CYCLES Review Sheet

- 1. Where does oxygen in the atmosphere come from?
- 2. How much of California's available water occurs north of Sacramento?
- 3. How much of the demand for water occurs in the southern two-thirds of the state?
- 4. How much of all the water on earth is suitable and ready for human consumption?
- 5. How do plants and animals play an important role in the carbon cycle?
- 6. How will reducing the use of fossil fuels help maintain an appropriate balance of carbon dioxide and oxygen in the atmosphere?
- 7. How is carbon dioxide in the atmosphere used to make sugar?
- 8. How does cutting down trees increase the amount of carbon dioxide in the atmosphere?
- 9. How are photosynthesis and respiration important to the movement of carbon through an ecosystem?
- 10. How does matter (water, nitrogen, carbon, oxygen) cycle through an ecosystem?
- 11. What is used by both plants and animals for energy?
- 12. Where has the water that we use today come from and what state has it been in?
- 13. Why is it difficult to integrate nitrogen gas from the atmosphere into the nitrogen cycle of the biosphere?
- 14. How do organisms "fix" atmospheric nitrogen?
- 15. Of what is nitrogen is an essential component?
- 16. How are clouds formed?
- 17. How does too much carbon dioxide in the atmosphere affect the earth's climate?
- 18. What examples are reservoirs/sinks for carbon dioxide?
- 19. Where is most of the earth's nitrogen?
- 20. What are aquifers and aquitards?
- 21. When water takes the form of rain, hail, sleet, or snow to get back to the earth it is called what?
- 22. What is the process of converting nitrogen (N_2) into usable nitrates (NO^{3-}) ?
- 23. In the nitrogen cycle, what role does bacteria play?
- 24. A mutation that prevents a maple tree from efficiently taking gases from the air would most directly affect which processes?
- 25. What is the largest reservoir of carbon?
- 26. Bacteria drive the _____ cycle.
- 27. What are the ingredients and products of photosynthesis?