

# **Platte County School District #2**

## **Science Standards**

### **3rd Grade**



2017-2018 School Year

## Quarter 1: Scientific Method and Engineering Design

### ESTABLISHED GOALS

**3-5-ETS1-1:** Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

**3-5-ETS1-2:** Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

**3-5-ETS1-3:** Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

## Quarter 2: Forces and Interactions

**3-PS2-1:** Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object. [Clarification statement: Examples could include an unbalanced force on one side of a ball can make it start moving; and, balanced forces pushing on a box from both sides will not produce any motion at all.] [Assessment boundary: Assessment is limited to one variable at a time: Number, size, or direction of forces. Assessment does not include quantitative force size, only qualitative and relative. Assessment is limited to gravity being addressed as a force that pulls objects down.]

**3-PS2-4:** Define a simple design problem that can be solved by applying scientific ideas about magnets. [Clarification statement: Examples of problems could include constructing a latch to keep a door shut and creating devices to keep two moving objects from touching each other.]



## Quarter 3: Inheritance and Variation of Traits – Life Cycles and Traits and Duration:

### Interdependent Relationships in Ecosystems – Environmental Impacts on Organisms

**3-LS4-1:** Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago. [Clarification statement: Examples of data could include type, size, and distribution of fossil organisms. Examples of fossils and environments could include marine fossils found on dry land, tropical plant fossils found in Arctic areas, and fossils of extinct organisms.] [Assessment boundary: Assessment does not include identification of specific fossils or present plants and animals. Assessment is limited to major fossil types and relative ages.]

**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. [Clarification statement: Examples of evidence could include needs and characteristics of the organisms and habitats involved. The organisms and their habitat make up a system in which the parts depend on each other.]

**3-LS4-4:** Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change. [Clarification statement: Examples of environmental changes could include changes in land characteristics, water distribution, temperature, food, and other organisms.] [Assessment boundary: Assessment is limited to a single environmental change. Assessment does not include the greenhouse effect or climate change.]



## Quarter 4: Weather and Climate

### ESTABLISHED GOALS

**3-ESS2-1:** Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season. [Clarification statement: Examples of data could include average temperature, precipitation, and wind direction.]  
[Assessment boundary: Assessment of graphical displays is limited to pictographs and bar graphs. Assessment does not include climate change.]

**3-ESS2-2:** Obtain and combine information to describe climates in different regions of the world.

**3-ESS3-1:** Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard. [Clarification statement: Examples of design solutions to weather-related hazards could include barriers to prevent flooding, wind resistant roofs, and lightning rods.]

