

## Cell Biology Part 2 Test Review

### Photosynthesis and Cellular Respiration

1. Write the equation for photosynthesis. Write it out in symbols and with words underneath.
2. Where does photosynthesis occur (organelle)?
3. What is the source of energy for photosynthesis?
4. What are the reactants for photosynthesis?
5. How do the reactants get into the plant?
6. What are the products (end materials) of photosynthesis?
7. What does aerobic and anaerobic mean?
8. Does aerobic or anaerobic cellular respiration produce more energy?
9. What is a benefit of anaerobic respiration?
10. What are the reactants for aerobic cellular respiration?
11. What are the products for aerobic cellular respiration?
12. Write the equation for aerobic cellular respiration. Write it out in symbols and with words underneath.
13. Under what conditions does anaerobic respiration or fermentation occur?
14. What are the reactants and products of anaerobic respiration?
15. Draw an ATP molecule.
16. Explain the ADP-ATP cycle?
17. What type of cells carry out cellular respiration?
18. What type of organism photosynthesizes?
19. Compare and contrast the processes of cellular respiration and photosynthesis?

### Cell Division

20. In humans, how many chromosomes are in each cell (except gametes)?
21. What is a gamete?
22. What is a somatic cell?
23. What is the difference between haploid and diploid cells (look at the back of your foldable)?
24. Compare and contrast the processes of mitosis and meiosis (look at chart in notes).
25. Explain the role of mitosis in asexual reproduction.
26. Explain the role of meiosis in sexual reproduction.
27. Explain the process of mitosis. Start with interphase and end with cytokinesis (look at foldable).
28. Explain how it is possible to maintain the chromosome number during asexual reproduction in mitosis.
29. Why do asexually reproducing species have less genetic variation in comparison to species that reproduce sexually?
30. Bacteria can reproduce by asexual reproduction. Will the daughter cells have the same or a different number of chromosomes from the initial cell?
31. What is cancer?