

# Duration of Insolation

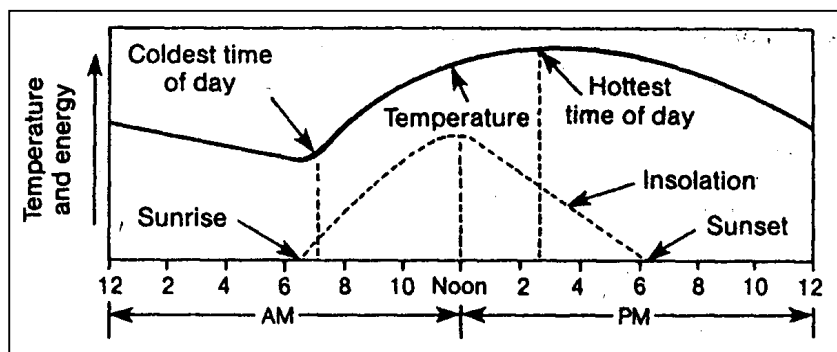
Name \_\_\_\_\_

Partners \_\_\_\_\_

**Directions: give the best answer to the following questions.**

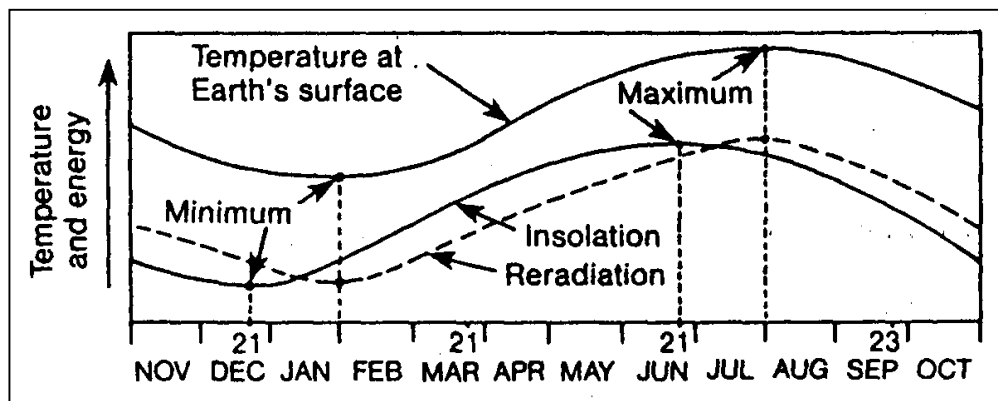
1. The length of the day, in hours, at a given location is called the \_\_\_\_\_.
2. The number of daylight hours varies with the \_\_\_\_\_ and \_\_\_\_\_.
3. On December 21 in N.Y.S., the angle of insolation is ( smallest / largest ), and the duration of insolation is ( shortest / longest ). On June 21, the angle of insolation is ( smallest / largest ), and the duration of insolation is ( shortest / longest ).
4. The longer the day's duration, the higher the surface \_\_\_\_\_ gets.

5. The diagram at right shows that the greatest amount of insolation occurs at around \_\_\_\_\_, but the hottest time of the day is ( before / during / after ) solar noon. That's because the Earth is still receiving ( more / less ) energy than it is radiating.



6. The Earth reaches radiative balance (energy being absorbed = energy being radiated) at about \_\_\_\_\_.
7. The coldest time of the day is \_\_\_\_\_.
8. The next diagram shows that in the Northern Hemisphere, the day when we receive maximum insolation is \_\_\_\_\_.

9. The hottest time of the year occurs ( before / during / after ) June 21. The Earth reaches radiative balance (outgoing radiation equals incoming radiation) around \_\_\_\_\_.



10. The coldest day of the year usually occurs ( before / around / after ) December 21.