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**LE-9R Cell Topic 3: Parts of a Cell**

Many of the world’s organisms are made of only one cell, but all organisms from the most basic to the most complex are all made of cells. Cells are like a miniature city surrounded by a membrane that keeps the interior operating within its normal range (at homeostasis).

All of the cells **organelles** (little organs) are working with each other at all times to keep the balance.

Organelles have a large range of size, shape and function. Organelles are responsible for many jobs within a cell. Each organelle has its OWN job. Some jobs: *protects the cell, controls the cell, power supplier of the cell, sort information and eliminate waste.*

**Questions**

1. Describe the role that each job has below.

Mayor 🡺 Fireman 🡺

Police 🡺 Sanitation 🡺

Trucking 🡺 Construction 🡺

Power Plant 🡺 Farmer 🡺

1. What does the term organelle mean?
2. Name 3 functions/jobs of organelles.
3. List the levels of organization from most complex to least complex

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Cell* | *Organ* | *Organism* | *Tissue* | *Organ System* |

*Most complex Least Complex*

1.\_\_\_\_\_\_\_\_\_\_\_\_2.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_5.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What are the organelles found in both plant and animal cells?

|  |  |  |  |
| --- | --- | --- | --- |
| Diagram | Organelle | Function | Analogy |
| 873880126.jpg |  | Determines what goes in/out of the cell.  Protects and supports the cell. |  |
| 250px-Cytoplasm-illustration.jpg |  | The watery material in the cell between the cell membrane and the nucleus    Contains nutrients for cell.  Also for protection.a  The place where many chemical reactions occur |  |
| Nuclear+membrane+nucleolus+chromatin.jpg |  | Decides what goes into and out of the nucleus. |  |
| th-1.jpg |  | Is the control center of the cell.  The “brain” of the cell.    Stores the genetic material of the cell, called DNA. |  |

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**LE-9R Cells Daily Quiz 3**

1. What are organelles?
2. Why is a cell like a city?
3. Pick ONE organelle we learned today and explain its function: Cell membrane, Cytoplasm, Nuclear Membrane or Nucleus