Science

Science: approach to understanding the natural world that is based on data

data

- 1. 수치화 되는 것들, 정량화 되는 것들 => 이상적인 data
- 2. 규격화 될 수 없는 것들(묘사, 그림 등등) => 충분히 가치 있는 것

Hypothesis(가설)? Theories(학설)?

Hypothesis -> investigation, experiment -> abundant evidence(data) -> theory

Good theory is the one with broad explanatory power.

What is Life??

life

- 1. Order
- 2. Regulation
- 3. Growth and development
- 4. Energy proceesing
- 5. Response to the environment
- 6. Reproduction
- 7. Evolution

Species

- live in the same place and time
- have the potential to interbreed with one another in nature to produce healthy offspring

Taxanomy(분류학)

The three domain of life

- Bacteria(세균)
- Archaea(고세균)
- Eukarya(진핵생물)

Bacteria and Archaea have prokaryotic cells Eukarya have eukaryotic cells

Kingdoms consist of Domain eukarya

- Kingdom Plantae
- Kingdom Fungi

- Kingdom Animalia
- Protists (Not fit into any of ther three kingdoms)

Evolution

Evolution

- the fundamental principle of life
- change no matter better of worse
- species that are very similar share a more recent common ancestor

Natural selection

- Descent with modification
- Mechanism for descent with modification

Biological system

- 1. Molecules and Atoms
- 2. Organells(subcellular organelles)
- 3. Cells
- 4. Tissues
 - cells with a same specific function
- 5. Organs and Organ System
 - group of Tissues with similar functions.
- 6. Organisms(단일 개체)
- 7. Populations(개체군)
 - same species, locality
- 8. Communites(군집)
 - group of populations that interact each other
- 9. Ecosystem(생태계)
 - communites + environment(can be not-life thing)
- 10. Biosphere(생물권)