

“What Factors Affect Climate?” Slideshow Questions

ALWAYS TRY TO ANSWER IN FULL SENTENCES.

- 1) By what energy transfer process does the Sun’s energy reach Earth”
- 2) What are the two most important types of **insolation**?
- 3) Because Earth is a 3-D sphere, compared with areas at low latitudes, climates in high latitudes are generally (warmer) (cooler).
- 4) Most locations outside the Tropics have (wet/dry)(warm/cool) seasons because Earth’s axis is (tilted)(perpendicular) to the plane in which Earth (revolves)(rotates) around the Sun.
- 5) In the Tropics, instead of warm and cold seasons, many climates have (wet)(dry) summers and (wet)(dry) winters. The is called a M climate.
- 6) What two factors are most important in creating three wind-pressure zones in each hemisphere?
- 7) Compared with areas having a low elevation, the climate in areas at high altitude are generally (warmer) (cooler).
- 8) Locations on the (leeward)(windward) side of mountains facing an ocean generally are (wetter)(drier) than locations on the (leeward)(windward) side.
- 9) What are two mountain ranges in the western USA that show this type of “topographic climate” effect?

- 10) Areas downwind of the Great Lakes usually receive (more)(less) snow and rain.
- 11) Compare with areas farther inland, coastal areas generally have a (wider)(narrower) range of annual temperatures with (warmer)(cooler) summers and (warmer)(cooler) winters.
- 12) Who is the State Climatologist and where does he teach?
- 13) Select and compare temperature patterns for two different time periods (at least 1 year long).
- 14) Select and compare precipitation patterns for for two different time periods (at least 1 year long).
- 15) Why is the “greenhouse effect” important for our planet?
- 16) What are the two most important greenhouse gases?
- 17) What are three natural factors that can change climate?
- 18) What are two human-induced factors that can change climate?

Summary—On another sheet of paper, discuss the most important concepts you have learned through this presentation.