

Introduction to A & P

-“Key Terminology”

1.) **Biology**- study of living things

a.) botany: study of plants

b.) zoology: study of animals

*Both branches encompasses the life processes, classification and development of living things

2.) **Morphology**- the study of forms and structures of plants and animals

a.) anatomy: a subdivision of morphology

- Concerned with the structure and parts of the cell and how they are related to the whole organism
- The study of structure of an organism
- Macroanatomy: involves structures which can be seen with the naked eye
- Microanatomy: these structures are seen with a microscope

b.) physiology: involves the study of how an organism functions

- Physical and chemical mechanism
- What happens?
- Why it happens?
- How it happens?
- Physiologist

c.) psychology: the study of the mind, human emotions, and behavior

- Psychologist

d.) biochemistry: the study of atoms, ions, matter and how one form of matter reacts in living things

- Biochemist

e.) pathology: study of body dysfunction

- Dysfunction- abnormalities
- Pathologist

f.) genetics: explains how various physical traits are passed from one generation to the next

- DNA/RNA
- Geneticist

-“Planes of the body”

- Goes from simple to complex

1.) **Level #1: Chemical level**

- Common to all living things
- Plants and animals
- Atoms; ions; matter; chemical reactions

2.) **Level #2: Cellular level**

- Cell- the basic unit of structure and function of living things
- Cell differentiation- during early embryonic development the cell begins to change its appearance. Cells with common origin become specialized in order to perform specific tasks. Cells also develop structural characteristics which are unique to that group of cells