

# Geological Maps Assignment

**Niota Quadrangle** (Refer to the Niota quadrangle to answer the following questions)

1. Where is this geological quadrangle map located (and in what state)?
2. What is the name of the oldest geological formation on the Niota geological quadrangle map? (Hint – See the legend.)
3. What is the name of the youngest geological formation on the Niota geological quadrangle map? (Hint – See the legend.)
4. Where on the map is the location of the oldest formation?
5. What is the approximate strike and dip direction of the Kingsport formation near the Dupont Mine?

6. What formation/unit is the thickest in the Niota geological quadrangle map? (Hint – See the Niota map's cross sections A-A' and B-B')
  
  
  
  
  
  
  
  
  
  
7. What kind of fault is the Saltville fault?
  
  
  
  
  
  
  
  
  
  
8. If a deep well were drilled at the Niota School, northwest of Niota, Tennessee, what sequence of formations would be penetrated to a depth of ~1000' below sea level? (Name the top four units in order from top to bottom.) (The school is near the bottom of the map)
  
  
  
  
  
  
  
  
  
  
9. What formation/unit is being mined at the Anderson Mine? (Anderson Mine is in the northeast section of the map)
  
  
  
  
  
  
  
  
  
  
10. Examine the formations cropping out in the area where line A-A' crosses Rogers Creek Ridge (northwestern part of map). In that area, Ohc encircles Oh. What kind of structural fold (on a small scale) is this? (Hint – See the cross section A-A')