**NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ PERIOD: \_\_\_ DATE:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**SURFACE WATER INQUIRY QUESTIONS**

**You can access the online document to answer the questions from my website or read Chapter 9 in the textbook. Please read carefully so that you gain a full understanding of the concepts. Write your answers in complete sentences and on a separate sheet of paper.**

1. What can happen to a water molecule once it reaches Earth’s surface? p.212

2. Why does newly fallen precipitation become runoff? p.212

3. How do soil composition, vegetation, rate of precipitation, and slope affect runoff? pp. 212-214

4. How are drainage basins formed and separated from one another? p. 215

5. How do minerals become dissolved in water? pp. 215-216

6. Why do streams carry particles in suspension? p.216

7. How does a stream’s bed load contribute to the weathering of sediments? p. 217

8. Why are most pebbles found along the bottom and side of stream round and polished? p. 217

9. How are potholes formed? pp. 217-218

10. What affects the speed by which a channels flows? p. 218

11. How is a stream’s discharge determined? p. 218

12. What conditions may occur that might erosion power of a stream? p. 218

13. How do floodplains develop highly fertile soil? pp. 219-220

14. Why do upstream and downstream flooding occur? pp. 220-221

15. How was the Colorado River formed? p. 223

16. Explain the varying rate of flow of a meandering river affects deposition and erosion. pp. 224-225

17. How are alluvial fans formed? p.226

18. Compare and contrast the composition of materials that form alluvial fans and deltas. p. 226

19. Why does rejuvenation occur? p. 227

20. How do areas of limestone become lakes? p. 229

21. How do fertilizers that consist of nitrogen and phosphorus affect the amount of oxygen in a body of water? pp. 229-230

22. Compare and contrast bogs, marshes, and swamps. pp.230-231

24. What two benefits do wetlands offer? p. 230