



## Bellwork for Week 11: Mar. 15-19, 2004

**Bell #45:** Chemical and Mechanical Weathering Critical Thinking, Page 147.

- (1) Determine the major type of weathering that occurs in Washington, D.C. AYT, 23o; AYP, 104 cm.
- (2) If the AYT in Washington, D.C. dropped 26o but the AYP stayed the same, what kind of weathering would dominate?
- (3) Phoenix, Arizona, has an AYT of 20o and an AYP of 20 cm. How would the climate have to change for moderate chemical weathering to become dominant?
- (4) According to the graph, no frost action occurs at a mean annual temperature above 13oC. What is a possible reason?
- (5) In general, how does a climate with strong chemical weathering differ from a climate with strong mechanical weathering?

**Bell #46:** Why are streets and highways damaged so much more in winter than in summer?

**Bell #47:** Particle Size Critical Thinking, Page 189.

- (1) If a particle has a diameter of 0.0f cm, what is the particle called?
- (2) What is the name of the particle that stays in suspension at the slowest stream speed?
- (3) What is the minimum stream speed needed to carry a boulder in suspension?
- (4) Name the particles that would be in suspension in a stream moving at 100 cm/sec.

**Bell #48:** Which horizon of a soil profile is most weathered? Explain.

**Bell #49:** How are mechanical and chemical weathering similar and different?.