Cell Organelles Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Bozeman Science Video- <http://www.bozemanscience.com/043-cellular-organelles>

**The Inner Life of a Cell** link <http://www.youtube.com/watch?v=wJyUtbn0O5Y>

1. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the control center of the cell. It tells other parts of the cell what to do.
2. Working outward from the nucleus we have the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **endoplasmic reticulum**.
3. The **rough ER** is rough because it has \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on it; and these are the site of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. The **smooth ER** is really responsible for making \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and breaking down toxins.
5. Proteins will be trapped in transport vesicles and brought to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ complex. From there they can go to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ parts of the cell or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the cell.
6. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is important in breaking down material when it is not used.
7. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is important in storage; particularly for plants.
8. The two organelles that deal with ENERGY are the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (2:36)
9. When you hear him talking about organelles, he is talking about \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cells.
10. All **eukaryotic** cells have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, its how they make ATP.
11. Producers (plant cells) are going to have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and that’s so they can make sugar; which is then used by the **mitochondria**.
12. **Ribosomes** are made up of two parts; \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and ribosomal RNA and are synthesized (made) in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
13. mRNA (messenger RNA) is made into a protein at the **ribosome** and this can take place in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (free ribosomes) or at the **rough ER**.
14. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a membrane that folds upon itself that is located near or around the nucleus. It has \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ attached to part of it.
15. The function of the **Endoplasmic Reticulum** is to give us a lattice, so it can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ things.
16. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **apparatus** or **complex** takes things that are produced in the ER and ships them to different parts of cell. This would be the UPS of the factory.
17. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the organelle that has a lot of digestive enzymes to break down materials such as viruses.
18. The **lysosome** can also get rid of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that’s not working or \_\_\_\_\_\_\_\_\_\_\_\_ cells
19. Because of this, the **lysosome** is sometimes referred to as the “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ sac”. They are really important in breaking down material that is not needed anymore. (6:49)
20. The folding inside the **mitochondria** is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and its purpose is to increase surface area to make more ATP.
21. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the cell is going to be mostly for storage. Every plant cell is going to a central or (large) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ where they put water, some toxins, and pigments.
22. And last is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, if we see a lot of these, that means we are doing photosynthesis.



**Thylakiod**- membrane where photosynthesis takes place, contains green pigment chlorophyll.

**Grana**-stacks of thylakoids

**Stroma**- liquid filling in the chloroplast