



Instructions: Answer the following:

1. The _____ (the last 2 million years) has been a time of fluctuating climate conditions.
2. There have been periods of glacial and non-glacial conditions of about _____ years.
3. When the earth's temperature drops by only a few degrees, _____ build up causing the reflectivity or albedo to increase as well as cloudiness.
4. It is during these cooler and wetter parts of the cycles when the _____ (answer to #3) build up that glaciers formed in the higher mountains of _____.
5. List the 8 areas and/or mountains that were extensively glaciated in the region.
6. In the Wyoming Rockies, the last two glacial advances were called _____, which occurred _____ years ago, and _____ which occurred _____ years ago.
7. These two advances are called _____ and _____ in the Copper Basin region.
8. In the Wood River Valley they are called _____ and _____.
9. Rewrite the previous names and ages next to each other in the correct age and area.

Age:	Wyoming area:	Copper Basin:	Wood River Valley:
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
10. During glacial advances, _____ builds up and literally, although slowly, _____ down valleys.
11. The deposits of poorly sorted sediment that forms on the sides and at the end of valley glaciers are called _____.
12. At the front of glaciers meltwater flows _____.
13. This meltwater coming from the glaciers is full of sediment and is deposited downstream as river _____.
14. Explain briefly what glaciation has to do with the Bonneville Flood.

15. The Bonneville basin is the result of _____ and _____ faulting, which started approximately _____ million years ago.

16. Water from the _____ _____ _____ on the west side of Nevada, and from the _____ _____ in northeast Utah, does not reach the ocean, but instead flows into a closed basin, of which Bonneville basin is the _____.

17. The climate changes produced large lakes during the colder wetter glacial periods, but during the _____ periods it was drier and these lakes would shrink and exist as saline lakes.

18. Dating methods vary according to what exists to be dated (what type of minerals are present or fossils, etc). What type of dating method is used in the book Rocks, Rails and trails as far as the Bonneville Flood is concerned? _____

19. What was the maximum height of Lake Bonneville in feet and meters?

20. The Bonneville Flood was caused by failure of an alluvial dam at _____ _____ just north of _____ Pass.

21. The Bonneville Flood emptied in which direction?

22. What are the “petrified watermelons”?

23. Besides the climate change what other change may have caused Lake Bonneville to rise as much as it did?

24. As the flood moved through the Portneuf Narrows south of Pocatello the water was _____ feet deep and moving at _____ miles per hour.

25. As the water slowed when it spread out in the Pocatello downtown area, boulders up to _____ feet in diameter were deposited.

26. A flat delta deposit now known as the _____ _____ was laid down northwest of Pocatello, and is the present site of the city of Chubbuck and the Pocatello airport.

27. The Bonneville Flood occurred about _____ years ago. (radiocarbon date)

28. It was somewhere around 3,000 years after the _____ _____ _____ floods and the _____ _____ floods.

29. The flood emptied the upper _____ feet of water of Lake Bonneville.

30. The total estimated volume of the Lake Bonneville Flood is _____ cubic km or 1150 cubic miles of water.

31. The peak discharge may have lasted _____ weeks.

32. The result of large scale flooding is called scabland topography and has features like dry _____, alcoves, scoured _____ surfaces and boulder bar accumulations along the flood path.

33. Using the descriptions of the preceding question find a picture of each feature (about four) of scabland topography in the Rocks, Rails and Trails book. Write down the page number and which feature it shows.

34. There are two possible reasons as to why the Bonneville Flood occurred mentioned in the book. What are they?

35. After the flood, the lake stayed at the _____ of _____ feet until about _____ years ago.

36. The modern lake level of the Great Salt