

Main Criteria: Cogent Education's Interactive Cases

Secondary Criteria: Nebraska Academic Standards

Subject: Science

Grades: 9, 10, 11, 12



Title	Common Among States	Nebraska Academic Standards	Nebraska Academic Standards	Nebraska Academic Standards	Nebraska Academic Standards
Action Potential -	NE	<p>NE.SC 1: - INQUIRY, THE NATURE OF SCIENCE, AND TECHNOLOGY: Students will combine scientific processes and knowledge with scientific reasoning and critical thinking to ask questions about phenomena and propose explanations based on gathered evidence.</p> <p>1.1. - Abilities to do Scientific Inquiry</p> <p>12.1.1. - Students will design and conduct investigations that lead to the use of logic and evidence in the formulation of scientific explanations and models.</p> <p>- Scientific Questioning</p> <p>12.1.1.a. - Formulate a testable hypothesis supported by prior knowledge to guide an investigation</p> <p>12.1.1.b. - Design and conduct logical and sequential scientific investigations with repeated trials and apply findings to new investigations</p> <p>12.1.1.f. - Represent and review collected data in a systematic, accurate, and objective manner</p> <p>12.1.1.g. - Analyze and interpret data, synthesize ideas, formulate and evaluate models, and clarify concepts and explanations</p> <p>12.1.1.h. - Use results to verify or refute a hypothesis</p> <p>12.1.1.i. - Propose and/or evaluate possible revisions and alternate explanations</p> <p>12.1.1.j. - Share information, procedures, results, conclusions, and defend findings to a scientific community (peers, science fair audience, policy makers)</p> <p>12.1.1.l. - Use appropriate mathematics in all aspects of scientific inquiry</p> <p>1.2. - Nature of Science</p> <p>12.1.2. - Students will apply the nature of scientific knowledge to their own investigations and in the evaluation of scientific explanations.</p> <p>12.1.2.a. - Recognize that scientific explanations must be open to questions, possible modifications, and must be based upon historical and current scientific knowledge</p> <p>NE.SC 3: - LIFE SCIENCE: Students will integrate and communicate the information, concepts, principles, processes, theories, and models of the Life Sciences to make connections with the natural and engineered world.</p> <p>3.1. - Structure and Function of Living Systems</p> <p>12.3.1. - 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Use results to verify or refute a hypothesis</p> <p>12.1.1.i. - Propose and/or evaluate possible revisions and alternate explanations</p> <p>12.1.1.j. - Share information, procedures, results, conclusions, and defend findings to a scientific community (peers, science fair audience, policy makers)</p>	<p>NE.SC 1 - INQUIRY, THE NATURE OF SCIENCE, AND TECHNOLOGY: Students will combine scientific processes and knowledge with scientific reasoning and critical thinking to ask questions about phenomena and propose explanations based on gathered evidence.</p> <p>1.1. - Abilities to do Scientific Inquiry</p> <p>12.1.1. - Students will design and conduct investigations that lead to the use of logic and evidence in the formulation of scientific explanations and models.</p> <p>- Scientific Questioning</p> <p>12.1.1.a. - Formulate a testable hypothesis supported by prior knowledge to guide an investigation</p> <p>12.1.1.b. - Design and conduct logical and sequential scientific investigations with repeated trials and apply findings to new investigations</p> <p>12.1.1.f. - 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	<p>12.1.1.1. - Use appropriate mathematics in all aspects of scientific inquiry</p> <p>1.2. - Nature of Science</p> <p>12.1.2. - Students will apply the nature of scientific knowledge to their own investigations and in the evaluation of scientific explanations.</p> <p>12.1.2.a. - Recognize that scientific explanations must be open to questions, possible modifications, and must be based upon historical and current scientific knowledge</p> <p>NE.SC 3: - LIFE SCIENCE: Students will integrate and communicate the information, concepts, principles, processes, theories, and models of the Life Sciences to make connections with the natural and engineered world.</p> <p>3.1. - Structure and Function of Living Systems</p> <p>12.3.1. - Students will investigate and describe the chemical basis of the growth, development, and maintenance of cells.</p> <p>12.3.1.d. - Describe how an organism senses changes in its internal or external environment and responds to ensure survival</p>	<p>12.1.1.1. - Use appropriate mathematics in all aspects of scientific inquiry</p> <p>1.2. - Nature of Science</p> <p>12.1.2. - Students will apply the nature of scientific knowledge to their own investigations and in the evaluation of scientific explanations.</p> <p>12.1.2.a. - Recognize that scientific explanations must be open to questions, possible modifications, and must be based upon historical and current scientific knowledge</p> <p>NE.SC 3: - LIFE SCIENCE: Students will integrate and communicate the information, concepts, principles, processes, theories, and models of the Life Sciences to make connections with the natural and engineered world.</p> <p>3.1. - Structure and Function of Living Systems</p> <p>12.3.1. - Students will investigate and describe the chemical basis of the growth, development, and maintenance of cells.</p> <p>12.3.1.d. - Describe how an organism senses changes in its internal or external environment and responds to ensure survival</p>	<p>12.1.1.1. - Use appropriate mathematics in all aspects of scientific inquiry</p> <p>1.2. - Nature of Science</p> <p>12.1.2. - Students will apply the nature of scientific knowledge to their own investigations and in the evaluation of scientific explanations.</p> <p>12.1.2.a. - Recognize that scientific explanations must be open to questions, possible modifications, and must be based upon historical and current scientific knowledge</p> <p>NE.SC 3: - LIFE SCIENCE: Students will integrate and communicate the information, concepts, principles, processes, theories, and models of the Life Sciences to make connections with the natural and engineered world.</p> <p>3.1. - Structure and Function of Living Systems</p> <p>12.3.1. - Students will investigate and describe the chemical basis of the growth, development, and maintenance of cells.</p> <p>12.3.1.d. - Describe how an organism senses changes in its internal or external environment and responds to ensure survival</p>	<p>12.1.1.1. - Use appropriate mathematics in all aspects of scientific inquiry</p> <p>1.2. - Nature of Science</p> <p>12.1.2. - Students will apply the nature of scientific knowledge to their own investigations and in the evaluation of scientific explanations.</p> <p>12.1.2.a. - Recognize that scientific explanations must be open to questions, possible modifications, and must be based upon historical and current scientific knowledge</p> <p>NE.SC 3: - LIFE SCIENCE: Students will integrate and communicate the information, concepts, principles, processes, theories, and models of the Life Sciences to make connections with the natural and engineered world.</p> <p>3.1. - Structure and Function of Living Systems</p> <p>12.3.1. - Students will investigate and describe the chemical basis of the growth, development, and maintenance of cells.</p> <p>12.3.1.d. - Describe how an organism senses changes in its internal or external environment and responds to ensure survival</p>
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