**IV. Science**

1. Earth Science (30%)
   1. Understands the structure of the Earth system (e.g., structure and properties of the solid Earth, the hydrosphere, the atmosphere)
   2. Understands processes of the Earth system (e.g., earth processes of the solid Earth, the hydrosphere, the atmosphere)
   3. Understands Earth history (e.g., origin of Earth, paleontology, the rock record)
   4. Understands Earth and the universe (e.g., stars and galaxies; the solar system and planets; Earth, Sun, and Moon relationships)
   5. Understands Earth patterns, cycles, and change
2. Life Science (30%)
   1. Understands the structure and function of living systems (e.g., living characteristics and cells, tissues and organs, life processes)
   2. Understands reproduction and heredity (e.g., growth and development, patterns of inheritance of traits, molecular basis of heredity)
   3. Understands change over time in living things (e.g., life cycles, mutations, adaptations and natural selection)
   4. Understands regulation and behavior (e.g., life cycles, responses to external stimuli, controlling the internal environment)
   5. Understands unity and diversity of life, adaptation, and classification
   6. Understands the interdependence of organisms (e.g., ecosystems, populations, communities)
3. Physical Science (30%)
   1. Understands the physical and chemical properties and structure of matter (e.g., changes of states, mixtures and solutions, atoms and elements)
   2. Understands forces and motions (e.g., types of motion, laws of motion, forces and equilibrium)
   3. Understands energy (e.g., forms of energy, transfer and conservation of energy, simple machines)
   4. Understands interactions of energy and matter (e.g., electricity, magnetism, sound)
4. Science in Personal and Social Perspectives (5%)
   1. Knows about personal health (e.g., nutrition, communicable diseases, substance abuse
   2. Understands science as a human endeavor, process, and career
5. Science as Inquiry and Science Processes (5%)
   1. Understands science as inquiry (e.g., questioning, gathering data, drawing reasonable conclusions)
   2. Understands how to use resource and research material in science
   3. Understands the unifying processes of science (e.g., systems, order, and organization)