Washington State Essential Learnings
~ Science ~

Systems
The student understands and uses scientific concepts and principles to understand systems.

	Physical	Earth	Life
1.1 Properties of Systems Use properties to identify, describe, and categorize substances, materials, and objects, and use characteristics to categorize living things.	1. Properties of Substances 2. Motion of Objects 3. Wave Behavior 4. Energy Sources and Kinds	5. Nature and Properties of Earth Materials	6. Characteristics of Living Things
1.2 Structure of Systems Recognize the components, structure, and organization of systems and the interconnections within and among them.	1. Systems Approach 2. Energy Transfer and Transformation 3. Structure of Matter	4. Components and Patterns of earth Systems 5. Components of the Solar System and Beyond	6. Structure and Organization of Living Systems 7. Molecular Basis of Heredity 8. Human biology
1.3 Changes in Systems Understand how interactions within and among systems cause changes in matter and energy.	1. Nature of Forces 2. Forces to Explain Motion 3. Physical and Chemical Changes	4. Processes and Interactions in Earth Systems 5. History and Evolution of Earth 6. Hydrosphere & Atmosphere 7. Interactions in the Solar System and Beyond	8. Life Processes and the Flow of Matter and Energy 9. Biological Evolution 10. Interdependence of life

Inquiry
The student knows and applies the skills, processes, and nature of scientific inquiry.

2.1 Investigating Systems: Develop the knowledge and skills necessary to do scientific inquiry.	1. Questioning 2. Planning and Conducting Investigations 3. Explaining 4. Modeling 5. Communicating
2.2 Nature of Science: Understand the nature of scientific inquiry.	1. Intellectual honesty 2. Limitations of science and technology 3. Evaluating Inconsistencies 4. Evaluating Methods of Investigation 5. Evolution of Scientific Ideas

Design
The student knows and applies the design process to develop solutions to human problems in societal contexts.

3.1 Designing Solutions: Apply design processes to develop solutions to human problems or meet challenges using the knowledge and skills of science and technology.	1. Identifying Problems 2. Designing and Testing Solutions 3. Evaluating Potential Solutions
3.2 Science, Technology, and Society: Know that science and technology are human endeavors, interrelated to each other, to society, and to the workplace.	1. All Peoples Contribute to Science and Technology 2. Relationship of Science and Technology 3. Careers and Occupations using Science, Mathematics, and Technology 4. Environmental and Resource Issues

For the complete standards, go to http://www.k12.wa.us/curriculumInstruct/ealrs/default.asp?iSubjectID=6