

# Amoeba Sisters: Introduction to Cells: The Grand Tour Video Question Sheet

Name:

Block:

1. What is the modern cell theory? 3 Things.

a)

b)

c)

2. What are examples of organisms that make up...

a) Prokaryotes:( 2 examples illustrated)

i)

ii)

b) Eukaryotes:( 4 things illustrated)

i)

ii)

iii)

iv)

3. Similarities between Prokaryotes and Eukaryotes.

Prokaryotes and Eukaryotes both have:
1)
2)
3)
4)

4. Unlike Eukaryotes... Prokaryotes have **no** \_\_\_\_\_ and **no membrane** bound \_\_\_\_\_.

5. A cell membrane is also a \_\_\_\_\_ membrane, which is selectively permeable, which means only selectively allow certain \_\_\_\_\_ in and out. By doing so, it keeps things in the cell and stable. Another word for stable is \_\_\_\_\_. A jelly like material that surrounds all cell structures is called \_\_\_\_\_. Can you find cytoplasm in both prokaryotes and eukaryotes? Yes or No. Are ribosomes in both Prokaryotes and Eukaryotes? Yes or No. A \_\_\_\_\_ is a collection of fibres that provide support for the \_\_\_\_\_ and its organelles.

6. The main function of ribosomes is that they make \_\_\_\_\_.

7. The nucleus in Eukaryotic cells hold \_\_\_\_\_. The nucleus controls the cell's \_\_\_\_\_. The Nucleolus is in the \_\_\_\_\_, where \_\_\_\_\_ are produced.

8. Attached to the membrane of the nucleus is the Endoplasmic Reticulum, which is abbreviated as \_\_\_\_\_ .
9. Rough ER's main function are...( 2 things)
- a)
- b)
10. Smooth ER's main function is:
- a) \_\_\_\_\_ (Reason why there is tons of this in the liver.)
- b) \_\_\_\_\_
11. The Golgi Apparatus(GA)'s main function is to...( 3 things)
- a) Ultimate \_\_\_\_\_ center.
- b) Has \_\_\_\_\_ that modify molecules.
- c) Sorts materials and can determine where to send the different \_\_\_\_\_.
12. The word that means sending items out of a cell is called \_\_\_\_\_.
13. Mitochondria are like power plants making \_\_\_\_\_ during a process called Cellular Respiration or CR. ATP runs on \_\_\_\_\_, which is the formal word for sugar. CR needs the presence of \_\_\_\_\_ to make ATP efficiently.
14. Eukaryotic plant cells have many of the organelles animal cells have with the addition of \_\_\_\_\_. These awesome organelles can make sugar directly from \_\_\_\_\_ energy in a process called photosynthesis. These organelles have a green look to them, due to a pigment that captures light energy and reflects \_\_\_\_\_ light.
15. Vacuoles are cell organelles that can have different functions such as simply \_\_\_\_\_ of materials.
16. All cells have membranes, but plant cells additionally have a cell \_\_\_\_\_. This adds protection and supports the shape of these cells.

