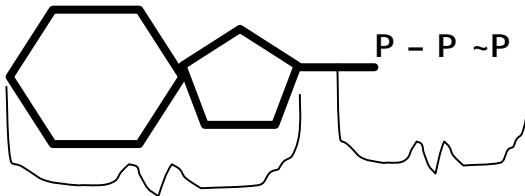


# *Cell Energy, Photosynthesis & Respiration Review sheet*

1. Name two reasons why sugar is not useable as it is?

2. Name this molecule.



3. What type of battery did we say this molecule works like?

4. Name two reasons we said ATP solves the problems of sugar.

## Photosynthesis

5. What is an Autotroph?

6. What is a Heterotroph?

7. Why does Photosynthesis Happen?

8. What is needed to do Photosynthesis?

9. What does Photosynthesis produce?

10. What are the uses of the products?

## Now the Details

11. What part of a plant does Photosynthesis?

12. What is the chemical that is present in those parts?

13. Why do electrons have lots of energy?

14. When can the light reactions happen?

15. What does a plant do with the energy in sunlight?
16. What does the plant collect from the breakdown of water in the light reactions?
17. What holds on to the material the plant collected so it doesn't hurt the cell?
18. When does the plant do the dark reactions?
19. What molecule is made during the dark reactions?
20. Where does the energy come from to make that molecule?
21. What type of food do we use as our main source of energy?
22. What do we call the process of breaking down sugar using oxygen to release energy?
23. What structure in your cells makes energy?
24. What gas do we need to make energy?
25. What do your cells do with left over energy when you spend energy to "pay for" an activity?
26. Do we release the energy from sugar quickly or slowly?

#### Respiration Chart

27. How many ATP does it take to store the energy from 1 sugar?
28. If you start exercising, how long does your ATP supply last?
29. ATP is the energy storage molecule that works like a \_\_\_\_\_ battery.
30. Which part of your body burns the most calories?
31. Which cells in your body starve to death first if you cannot make energy?
32. ATP and Creatine in your cells can give you energy without using any:
33. Sugar, Glycogen, and Fat can only give you energy if you get enough of what gas?
34. What happens to your energy level as you go farther down the list of energy sources?
35. In the yeast experiment, what gas were the yeast breathing out that made the pressure in the tube increase?
36. What did the increase in pressure tell you about the yeast?
37. What did it mean if the pressure went twice as high for snickers as for cheese?