hours of daylight (90% of 24).
- ▶ Since about 60% of line B is in the daylight, location B will receive about 14 hours of daylight (60% of 24)
- ▶ If you lived on the equator, every day would have 12 hours of day and 12 hours of night.
- ▶ Since only about 10% of line F is in the daylight, location F would receive about 2 hours of daylight (10% of 24).
- ▶ Notice that the north pole receives 24 hours of daylight while the south pole receives none on this day.