

CELL STRUCTURE AND FUNCTION

1. What are the 3 parts of the cell theory?
2. Identify the scientists involved in developing the cell theory and what they did.
3. What is the smallest basic unit of life?
4. What is needed to see most cells?
5. _____ are made of one cell, while _____ are composed of more than one cell.
6. Describe prokaryotic cells.
7. Give an example of a prokaryote.
8. What are eukaryotes?
9. Are plant and animal cells prokaryotes or eukaryotes?
10. Where is DNA found inside prokaryotic cells?
11. What 2 structures surround prokaryotic cells?
12. What organelle, not surrounded by a membrane, is found in prokaryotes & eukaryotes?
13. Name the 3 basic cell structures in eukaryotes.
14. _____ are small structures in the cytoplasm that perform specific functions.
15. Give the function of these organelles: endoplasmic reticulum, Golgi bodies, Nucleolus, Lysosomes, Ribosomes, mitochondria, chloroplast, cytoplasm, cell membrane, vesicles, vacuoles.
16. Describe the structure of each organelle.
17. Lysosomes contain _____ enzymes to break down _____ and worn out _____ parts.
18. Where is the nucleolus located?
19. Nucleoli make _____ that make _____ for the cell.
20. How does smooth ER differ from rough ER?
21. Proteins used in the cell are made by _____ ER, while proteins to be exported are made by _____ ER.
22. What organelle serves as the powerhouse of the cell?
23. What important process takes place in the mitochondria?
24. Which type of cells would have more mitochondria & why?
25. _____ like glucose are burned in the mitochondria to release cellular energy known as _____.
26. What surrounds the outside of all cells?
27. In plant cells, a cell _____ surrounds the cell membrane for extra support.
28. What 2 things make up all cell membranes?
29. Cell membranes only allow certain materials into & out of the cell so they are said to be _____.
30. The cell _____ is a living layer around cells, while the cell _____ in plants is nonliving.
31. Jelly-like material inside the cell membrane is called _____ and is where most _____ of the cell take place.
32. Organelles are found inside the cell's _____.
33. The _____ controls the activities of the cell and contains the cell's _____.
34. the _____ surrounds the nucleus.
35. Chromosomes inside the nucleus contain _____ that control the cell's characteristics.
36. Cell walls resist the loss of _____ from a cell and give _____ & support to the cell.
37. What large organelle takes up most of the space in a plant cell?
38. What is the membrane called that surrounds the central vacuole in plants?
39. Name 2 structures found in plant, but NOT animal cells. Animal cells store their carbohydrate energy as _____ in their cytoplasm.
40. What paired organelle involved with cell division is found in animal but NOT plant cells?
41. Name 6 types of animal cells.
42. List 3 similarities between plant and animal cells.
43. How do plant and animal cells compare in size?
44. How do plant and animal cells compare in shape to each other?
45. Do animal cells have cell walls?

