

Using the table of factors that influence climate, answer the following questions, which refer to the diagram on the next page. The diagram represents an imaginary continent on the earth that is surrounded by water. The arrows indicate the direction of the prevailing winds. Two large mountain ranges are also indicated. Points A, B, and E are located at sea level; C and D are in the foothills of the mountains; F is high in the mountains.

1. What factor would cause location F to have a colder yearly climate than any other location?
F is located high in the mountains
2. What three factors would cause location E to have the greatest annual rainfall?
 1. Proximity to a large body of Water
 2. Windward side; prevailing wind direction
 3. Near the equator which is a wet belt
3. Which location, C or D, would you expect to have the greater annual rainfall? Explain your answer. **D, proximity to a large body of water; windward side of MTN**
4. Which location, A or B, would you expect to have the greater range in temperature during the year? **A** Explain your answer. **Farther inland**
Land has a lower specific heat, changes temperature faster
5. Location A is in the center of a large desert. What factor could account for its low annual precipitation? **30 N arid climate due to High Pressure**
6. What three factors would cause the climate at location D to be cooler than at location B?
 1. Located on the coast
 2. Located on the windward side of the mountain
 3. Prevailing wind direction comes from the water