



Cell Organelles and Their Functions

Name _____

Date _____

Below is a list of the organelles found in plant and animal cells. Match the organelle with the function it carries out inside a cell. Many of the cell organelles will be used more than once.

"enriched" organelles

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|--------------------|----------------------|----------------------------------|
| 1) Cell Membrane | 8) Cytoplasm | 15) Nucleolus |
| 2) Cell Wall | 9) Cytoskeleton | 16) Nucleoplasm |
| 3) Central Vacuole | 10) Golgi apparatus | 17) Nucleus |
| 4) Centriole | 11) Leukoplast | 18) Ribosome |
| 5) Chloroplast | 12) Lysosome | 19) Rough endoplasmic reticulum |
| 6) Chromoplast | 13) Mitochondria | 20) Smooth endoplasmic reticulum |
| 7) Chromosome | 14) Nuclear membrane | 21) Vacuole |

- _____ 1. This is the control center of the cell.
- _____ 2. This is made of DNA and is the storage area for all genetic information.
- _____ 3. This is the site of protein synthesis in a cell.
- _____ 4. This porous structure surrounds the nucleus, keeping it intact.
- _____ 5. This internal membrane system is so extensive that it accounts for more than half the total membrane in a cell.
- _____ 6. When newly formed proteins leave the rough endoplasmic reticulum, they are transported to this organelle, where the proteins are sorted and packaged.
- _____ 7. This part of the cell manufactures the ribosomal subunits.
- _____ 8. This part of the cell is surrounded by a very thick outer membrane to protect the rest of the cell from its strong enzymes.
- _____ 9. The portion of the cell that exists outside of the nucleus.
- _____ 10. The part of the cell that controls what enters and leaves the cell.
- _____ 11. The part of the cell where chromosomes would be found.
- _____ 12. This membrane connects the nuclear membrane to the cell membrane.
- _____ 13. This part of the cell contains strong digestive enzymes to break down proteins, carbohydrates and lipids into small molecules that can be used by the rest of the cell.
- _____ 14. These are the most numerous of the cell's organelles.
- _____ 15. This serves as the "powerhouse" of the cell.
- _____ 16. The place where lipids are manufactured.
- _____ 17. This part contains the instructions for making proteins and other important molecules.
- _____ 18. This organelle consists of two types of fibers called microfilaments and microtubules.
- _____ 19. Choose 2 of the organelles from the list above that would never be found in a plant cell.
- _____ 20. These three organelles all are surrounded by a double membrane.

- _____ 21. This is the semi-fluid portion found inside the nucleus.
- _____ 22. Newly made proteins are inserted into spaces of this organelle where they are modified and shaped into functioning proteins.
- _____ 23. This organelle puts the “finishing touches” on proteins before they are shipped off to their final destinations.
- _____ 24. Choose 5 organelles from the list above that would never be found in an animal cell.
- _____ 25. This large structure in a plant cell is filled with water creating turgor pressure.
- _____ 26. This is the site of photosynthesis in a plant cell.
- _____ 27. These may be found free-floating in the cytoplasm or attached to the endoplasmic reticulum.
- _____ 28. This part of the cell contains internal folds of membrane called cristae.
- _____ 29. This part of the cell is involved with cell movement, cell shape and the separation of chromosomes during cell division.
- _____ 30. This organelle has the unique ability to absorb the energy from the sun and convert it into a molecule of glucose.
- _____ 31. This organelle contains pigments of all colors except green.
- _____ 32. This organelle serves as a storage area for starch in a plant cell.
- _____ 33. The type of endoplasmic reticulum to which no ribosomes are attached.
- _____ 34. This serves as a storage area inside an animal cell.
- _____ 35. This organelle is composed of tough, stringy cellulose fibers.
- _____ 36. The type of endoplasmic reticulum to which ribosomes are attached.
- _____ 37. This organelle is often found near the cell membrane. It consists of a stack of flattened sacs.
- _____ 38. This organelle helps to “clean up” or destroy any debris that might build up inside the cell.
- _____ 39. This organelle has an internal membrane system called thylakoids.
- _____ 40. This is the site of cellular respiration.
- _____ 41. This is an internal framework and support system to give shape and organization to a cell.
- _____ 42. What two structures give the plant the strength and support needed to stand upright?
- _____ 43. This part contains the green pigment chlorophyll.
- _____ 44. This organelle gives fruits and flowers their color.
- _____ 45. Which of the above would be found in both plant cells and in animal cells?