

**Content Standards & Benchmarks: Science
Grades 9-12
West Des Moines Community School District**

Standard #1

Students will understand major concepts in earth science and how these apply to society.

- 12.1.a analyze a weather map.
- 12.1.b understand the unique qualities of the earth that make life possible.
- 12.1.c identify natural factors that affect the earth's surface.

Standard #2

Students will understand major concepts in life science and how these apply to society.

- 12.2.d understand that populations of organisms change over time.
- 12.2.e identify factors affecting transmission of disease.
- 12.2.f understand that DNA is the common thread of living organisms.

Standard #3

Students will understand major concepts in physical science and how these apply to society.

- 12.3.g understand the structure of the atom.
- 12.3.h understand forces acting on macroscopic and microscopic objects.
- 12.3.i identify forms of energy and energy transfer.
- 12.3.j understand the properties of matter through physical and chemical changes.

Standard #4

Students will use scientific inquiry process (e.g. questioning, observing, predicting, experimenting, controlling variables, concluding) to understand the natural world.

- 12.4.k construct or develop a graph from experimental data.
- 12.4.l determine relationship between variables by interpreting graph/chart/table (visual representation of data).
- 12.4.m be able to make and interpret accurate and precise measurements

Standard #5 Students will recognize the inter-relationships among the earth, life, and physical sciences and their effect on the environment.

- 12.5.n explain the effect of population growth on the earth's resources.
- 12.5.o understand the cyclical nature of the earth's resources.

Standard #6

Students will know the needs, functions, and systems of the human body, as it develops into an adult.

- 12.6.p understand the basic functions of the human body.
- 12.6.q identify key components of a healthy lifestyle.