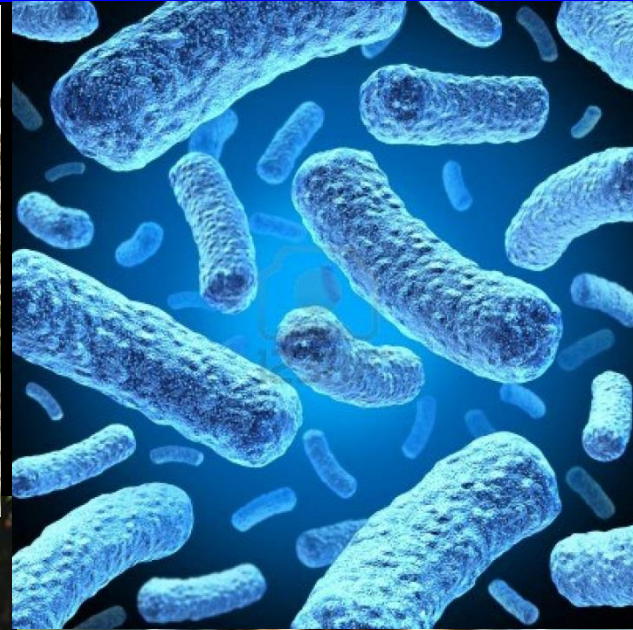


Scientific Method and Life Unit



Life Science - The study of living things.



Scientific Method

1. State the Problem – Ask a question you need answered.



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2. Gather Information – Research the Internet, books, encyclopedias



Scientific Method

- 1. State the Problem – Ask a question you need answered.**
- 2. Gather Information – Research the Internet, books, encyclopedias**
- 3. Form a Hypothesis – A prediction that can be tested.**

4. Perform Experiment

Variable - what is tested
Control - what stays the same



4. Perform Experiment

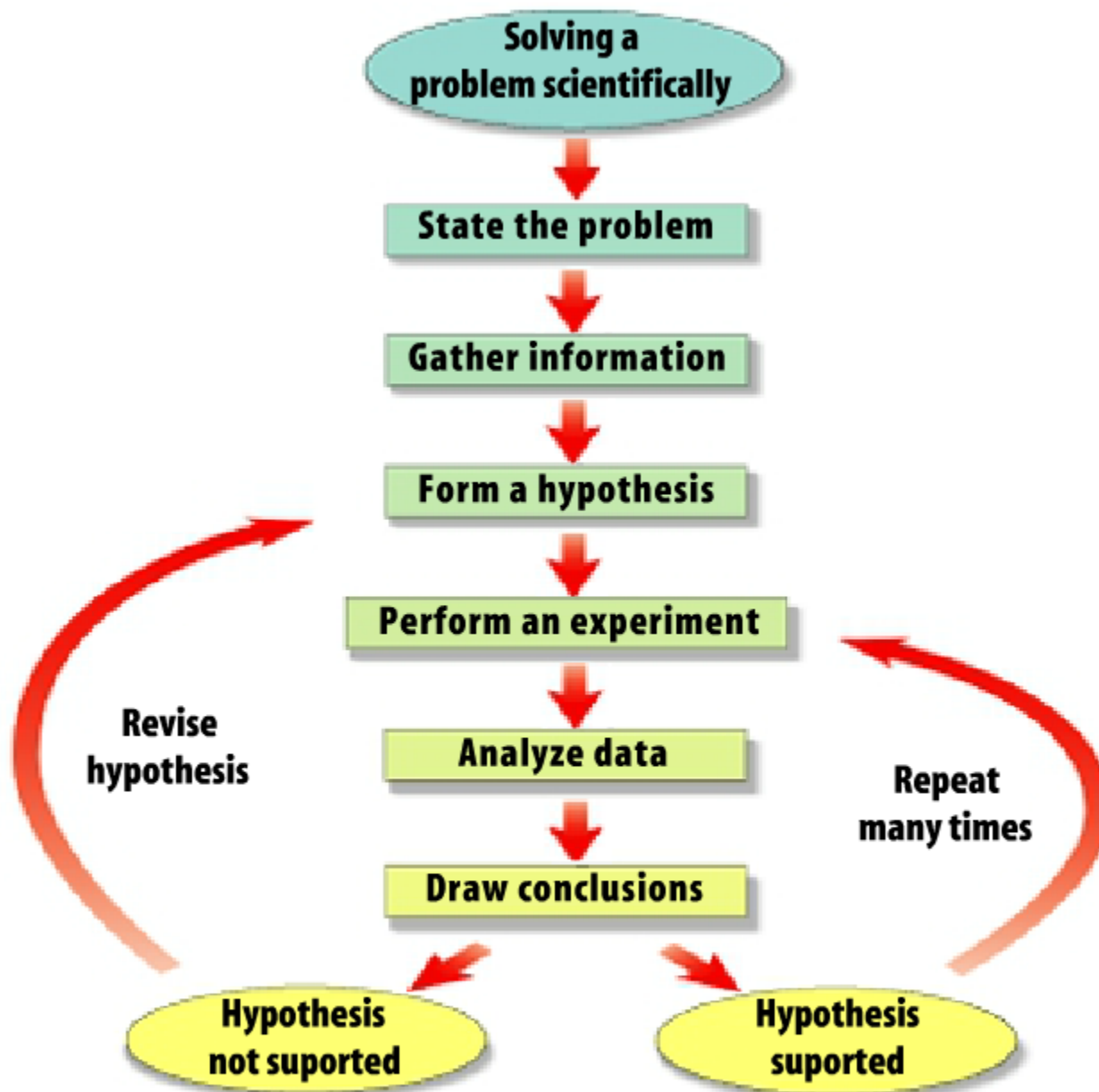
Variable - what is tested

Control - what stays the same

5. Analyze Data – Watch what happens in the experiment.

6. Draw Conclusions – Accept or reject hypothesis.

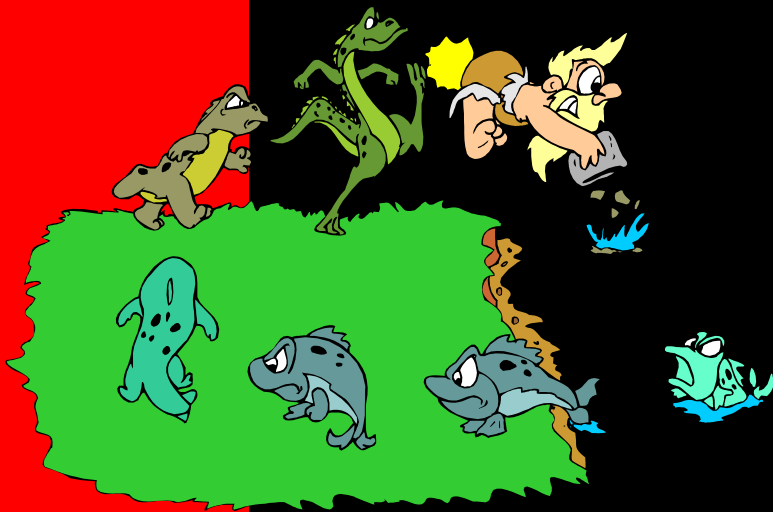
7. Communicate Results



Law – Statements about nature based on experiments that is true all the time.


Theory – Statements about nature that is based on experiments which may or may not be true.

Where does Life Come From?

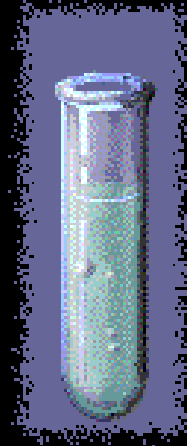
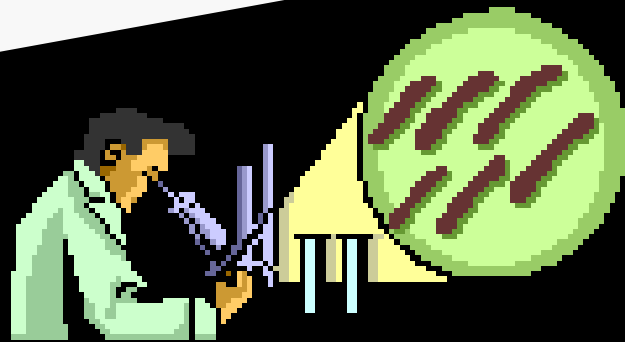


or



The idea that living things come from nonliving things is called **spontaneous generation**. 

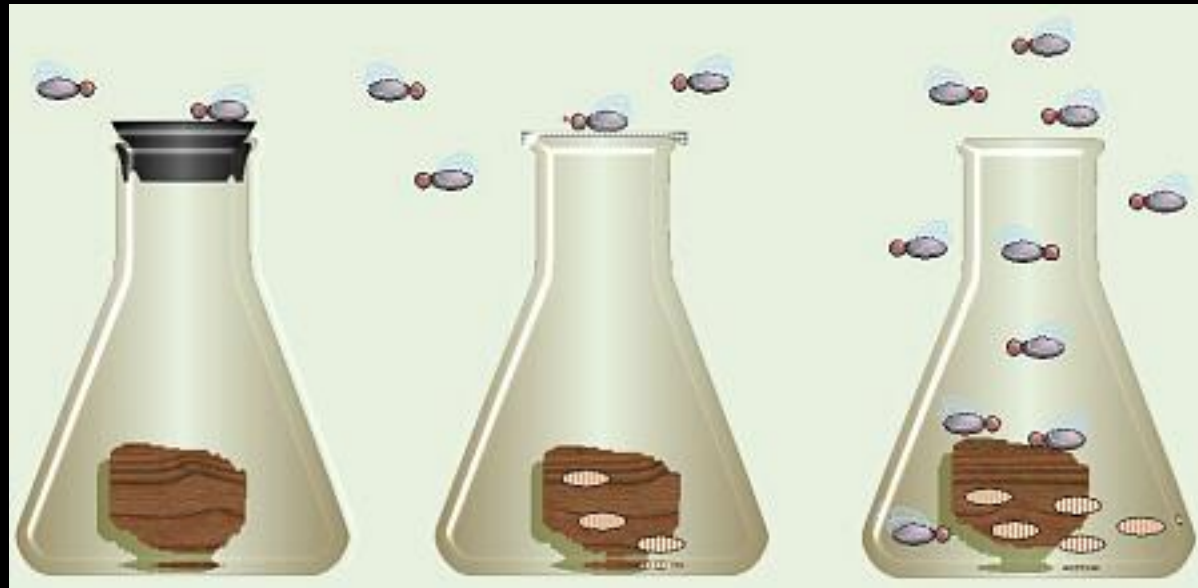




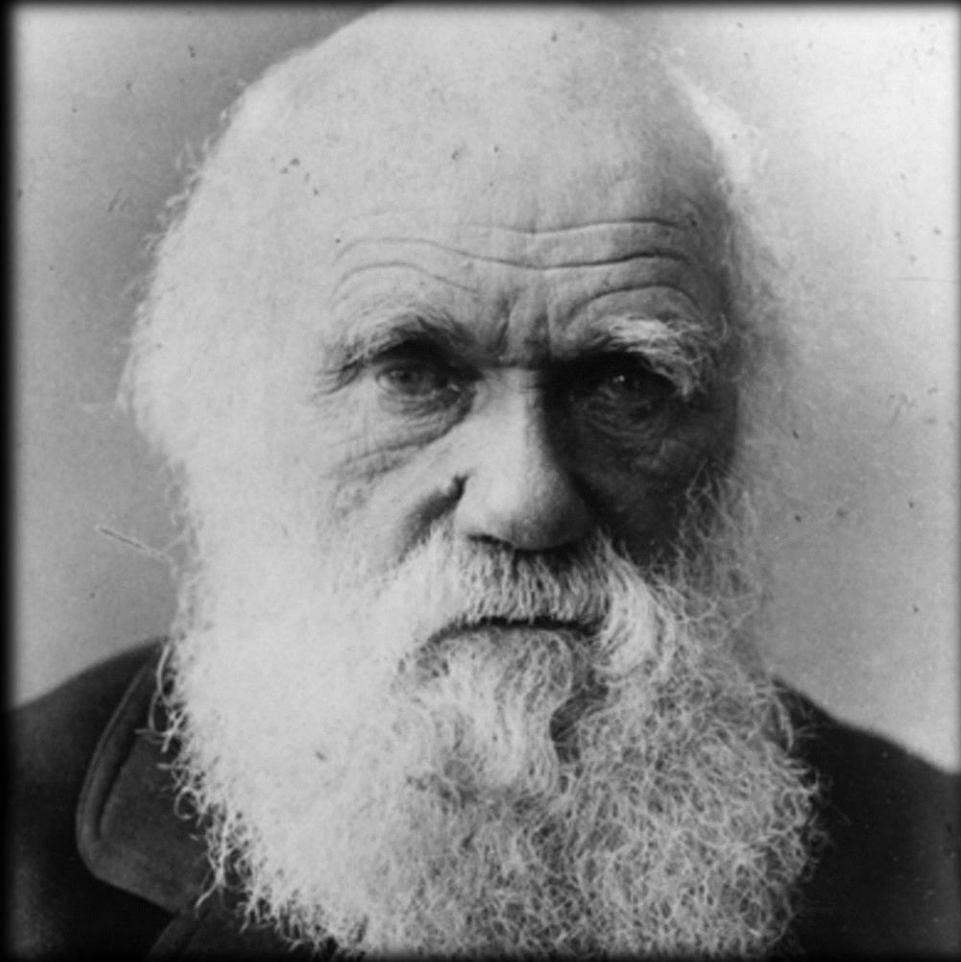
Louis Pasteur proved that living things can only come from other living things. This is called **biogenesis**.

Redi's Experiment


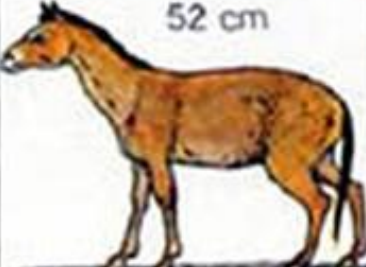
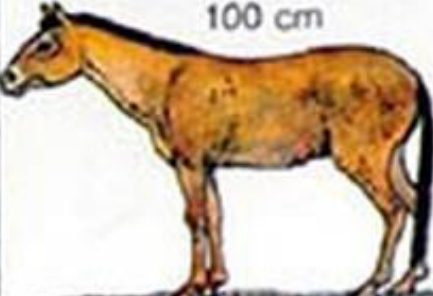
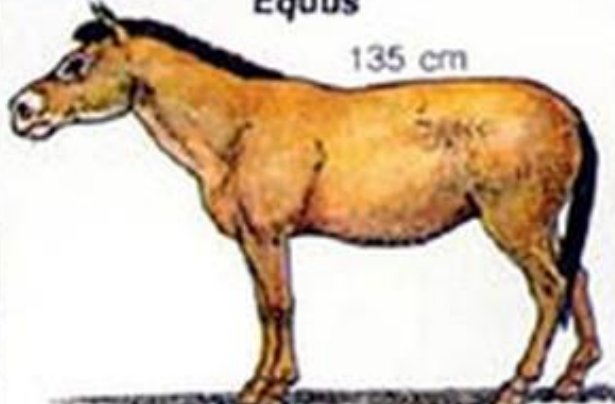



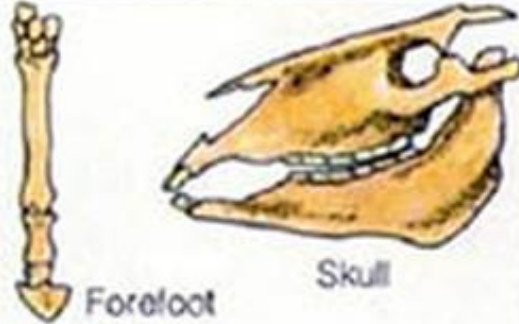
1. Put meat in jars and covered one.
2. Maggots appeared only on the uncovered meat.



Charles Darwin - Came up with the theory that evolution happens as a result of natural selection.



Evolution

50 million years ago	35 million years ago	26 million years ago	3 million years ago
<p><i>Eohippus</i></p> <p>38 cm</p> 	<p><i>Mesohippus</i></p> <p>52 cm</p> 	<p><i>Merychippus</i></p> <p>100 cm</p> 	<p><i>Equus</i></p> <p>135 cm</p> 
 <p>Forefoot</p> <p>Skull</p>	 <p>Forefoot</p> <p>Skull</p>	 <p>Forefoot</p> <p>Skull</p>	 <p>Forefoot</p> <p>Skull</p>

Liquids

Liters, Milliliters



Graduated Cylinder

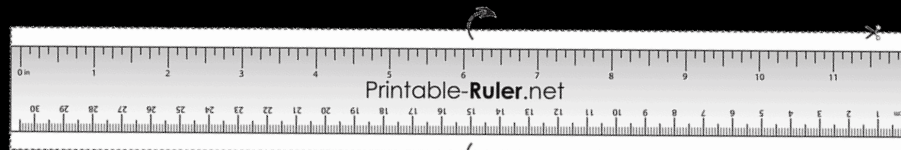
Mass

Grams, Kilograms



Length

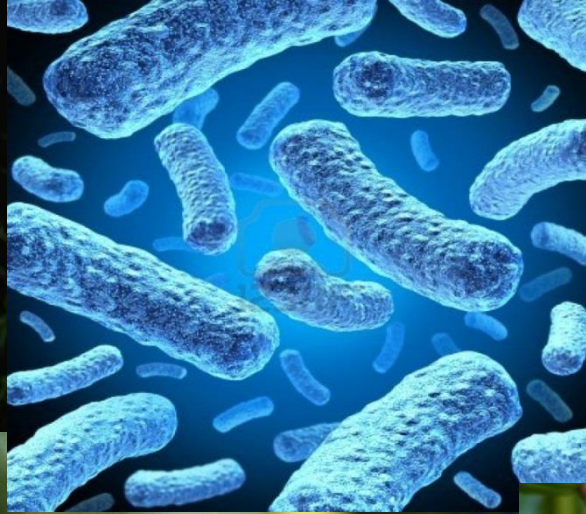
Kilometer, Meter, Centimeter



Metric System

Common SI Measurements

Measurement	Unit	Symbol	Equal to
Length	1 millimeter	mm	0.001 (1/1,000) m
	1 centimeter	cm	0.01 (1/100) m
	1 meter	m	100 cm
	1 kilometer	km	1,000 m
Volume	1 milliliter	mL	0.001 (1/1,000) L
	1 liter	L	1,000 mL
Mass	1 gram	g	1,000 mg
	1 kilogram	kg	1,000 g
	1 tonne	t	1,000 kg 5 1 metric ton



Organism - A living thing.
They adapt to their environment,
reproduce, and have a life span.

5 Characteristics of Living Things

1. [Organized 3:46](#)
2. [Respond 1:20](#)
3. [Energy 2:02](#)

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2. Respond - Must adapt to things around them.

3. Use energy - either by eating something or making its own food

4. Grow and Develop - Have a life span and will die.

5. Reproduce – Can only reproduce their own species.

