

WHAT IS BIOLOGY

- Biology (Greek or Latin origin)
- Bios = life
- Logos = study of
- Therefore Biology is the “study of life”



WHAT DOES IT MEAN TO BE LIVING?

- Living organisms:
 - Made up of cells
 - Reproduce
 - Have a universal genetic code
 - Grow and develop
 - Obtain and use materials and energy
 - Respond to environment
 - Maintain a stable internal environment
 - Change over time





WORKSHEET

- Using your textbook fill out the characteristics of living things worksheet

WHY STUDY BIOLOGY?

- Two important reasons for studying Biology:
 - Biology is relevant to our everyday experience
 - Medical advances
 - Addressing needs of growing human population
 - Challenges of decreasing rate of biodiversity
 - Biotechnology advances



WHY STUDY BIOLOGY?

- Biology can be controversial

Examples:

- Dealing with endangered species?
- Use of human fetal tissue in biomedical research?
- Genetically Modified Foods



EXAMPLE BRANCHES OF BIOLOGY

1. Zoology- the study of animals
2. Botany- the study of plants
3. Anatomy- study of an organism's parts
4. Physiology- study of how organism's parts work
5. Entomology- study of insects
6. Genetics- study of heredity and genetic material (DNA/RNA, chromosomes, genes)
7. Ecology- study of all life in a particular area, the relationships b/t those life forms and the environment
8. Cell Biology- the study of cells

