

Cell Parts Key Words

Cell Terms

1. **Active transport-**
2. **Autotrophs**
3. **Bimolecular Layer –**
4. **Cell –**
5. **Cell theory –**
6. **Cellulose –** Large carbohydrate molecule that makes up the Cell Wall found in Plant Cells
7. **Cell membrane –**
8. **Cellular respiration –** (Aerobic Respiration) $C_6H_{12}O_6 + 6O_2 \rightarrow 6CO_2 + 6H_2O + ATP$
Glucose + Oxygen \rightarrow Carbon dioxide + Water + Energy
Takes place in the Cristae of the Mitochondria
9. **Cell Wall –**
10. **Centriole –**
11. **Chloroplast –**
12. **Chlorophyll –**
13. **Chromosome –**
14. **Chromatin –**
15. **Cilia –**
16. **Cristae –**
17. **Cytoplasm –**
18. **Cytoskeleton -** Unique to the eukaryotes. It is a network of protein filaments, mostly actin and tubulin, which are anchored to the cell membrane, and criss-cross the periphery of the cell. The network provides a structural framework that gives the cell its shape, and stabilizes the membrane systems. It also permits the cell to selectively exert tension on the membrane, making movement of the cell possible. The contractibility of these protein filaments are also responsible for muscle function, and the operation of the spindle apparatus, which separates the chromosomes during mitosis
19. **DNA (Deoxyribonucleic Acid) –** The genetic material, the recipe of life. Composed of Nucleotides A, T, C, G. Found in chromosomes and Chromatin.
20. **Diffusion-**

21. Dynamic Equilibrium

22. **Endocytosis** -

23. **Endoplasmic Reticulum**

24. **Equilibrium-**

25. **Eukaryote** - Evolved 1.5 billion years ago, includes the kingdoms Protista, Plantae, Fungae, Animalia. The name means "true nut" or "true kernel" in Greek; the "nut" is the nucleus of the eukaryotic cell, a membrane sac that contains the cell's DNA. Eukaryotes have their DNA in linear pieces that are bound up with special proteins (histones) to make chromosomes.

26. **Exocytosis-**

27. **Facilitated Diffusion-**

28. **Flagella** – (undulipodium)

29. **Fluid Mosaic Model** –

30. **Golgi Body** (Golgi Apparatus) –

31. **Heterotrophs** –

32. **Hydrophobic** – “Water fearing” the lipid tail region of the phospholipid

33. **Hydrophilic** – “Water loving” the head region of the phospholipid

34. **Hypertonic** – having a higher osmotic pressure. More solvent in comparison

35. **Hypotonic** - having a lower osmotic pressure. Less solvent in comparison

36. **Isotonic** – Having the same or equal osmotic pressure. No net flow occurs

37. **Lateral Movement-**

38. **Lysosome** –

39. **Microfilaments** –

40. **Microtubules** –

41. **Mitochondria-**

42. **Nuclear membrane** (nuclear envelope) –

43. **Nucleolus-**

44. **Nucleus-**

45. **Organelle-**

46. **Osmosis** –

47. **Passive Transport** –

48. **Peroxisomes**

49. **Phagocytosis** –
50. **Photosynthesis**-
51. **Phospholipid** –
52. **Pinocytosis** - (cellular drinking)
53. **Plastid**- pigment storage organelle
54. **Prokaryote** - appeared 3.5 billion years ago, are the kingdoms Monera (Eubacteria) and Archaea. They are essentially molecules surrounded by a membrane and cell wall. Prokaryotic cells lack characteristic eukaryotic subcellular membrane enclosed "organelles", but may contain membrane systems inside a cell wall. Prokaryotic cells may have photosynthetic pigments, such as is found in cyanobacteria ("blue bacteria"). Some prokaryotic cells have external whip-like flagella for locomotion or hair like pili for adhesion. Prokaryotic cells come in multiple shapes: cocci (round), bacilli (rods), and spirilla or spirochetes (helical cells).
55. **Ribosome** –
56. **Selectively Permeable Membrane** –
57. **Turgor Pressure** – the pressure created in a plant cell when the membrane is expanded by osmosis and presses against the cell wall.
58. **Transport Protein** –
59. **Vacuole** -
60. **Vesicle** -

Abbreviations

CO₂ = Carbon Dioxide

O₂ = Oxygen

C₆H₁₂O₆ = Sugar / Glucose

RXN = reaction

RNA = ribonucleic acid

E = energy

ATP = Cellular energy

H₂O = Water

Special Cell Process Terms

61. **Adaptation** –

62. **Consumer** –

63. **Development** –

64. **Metabolism-**

65. **Organ-**

66. **Organism** –

67. **Organ system** –

68. **Producer** -

69. **Reproduce-**

70. **Tissue-**

71. **Symbiosis-**

72. **System** –