NSCAS-AA Science Achievement Level Descriptors
Grade 5 Physical Science

Developing	On Track	Advanced
Developing learners do not yet demonstrate proficiency in the knowledge and skills necessary at this grade level, as specified in the assessed Nebraska College and Career Ready Standards. These results provide evidence that the student may need additional support for academic success at the next grade level.	On Track learners demonstrate proficiency in the knowledge and skills necessary at this grade level, as specified in the assessed Nebraska College and Career Ready Standards. These results provide evidence that the student will likely be ready for academic success at the next grade level.	Advanced learners demonstrate high levels of proficiency in the knowledge and skills necessary at this grade level, as specified in the assessed Nebraska College and Career Ready Standards. These results provide evidence that the student will likely be ready for academic success at the next grade level.
Students at this level	**Students at this level**	**Students at this level**
Recognize the difference between part of an object and a whole object, or identify when an object is made of smaller parts.	Identify that matter is made of tiny particles too small to be seen without magnification.	Develop a model or participate in an investigation to explain that matter is made of particles too small to be seen without magnification.
Recognize that a scale is used to measure weight. Identify that a substance (e.g., water) has the same weight as a solid and a liquid.	Use data and other information to identify that a substance has the same weight when heated or cooled and that weight of an object or substance as a whole is equal to the weight of its individual parts.	Participate in an investigation or make an observation to explain conservation of matter and that heating, cooling, and mixing substances does not change the weight of a substance.
Identify physical properties of materials (color, shape, size, weight).	Use physical properties to identify or categorize materials (color, shape, size, texture, weight).	Use an observation and/or a given model to identify materials based on physical properties including color, shape, size, texture, weight, and temperature.
Recognize that combining two substances can produce a mixture.	Use given information to compare the observable properties of substances before and after they are mixed to provide evidence whether or not a new substance was formed.	Participate in an investigation to determine and explain whether or not a new substance was formed as a result of mixing two substances.

NSCAS-AA Science Achievement Level Descriptors
Grade 5 Life Science

Developing	On Track	Advanced
Developing learners do not yet demonstrate proficiency in the knowledge and skills necessary at this grade level, as specified in the assessed Nebraska College and Career Ready Standards. These results provide evidence that the student may need additional support for academic success at the next grade level.	On Track learners demonstrate proficiency in the knowledge and skills necessary at this grade level, as specified in the assessed Nebraska College and Career Ready Standards. These results provide evidence that the student will likely be ready for academic success at the next grade level.	Advanced learners demonstrate high levels of proficiency in the knowledge and skills necessary at this grade level, as specified in the assessed Nebraska College and Career Ready Standards. These results provide evidence that the student will likely be ready for academic success at the next grade level.
Students at this level	**Students at this level**	**Students at this level**
Recognize that all animals, including humans, must have food for energy to survive.	Identify that all animals, including humans, need energy from food for healing, growing, moving, and staying warm.	Use a given model to explain that all animals, including humans, use food energy for survival including healing, growing, moving, and staying warm.
Identify that plants need air and water to survive (live and grow).	Identify supporting evidence that plants get materials for survival from air and water.	Use evidence to explain that plants get materials they need to survive primarily from air and water.
Use given information to identify that animals depend on other organisms for food, or identify a given organism's source of food.	Use a simple given model (e.g., food chain) to identify the movement of matter among plants and animals.	Use information and/or a given model to explain the movement of matter among plants and animals.

NSCAS-AA Science Achievement Level Descriptors
Grade 5 Earth and Space Sciences

Developing	On Track	Advanced
Developing learners do not yet demonstrate proficiency in the knowledge and skills necessary at this grade level, as specified in the assessed Nebraska College and Career Ready Standards. These results provide evidence that the student may need additional support for academic success at the next grade level.	On Track learners demonstrate proficiency in the knowledge and skills necessary at this grade level, as specified in the assessed Nebraska College and Career Ready Standards. These results provide evidence that the student will likely be ready for academic success at the next grade level.	Advanced learners demonstrate high levels of proficiency in the knowledge and skills necessary at this grade level, as specified in the assessed Nebraska College and Career Ready Standards. These results provide evidence that the student will likely be ready for academic success at the next grade level.
Students at this level	**Students at this level**	**Students at this level**
Identify that a dropped object falls down to the ground due to gravity.	Use information and/or an observation of falling objects to identify that objects are pulled downward toward Earth by gravity.	Use data and an observation to explain that gravity is a force that pulls objects on Earth downward/toward the ground.
Recognize that the Sun is a bright star.	Use a given model to identify that the Sun appears brighter than other stars because it is closer to Earth.	Use a given model to explain the difference in the apparent brightness of the Sun and other stars is due to their distance from Earth.
Recognize a pattern related to the day/night cycle (i.e., the Sun is present in the local sky during the day) or recognize the difference in the amount of sunlight in the summer compared to the winter.	Identify the cyclical pattern of the location of the Sun in the local sky (sunrise, noon, sunset) and/or the difference in the hours of daylight and darkness as the seasons change.	Use data from an observation to investigate and explain cyclical patterns in the Sun as related to the day/noon/night cycle and the relative number of hours of daylight during each season.
Identify a part of a given Earth system (i.e., geosphere [land], biosphere [organisms], hydrosphere [water], atmosphere [air]).	Identify the interaction of two Earth systems that could result in a natural Earth process or given change.	Use a given model of a natural Earth process to identify ways that two Earth systems interact and identify an observable change that can occur as a result of the interaction.
Recognize water and identify a body of water as saltwater or fresh water.	Use information (e.g., graphs, charts) to identify whether there is a larger supply of saltwater or fresh water on Earth and identify the sources of both types of water.	Create or use a graph and/or chart to explain the distribution of water on Earth as mostly saltwater (about 97%) found in oceans and that the fresh water supply (about 3%) is found in lakes, rivers, groundwater, and glaciers.
Recognize that Earth's resources (e.g., water, wood, fossil fuels) are limited and identify a way to personally conserve a natural resource.	Identify multiple ways to reduce, reuse, and recycle natural resources.	Describe an environment in which natural resources are found and explain ways the environment and natural resources can be protected or conserved.
Recognize how a tool or material can be used to solve a real-world problem.	Identify tools and materials that could be used to design a solution to a simple real-world problem when given one or more criteria or constraint.	Design a solution to a problem that meets given criteria, constraints on materials, time, and/or cost limits.