
Coal City Unit District #1
Third Grade
Science Curriculum

SC.3:1 Students will demonstrate understanding of creating an experiment to show the effects of balanced and unbalanced forces on an object. (NGSS 3-PS2-1, NGSS 3-PS2-2)

- SC.3:1-1 Recognize the difference between balanced and unbalanced force.
- SC.3:1-2 Construct and experiment that shows the four basic components in the scientific method (form a hypothesis, conduct an experiment, analyze the data, draw a conclusion) that demonstrates the effects of balanced and unbalanced forces on an object.
- SC.3:1-3 Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.

SC.3:2 Students will determine cause and effect relationships of magnetic interactions. (NGSS 3-PS2-3)

- SC.3:2-1 Recall magnets have poles.
- SC.3:2-2 Recognize magnets attract iron and nickel.
- SC.3:2-3 Show opposite poles attract.
- SC.3:2-4 Explain how magnets can attract even without touching.
- SC.3:2-5 Illustrate how the strength of a magnet's attraction affects the strength of the force.

SC.3:3 Students will design a demonstration that applies principles of magnetic attraction. (NGSS 3-PS2-4)

- SC.3:3-1 Recognize that magnets attract iron and nickel.
- SC.3:3-2 Recall that magnets do not need to touch to apply magnetic force.
- SC.3:3-3 Create a maze to demonstrate how a magnetic force can be applied on two objects without touching.

SC.3:4 Students will infer that animals who live in groups use that structure to increase their chances of survival. (NGSS 3-LS2-1)

- SC.3:4-1 Recognize many animals live in groups.
- SC.3:4-2 Explain how a specific group of animals use their existence to improve their rate of survival.

- SC.3:5 Students will analyze and interpret fossils and infer how the earth's environments have changed. (NGSS 3-LS4-1)**
- SC.3:5-1 Recognize that our earth has changed over millions of years.
 - SC.3:5-2 Define what a fossil is.
 - SC.3:5-3 Identify a fossil.
 - SC.3:5-4 Describe the type of environment in which an organism would have lived based on a fossil.
- SC.3:6 Students will explain how an animal's survival relates to it's ability to adapt to a given environment. (NGSS 3-LS4-3, NGSS 3-LS4-4,)**
- SC.3:6-1 Describe the habitat of an animal.
 - SC.3:6-2 Describe adaptations that help an animal live in their environment.
 - SC.3:6-3 Explain the types of food eaten by animals.
 - SC.3:6-4 Name what an animal needs to survive. (food, water, air, shelter)
 - SC.3:6-5 Identify a cause and effect relationship that results when needs are not met.
- SC.3:7 Students will develop a model that demonstrates a life cycle. (NGSS 3-LS1-1)**
- SC.3:7-1 List common stages in a life cycle: birth, growth, reproduction, and death.
 - SC.3:7-2 Create a representation that shows all four stages in a life cycle.
- SC.3:8 Students will identify which traits of plants and animals are inherited from their parents and which are influenced by the environment. (NGSS 3-LS3-1, NGSS 3-LS3-2)**
- SC.3:8-1 List traits that animals can inherit from their parents. (animals, not human)
 - SC.3:8-2 Compare and contrast characteristics that are inherited from parents and those that result from interactions with the environment.
- SC.3:9 Students will represent data in a graph to show typical weather conditions in various climate zones. (NGSS 3-LS4-2, NGSS 3-LS2-2)**
- SC.3:9-1 Identify temperature, precipitation and wind directions as components of weather.
 - SC.3:9-2 Create a graph that communicates weather conditions over a given period of time in various climate zones.
 - SC.3:9-3 Analyze findings and identify correct climate zone.
 - SC.3:9-4 Identify cities on a map.
 - SC.3:9-5 Create a legible graph that shows precipitation and temperatures for a given city.
 - SC.3:9-6 Orally present findings on weather conditions for a specific city.

SC.3:10 **Students will defend the effectiveness of a design solution that reduces the impact of a weather-related hazard. (NGSS 3-LS3-1)**

SC.3:10-1 List extreme weathers.

SC.3:10-2 Name some weather-related inventions.

SC.3:10-3 Select an invention and summarize how that invention has minimized the negative impacts of extreme weather conditions.

SC.3:11 **Students will create a simple design solution that meets the criteria for success and fits within the constraints. (NGSS 3-5-ETS1-1)**

SC.3:11-1 Identify a design problem that includes constraints on materials, time, or cost.

SC.3:11-2 Explain a plan that solves a problem.

SC.3:11-3 Create a model that solves a problem.

SC.3:11-4 Evaluate the results of a created model.

SC.3:11-5 Persist in making multiple attempts at a design solution that meets the criteria and fits within the constraints.