

Ch. 7 *(sections 1-3)* **Study Guide – Cells**

1. Who is Robert Hooke?
2. What are the three parts of the cell theory?
3. Compare and contrast transmission electron microscopes (TEM) and scanning electron microscopes (SEM).
4. What are the differences between prokaryotes and eukaryotes (list several)?
5. What kind(s) of organisms are prokaryotes?
6. What kind(s) of organisms are eukaryotes?
7. What is the function of the nucleus?
8. What is the function of the nucleolus?
9. What is the function of lysosomes?
10. What is the function of centrioles?
11. What is the function of the smooth endoplasmic reticulum?
12. What is the function of the rough ER?
13. What is the function of the golgi apparatus?
14. What is the function of the cytoskeleton?
15. Label the following structures (see page 206).
16. What is the function of a vacuole?
17. What do ribosomes do?



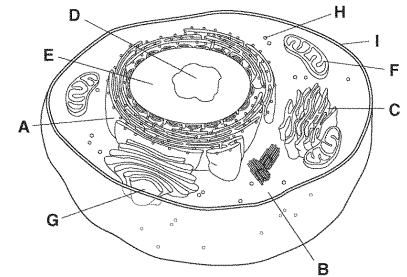
18. Label the following structures.

19. What is the function of mitochondria?

20. What is the function of chloroplasts?

21. What is the function of the cell wall?

22. Label the following structures.



23. What organisms have a cell wall (list 3)?

24. What 3 structures do plant cells have that animal cells do not?

25. What is the function of the cell membrane?

26. What are the channels and pumps that help move materials from one side to another made out of?

27. Define passive transport.

28. What is diffusion? Why/how does it occur?

29. Define equilibrium.

30. Define osmosis.

31. What will happen to an animal cell that is surrounded by 100% water?

32. What would happen to an animal cell with an internal salt concentration of 0.8% if it were placed in a salt solution with a concentration of 0.2%? Why? Draw a picture.

33. What would happen to an animal cell with an internal salt concentration of 0.2% if it were placed in a salt solution with a concentration of 1.0%? Why? Draw a picture.

34. What is facilitated diffusion?

35. Define active transport.

36. Compare and contrast endocytosis and exocytosis.