

04/09/2008

OCN 201 Biology Lecture 2: **Evolution and Classification of Life**

I. Classification of Life

A. Three Domains of Life

B. Two fundamentally different types of cells:

C. The Serial Endosymbiosis Theory

D. The Five Kingdoms

III. One of the most primitive animal types:

A. Evolved from colonial organization of:

IV. The Basis of Evolution by Natural Selection

- 1.
- 2.
- 3.
- 4.

V. How long ago did life arise?

- A. Evidence from mineral deposits:
- B. Evidence from fossil stromatolites:
- C. Evolutionary Time Line

Organism (Age in millions of years)

Prokaryotes (>3500)

Photosynthetic prokaryotes (2500)

Eukaryotes (1000)

Invertebrates (700)

Vertebrates (500)

Land Plants (430)

Mammals (190)

Apes (7)

Humans (2.5)

You (0.00002)