

Cells Review Guide

1. Complete the following table about cell Organelles.

Organelle	Function	Location (Plant/Animal/Both)
Cell membrane	allows things in or out of cell	Both
Cell wall	provides structure/support	plant
Ribosome	makes proteins	both
Smooth ER	passageway	Both
Rough ER	ribosomes on it & passageway	Both
Microfilaments	provides structure; 3D shape	both
Centrioles	help with cell reproduction	Animal
Flagella	movement	animal
Cilia	movement	animal
Nucleus	control center	Both
Nucleolus	holds DNA	Both
Nuclear membrane	allows things in/out of nucleus	both
Vacuole	stores water	both P=large A=many+small
Lysosome	cleans cell	animal
Golgi body	packages; secretes; modifies	Both
Mitochondria	powerhouse; makes energy	both
Chloroplast	makes food - goes thru photosynthesis	plant

2. List the parts of the cell theory. *over*

3. Explain the difference between a plant and animal cell using 3 distinguishing characteristics. *Plant = cell wall chloroplast & large vacuole A = round lysosomes cilia/flagella*

4. Explain the difference between a eukaryote cell and prokaryote cell using 4 distinguishing characteristics. *nucleus 1.5 bil ylo many organelles 2-1000 um size* *No nucleus few organelles 1-10 um size* *3.5 bil ylo*

5. Explain the difference between unicellular organisms and multicellular organisms.

6. Viruses *↳ 1 celled* *↳ many celled*

6a). Define it.

6b). What type of genetic information can it have? RNA or DNA

6c). Why is it considered to be non-living? List 3 reasons.

6d). List 4 types of viral diseases.

6e) List the 2 main methods of how a virus can reproduce. *lytic cycle* *lysogenic cycle*

7. Name and draw the 3 main shapes of bacteria. *coccus* *bacillus* *spirillum*

7a). How do you name a bacteria? *shape + arrangement name*

7b). List 3 types of bacterial diseases. *E. coli, streptococcus, staphylococcus*

7c). How can you kill a bacteria? *Antibiotics*

7d) How can a bacteria cell reproduce? *binary fission*

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- ① All living things are made of cells
 - ② Cells are the basic unit of structure & function in living organisms
 - ③ New cells are produced from existing cells
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