Geology 5: Chapter 11 Questions

1. What two orogenies during the late Paleozoic brought North America and Europe together as a combined land mass called Laurussia?
   a. Hercynian and Allegheny  
   b. Cassair and Sonoma  
   c. Caledonian and Acadian  
   d. Grenville and Trans-Hudson

2. Gradual flooding of the early Paleozoic erosional surface was the first event of the late Paleozoic. The new inland sea was termed
   a. Absaroka Sea.  
   b. Kaskaskia Sea.  
   c. Iapetus.  
   d. Rodinia.

3. An additional collision occurred in the late Carboniferous period when northwest Africa moved against the southern part of the Appalachian region. This encounter was called
   a. Taconic Orogeny.  
   b. Acadian Orogeny.  
   c. Avalon Terrane.  
   d. Allegheny Orogeny.

4. During the passage from ____________ to ____________ time, highland source areas that provided the Chattanooga Shale were reduced and the quantity of muddy sediment decreased. Carbonates then became the most abundant and widespread kind of sediment in the epeiric seas of the platform.
   a. Devonian / Mississippian  
   b. Devonian / Mesozoic  
   c. Mississippian / Permian  
   d. Pennsylvanian / Permian

5. The Ouachita, Allegheny, and Hercynian Orogenies represent the
   a. mountain-building events in the Cordillera.  
   b. rifting event that formed the Iapetus ocean.  
   c. suturing of Laurasia and Gondwanaland.  
   d. deposition of the Catskill Clastic Wedge.

6. The Catskill Clastic Wedge is a result of erosion from uplifted highlands formed during the
   a. Acadian Orogeny.  
   b. Taconic Orogeny.  
   c. Allegheny Orogeny.  
   d. Caledonian Orogeny.

7. Minerals which are resistant to weathering and erosion (like quartz), but which have a high density are called
   a. clastic sediments.  
   b. heavy minerals.  
   c. chemical sediments.  
   d. ore minerals.

8. The reason that the Chattanooga Shale has a high content of carbon (and uranium) is because it was deposited
   a. along a passive plate boundary.  
   b. along an active plate boundary.  
   c. in an oxygen-rich environment.  
   d. in an oxygen-deficient environment.

9. The separation between the Kaskaskia and Absaroka cratonic sequences in North America is based on the presence of
   a. widespread cyclothem deposition.  
   b. regional unconformities.  
   c. changes in the fossil assemblage.  
   d. absolute ages determined by radiometric techniques.

10. Gondwanaland experienced glacial conditions during the
    a. Silurian.  
    b. Devonian.  
    c. Carboniferous.  
    d. Permian.

11. Uncompahgre mountains, also called the ancestral Rockies, were the result of
    a. the collision recorded by the Ouachita Orogeny.  
    b. the mountain-building event of the Sonoma Orogeny.  
    c. domal uplift due to the basin subsidence to the south and east during the Pennsylvanian.  
    d. uplift of crustal blocks along extensive vertical reverse faults.
12. The Chattanooga Formation is composed of
a. late Pennsylvanian conglomerates and sandstones.
b. late Permian red beds.
c. late Devonian to Early Mississippian black shales.
d. Mississippian fossiliferous limestones and chert.

13. The Red Rock sandstones and the Flatirons were formed from clastic sediments derived from the erosion and weathering of the

14. What group of particularly coarse sediments, including conglomerates, were deposited and form some of the resistant ridges of the Appalachian Mountains in Pennsylvania?
   a. Sonoma Group           c. Pocono Group
   b. Dunkard Group          d. Monongahela Group

15. The orogeny in southern Europe that is a contemporary of the Allegheny Orogeny in North America during the late Paleozoic is

16. A dark gray concretionary variety of calcium phosphate used in the manufacture of fertilizers and other chemical products is
   a. phosphatic shales.       c. phosphorite.
   b. phosphates.              d. phosphorus.

17. The Permian-Triassic disturbances of the Cordilleran region have been named the ______ in British Columbia and the ____________ in the southwestern United States.
   a. the ancient British rock group   c. Mississippian Orogeny, American Orogeny
   b. the Permian-Triassic Orogeny      d. Cassiar Orogeny, Sonoma Orogeny

18. During the Devonian, subduction of oceanic lithosphere beneath the western margin of the continent was initiated resulting in the beginning of a disturbance known as

19. The late Paleozoic-Triassic has two cratonic sequences

20. The Alleghenian Orogeny and Owachita Orogeny were events in the final assembly of the supercontinent
   b. Laurentia.               d. Laurasia.