

# **Seven Themes Unifying the Science of Biology**

## **I. Cellular Organization**

- a. All living things are composed of one or more cells.

## **II. Reproduction**

- a. All living things have the ability to reproduce.

## **III. Metabolism**

- a. Living organisms perform many different chemical reactions in order to run the processes of life.
- b. Metabolism is the sum of all of the chemical reactions necessary to obtain and use energy.

## **IV. Homeostasis**

- a. All living organisms must maintain a stable internal environment in order to function properly.

## **V. Heredity**

- a. All living things are able to pass on their genes.

## **VI. Evolution**

- a. Changes in species over time
- b. Creates a great diversity in life

## **VII. Interdependence**

- a. Organisms interact and depend on each other