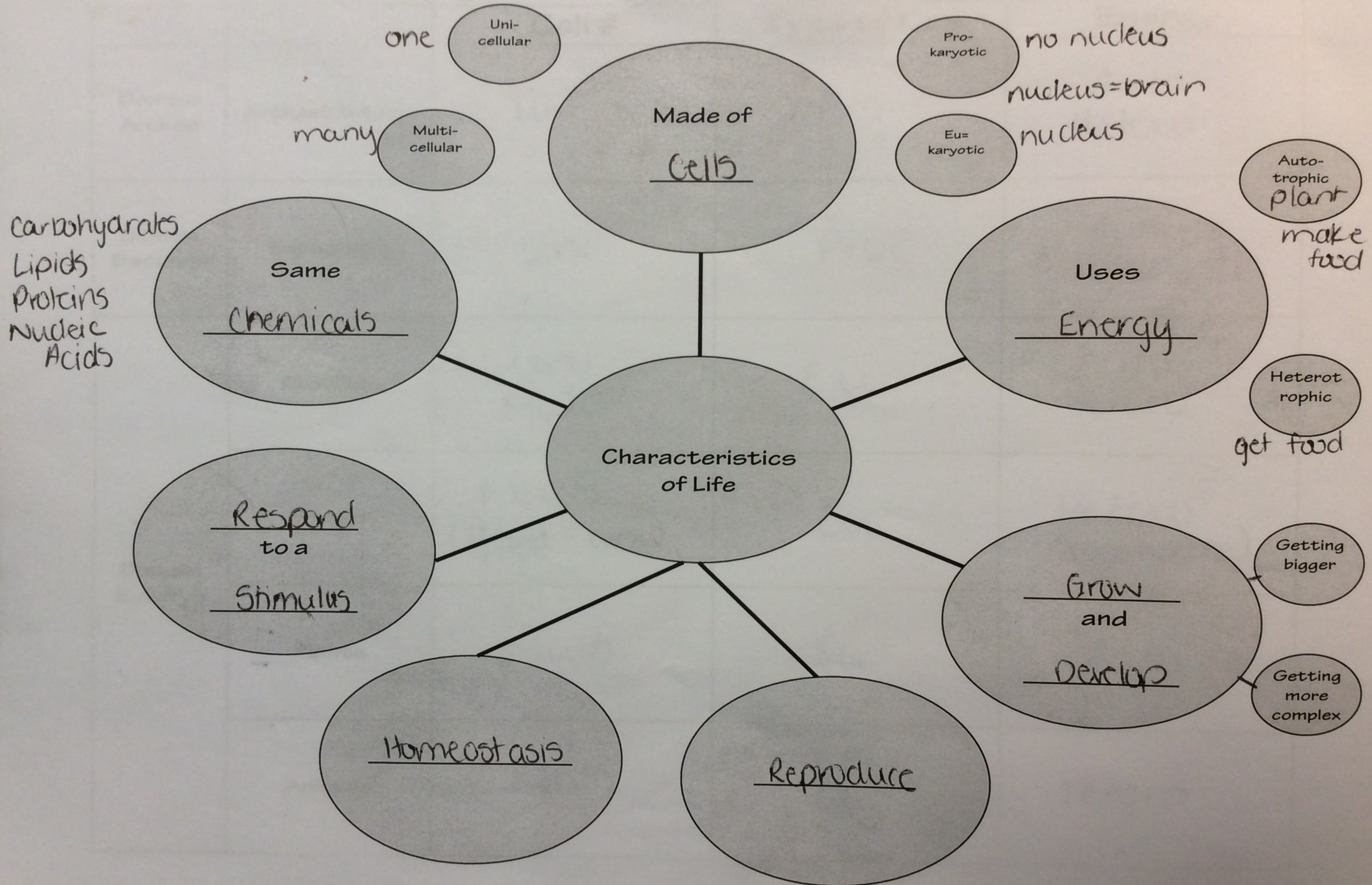


# Characteristics of Life Notes

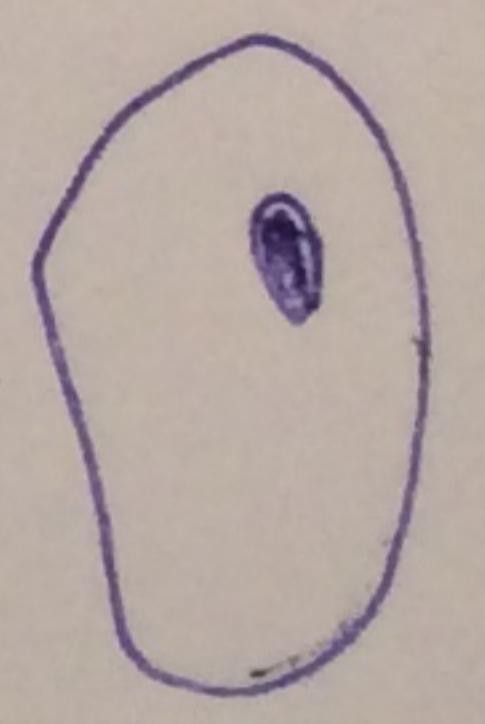




Definition:

One cell

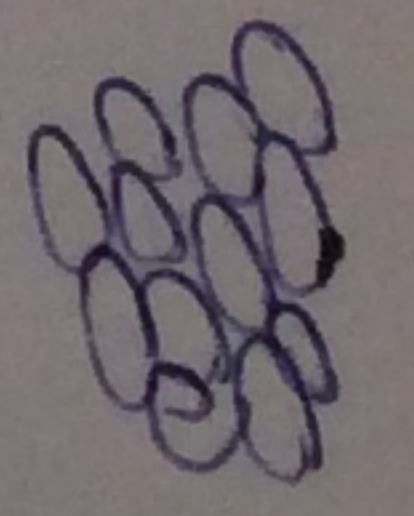
Picture:



Definition:

many cells  
(2+)

Picture



Synonyms:

Unicellular

Sentence:

Bacteria is a unicellular organism

Synonyms:

Multicellular

Sentence

Humans are a multicellular organism

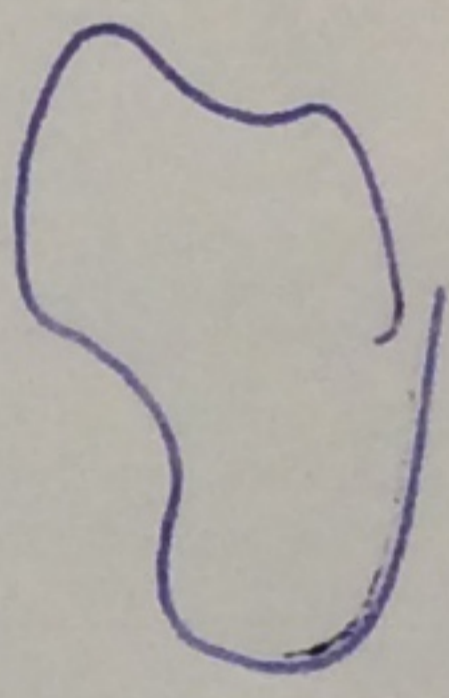
single  
once  
alone

multiplies  
mutual  
together

Definition:

no  
nucleus  
(brain)

Picture:



Definition:

nucleus  
(cell brain)

Picture



Synonyms:

Prokaryotic

Sentence:

Prokaryotic cells are very primitive

Synonyms:

Eukaryotic

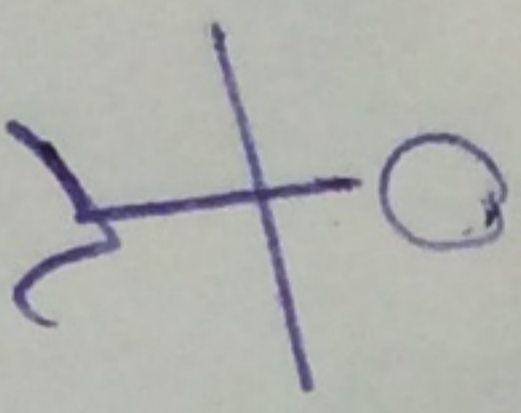
Sentence

true  
actual  
contained

Definition:

eat food →  
make energy

Picture:



Definition:

get energy →  
make food

Picture



Synonyms:

Heterotrophic

Sentence:

Humans are heterotrophic, even if they cook.

Synonyms:

Autotrophic

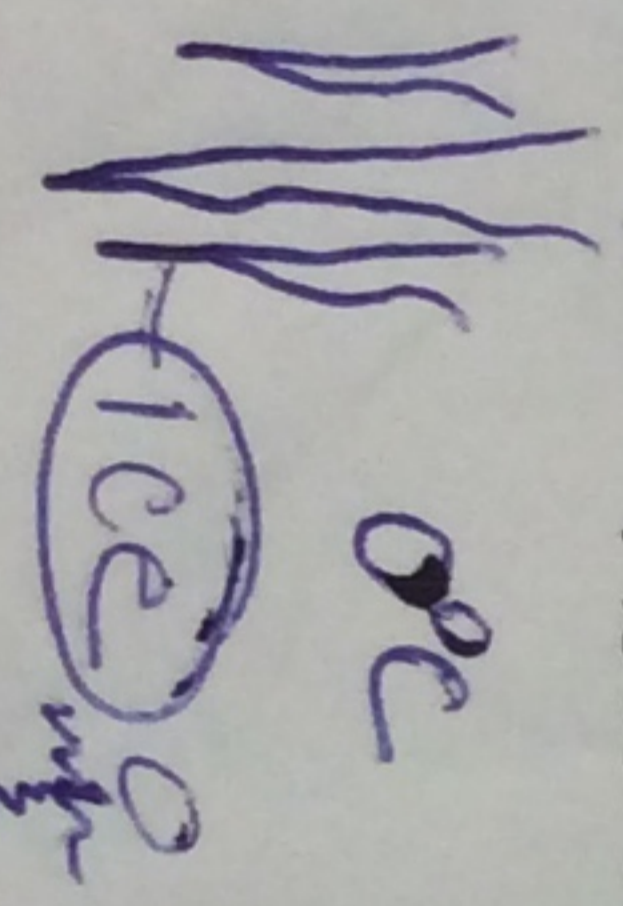
Sentence

Plants are autotrophs who photosynthesize

Definition:

a change or  
action that  
causes a  
response

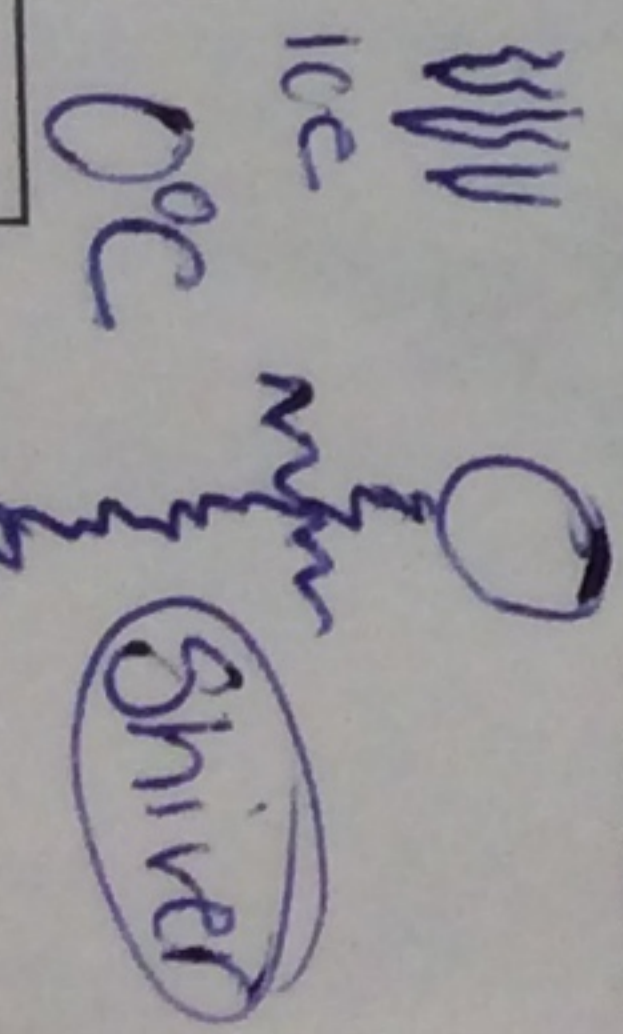
Picture:



Definition:

the action caused  
by a stimuli

Picture



Synonyms:

Stimuli

Sentence:

Cold weather stimulates me to shiver

Synonyms:

Response

Sentence

I shiver in response to cold weather.

Stimulate  
cause  
change

responding  
effect  
action



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

### Events in History and Biology from 1660 - 1870 CE

**Directions:** Use the links provided by your teacher to fill in the blanks with the appropriate scientist. Then, draw a line from the scientific event to the appropriate place on the timeline.

In 1665, the Great Plague was an epidemic that killed almost 25% of Londoners

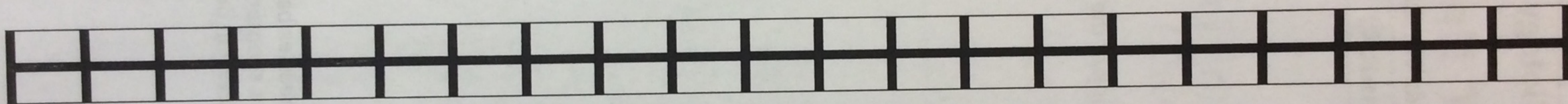
In 1687, Newton described how inertia and gravity work together to keep planets in orbit.

In 1838, the first Cherokees were forced westward beginning the Trail of Tears.

In 1676, Bacon's Rebellion in Jamestown.

In 1776, Declaration of Independence was signed.

1861-1865 - American Civil War



Hooke identified cells in 1665 using his compound light microscope.

Redi showed, in 1668, through his fly experiment that spontaneous generation does not occur from decaying meat.

In 1838, Schleiden concluded that all plants are made of cells. This idea is a basis of the **cell theory**.

Pasteur demonstrated that bacteria arise only from existing bacteria in 1863. This provided further proof that spontaneous generation does not occur.

- Scientist Names**
- Hooke
  - Leeuwenhoek
  - Pasteur
  - Redi
  - Schleiden
  - Schwann
  - Virchow

Leeuwenhoek, the father of microbiology, in 1677, scraped his teeth and looked at pond water calling the unicellular organisms animalcules.

In 1839, Schwann concluded that all animals are made of cells. This idea is a basis of the **cell theory**.

In 1855, Virchow concluded that all cells come from cells. This idea is a basis of the **cell theory**.



# Cell Theory

Premise	Scientist(s)	Picture
All living things are made of cells	Schleiden (plants) Schwann (animals)	
Cells are the most basic unit of life	Hooke Van Leeuwenhoek	
Cells are produced from other cells.	Mirchow (Redi & Pasteur)	