DO NOW

Base your answers to questions 1 through 3 on the diagram below, which shows igneous rock that has undergone mainly physical weathering into sand and mainly chemical weathering into clay.

1. Compare the particle size of the physically weathered fragments to the particle size of the chemically weathered fragments.
   
   Physically weathered sand is **larger** than clay.

2. Describe the change in temperature and moisture conditions that would cause an increase in the rate of chemical weathering into clay.
   
   Temperature increases, moisture increases

3. If the igneous rock is a layer of vesicular andesite, identify three types of mineral grains that could be found in the sand.

Base your answers to questions 4 through 6 on the block diagram below, which shows the landscape features of an area of Earth's crust. Two sedimentary rock layers, A and B, are labeled in the diagram. The rock symbol for layer B has been omitted.

4. Identify the most abundant mineral in rock layer A.
   
   Calcite

5. Describe how the caverns formed in rock layer A.
   
   Caves form by chemical weathering.
   Acid rain + water = dissolves the limestone.
6. The graph below shows the particle sizes that compose the clastic sedimentary rock in layer B.

In the area below, draw the map symbol that represents rock layer B.

7. The diagram below shows what happens to a rock within a stream's erosional-depositional system as time passes.

Which process of change is best represented by the sequence shown in the diagram?
(1) deposition  (2) metamorphism  (3) condensation  (4) weathering