

Grade 3 Science Proficiency Scale T1 - Physical Science

	Novice “1”	Approaching “2”	Proficient “3”	Advanced “4”
Communication	Practices asking questions to help check for understanding.	Asks questions to check for understanding in relation to physical science concepts.	Asks questions to check for understanding; clearly explains strategies, thinking and conclusions in relation to physical science concepts.	
Critical Thinking	Participates in whole group reading information and experiments to observe the effects of balanced and unbalanced motion and works with a team to design a bridge; <u>and</u> observes the cause and effect relationship of magnetic interactions.	Gathers relevant information to analyze the effects of balanced and unbalanced motion; and makes observations and collect evidence attempting to predict future motion of an object; and uses systems thinking to design a bridge; <u>and</u> draws conclusions about the cause and effect relationship of magnetic interactions.	Gathers relevant information to analyze the effects of balanced and unbalanced motion and makes observations and collects evidence to predict future motion of an object and uses systems thinking to design a bridge, reflecting on the process and understanding that a problem can be solved in many different ways; <u>and</u> draws conclusions about the cause and effect relationship of magnetic interactions and uses scientific ideas about magnets to explain a simple solution for a design problem.	Gathers relevant information to analyze the effects of balanced and unbalanced motion; makes observations and collects evidence to predict future motion of an object; and uses systems thinking to design a bridge unique and creative , reflecting on the process and understanding that a problem can be solved in many different ways, and shows understanding of the impact of decisions about materials and process used to create the product ; <u>and</u> draws conclusions about the cause and effect relationship of magnetic interactions and uses scientific ideas about magnets to explain a simple solution for a design problem, and shows understanding of the impact of decisions about materials and process used to create the solution.
<p>North Dakota State Standards</p> <ul style="list-style-type: none"> • 3-PS2-1: Plan and conduct an investigation to prove the effects of balanced and unbalanced forces on the motion of an object. • 3-PS2-2: Make observations and metric measurements of an object’s motion to prove that a pattern can be used to predict future motion. • 3-PS2-3: Ask questions to determine cause and effect relationships of static electricity or magnetic interactions between two objects not in contact with each other. • 3-PS2-4: Define a simple design problem that can be solved by applying scientific ideas about magnets. 				

Grade 3 Proficiency Scale T2 - Earth Science

	Novice “1”	Approaching “2”	Proficient “3”	Advanced “4”
Communication	Practices asking questions to help check for understanding.	Asks questions to check for understanding in relation to earth science concepts.	Asks questions to check for understanding; clearly explains strategies, thinking and conclusions in relation to earth science concepts.	
Critical Thinking	Works with a team to design a renewable energy or weather-related hazard prevention product or machine; <u>and</u> participates in whole group reading information about the climates in different regions of the world, listening to how scientists use the patterns to make predictions about weather and natural hazards.	Gathers relevant information and uses systems thinking to design a renewable energy or weather-related hazard prevention product or machine; <u>and</u> gathers relevant information about the climates in different regions of the world and describe the unique features of each, explaining how scientists use the patterns to make predictions about weather and natural hazards.	Gathers relevant information and uses systems thinking to design a renewable energy or weather-related hazard prevention product or machine; reflecting on the process and understanding that a problem can be solved in many different ways; <u>and</u> gathers relevant information about the climates in different regions of the world and draw conclusions to describe the unique features of each and how scientists use the patterns to make predictions about weather and natural hazards.	Gathers relevant information and uses systems thinking to design a unique and creative renewable energy or weather-related hazard prevention product or machine; reflecting on the process and understanding that a problem can be solved in many different ways, and show understanding of the impact of decisions about materials and process used to create the product or machine; <u>and</u> gathers relevant information about the climates in different regions of the world and draws conclusions to describe the unique features of each, and how scientists use the patterns to make predictions about weather and natural hazards.
<p>North Dakota Science Standards</p> <ul style="list-style-type: none"> • 3-ESS2-1: Represent data in tables and graphical displays to describe and predict typical weather conditions expected during a particular season. • 3-ESS2-2: Obtain and combine information to describe climates in different regions of the world. • 3-ESS3-1: Evaluate the feasibility of a design solution that reduces the impacts of a weather-related hazard. 				

Grade 3 Science Proficiency Scale T3 – Life Science

	Novice “1”	Approaching “2”	Proficient “3”	Advanced “4”
Communication	Practices asking questions to check for understanding related to life science concepts	Asks questions to check for understanding in relation to life science concepts.	Asks questions to check for understanding; clearly explains strategies, thinking and conclusions in relation to life science concepts.	In addition to score 3, the student demonstrated in-depth inferences and applications that go beyond what was taught.
Critical Thinking	Participates in whole group reading information about the traits and behaviors (including the life cycle) that help organisms survive and observes organized information about fossils; <u>and</u> works with a team to study and review a solution to solve a problem caused by an environmental change.	Describe fossils and the environments in which they were found. 3-LS4-1 Describe traits inherited from parents <u>and</u> similarities and differences in traits among siblings or between parents and offspring. 3-LS3-1 Describe characteristic habitats for a variety of organisms. 3-LS4-3	Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago. 3-LS4-1 Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents <u>and</u> that variation of these traits exists in a group of similar organisms. 3-LS3-1 Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all. 3-LS4-3	In addition to score 3, the student demonstrated in-depth inferences and applications that go beyond what was taught.
<p>North Dakota Science Standards</p> <ul style="list-style-type: none"> • 3-LS1-1: Develop models to describe that organisms have unique and diverse life cycles but all experience birth, growth, reproduction, and death. • 3-LS2-1: Construct an argument that some animals form groups that help members survive. • 3-LS3-1: Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms. • 3-LS3-2: Use evidence to support the explanation that the environment can influence the expression of traits. • 3-LS4-1: Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago. • 3-LS4-2: Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing. • 3-LS4-3: Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all. 				