

# UNIT ONE REVIEW

1. What does the vacuole do?
2. What is mitochondrion?
3. What is the flagella?
4. What is the outer shell of a cell?
5. What analogy could you use to describe the roles of organelles? Make sure to include at least three roles.
6. What are the six main processes cells must maintain?
7. A phospholipid molecule contains two distinct regions. The \_\_\_\_\_ region is attracted to water and the \_\_\_\_\_ region is repelled from water.



13. Explain the role of each of the following components of a negative feedback mechanism:
- receptor
  - control center
  - effector
14. Draw a labeled diagram of the cell membrane. Include the following components:  
**hydrophobic, hydrophilic, integral protein, peripheral protein, channel protein.**
15. Explain the difference between active and passive transport.
16. Define the terms hydrophobic and hydrophilic.

17. Compare the following terms:
  - a. integral and peripheral proteins
  - b. channel and carrier proteins
  - c. endocytosis and exocytosis
  - d. diffusion and osmosis
18. What does it mean to say that the cell membrane is selectively permeable?
19. If you could have lunch with one famous person (dead or alive) who would it be?  
Why?
20. List and briefly describe the three types of passive transport
21. What is ATP? What reaction produces ATP and in what part of the cell does this occur?
22. How does the size of a cell affect the rate at which a substance can diffuse through its membrane?

23. What does the term concentration gradient mean? How does the concentration gradient of a substance affect how quickly it will diffuse across a membrane?
24. What are the main components of the cell membrane?
25. What is the worst food in the entire world? Why?
26. What does the term "lipid bilayer" mean? Use a diagram to help you explain.
27. What are the two types of proteins found in the cell membrane called?
28. How is facilitated diffusion different from diffusion?

29. Describe the three different diffusion factors we tested in the celery lab. What did you conclude?

30. Who is the best musician of your generation? Why?

31. Why is Justin Bieber the greatest musician of your generation?

### TIPS FOR GETTING 100% ON THE TEST:

- Do this review!
- Correct this review!
- Look over your lessons!
  - Eat healthy foods!
- Balance studying and exercising!
  - Get a good amount of sleep!
  - Bring Ms. Burns coffee!