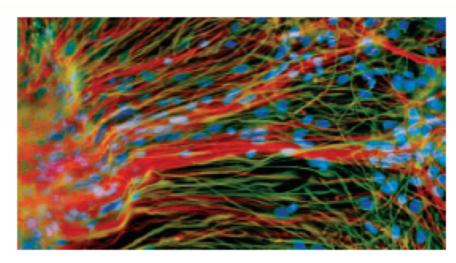
## SCIENCE 8: CHAPTER1 CELLS AND SYSTEMS

1.2 CELLS

## **CELL THEORY**

- The cell is the \_\_\_\_\_
- All organisms are
- All cells



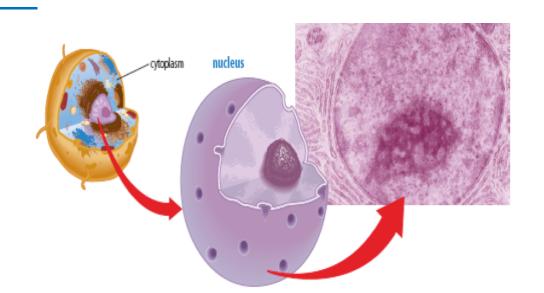
Embryonic stem cells that are developing into nerve cells

### THE FUNCTIONS OF <u>CELL ORGANELLES</u>

- The \_\_\_\_\_ the cell and \_\_\_\_
- \_\_\_\_\_, the \_\_\_\_\_ contains organelles, water, and other life supporting materials.
- The \_\_\_\_\_:

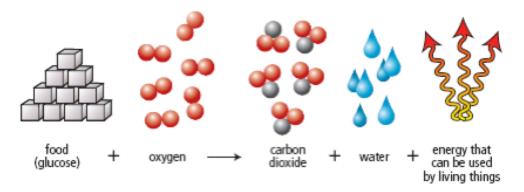
within the cell.

containsdeoxyribonucleic acid(\_\_\_\_\_\_\_).



## **ENERGY IN THE CELL**

- The \_\_\_\_\_ are the organelles that in the cell.
- When the cell changes chemical energy, in the food we eat, to energy the cell can use, it is called \_\_\_\_\_.
- The total of all the chemical reactions that take place in our cells is called our .



# ORGANELLES FOR ASSEMBLY, TRANSPORT, AND STORAGE

• are essential for all life and are	
the	
• then	the
and are placed in	by the
•are	cell membrane cytoplasm ribosome vacuole mitochondrion
food particles, cell wastes, and worn-out organelles.	endoplasmic reticulum ribosome

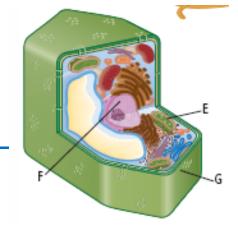
Animal cell

#### THE DIFFERENCE BETWEEN PLANT AND ANIMAL CELLS

• Plant cells have two parts that are not found in animal cells:

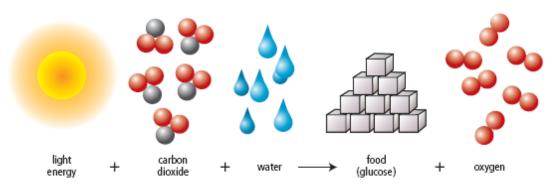


the cell and gives cell



•

into chemical energy



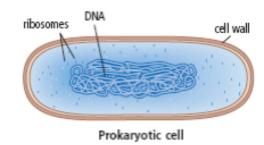
See pages 29-30

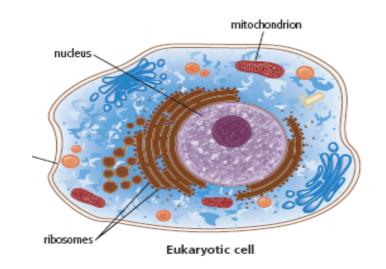
#### PROKARYOTIC AND EUKARYOTIC CELLS

Cells are classified into two groups:

Ce	ells have
organelles that are	
	•
ce	lls have
organelles that	
	•
Eukaryotic cells are	usually
than	prokaryotic

cells.





## BACTERIA AND VIRUSES

are prokaryotic cells	
• Some bacteria cause tuberculosis and strep throat.	such as:
• bacteria are used to such as: cheese and yogurt.	
<ul> <li>Bacteria are often grouped by the</li> <li>their cells.</li> </ul>	of
are not living.	
•, and the, and the	are
<ul> <li>Viruses do not contain any cell</li> <li>but reproduce by using a</li> </ul>	ell. See pages 33 - 34

