**Living Environment Course Pacing 2015\_2016**

**1. The Unity and Diversity of Life**

A) Safety in the Science Laboratory (In Lab)

B) The Scientific Method (and Graphing)

C) Instruments of Science (Microscopes, Measurements, in lab)

D) Cell Theory

E) Cellular Organelles (Organization)

F) Cell Transport (Osmosis, Diffusion, Passive Transport, Active Transport)

G) Life Functions (MR. STRANGER)

H) Classification/Taxonomy

**2. Chemistry of Life**

A) Organic vs. Inorganic Molecules

B) Carbohydrates

C) Proteins

D) Lipids

E) Nucleic Acids

F) Enzymes

**3. Nutrition**

A) Photosynthesis

B) Respiration

C) Leaf Structure (Stomata, Guard Cells)

D) Heterotrophic vs. Autotrophic

E) Human Digestive System

F) Organ of Excretory System

**4. Transport**

A) Cell Transport

B) Transport: Simple Organisms

C) Transport: Complex Organisms

D) The Human Transport System (Circulatory)

E) Immunity and Defense

**5. Gas Exchange/ Excretion/ Locomotion**

A) Criteria for Gas Exchange: Simple vs. Complex Organisms

B) Organs of Respiration

C) Review of the Excretory System

D) Organs of Locomotion

**6. Regulation**

A) Chemical vs. Nervous Regulation

B) Endocrine System

C) Nervous System

D) Regulation in Plants

**7. Reproduction**

A) Asexual Reproduction (Mitosis)

B) Sexual Reproduction (Meiosis)

C) Reproduction in Plants

**8. Genetics**

A) Mendelian Genetics

B) Gene-Chromosome Theory

C) DNA

D) RNA

E) Protein Synthesis

F) Mutations

G) Genetic Disorders

H) Modern Genetic Theory

**9. Evolution**

A) Evidence of Evolution

B) Theories of Evolution

C) Darwin’s Theory

D) Heterotroph Hypothesis

E) Mutations in Evolution

F) Modern Evolutionary Theory

**10. Ecology**

A) Hierarchy of Organization

B) Abiotic vs. Biotic Factors

C) Habitat vs Niche

D) Human Impact on Ecology: Global Warming, Acid Rain, Ozone Depletion