

Looking at Data and Evidence - Analyzing and Interpreting Data

2.1.1 Students will be able to represent observations and data in order to recognize patterns in the data, the meaning of those patterns, and possible relationships between variables.	
K	0P.2.1.1.1 Sort objects in terms of natural/human-made, color, size, shape, and texture, then communicate the reasoning for the sorting system. Emphasis is on using observations to describe patterns and/or relationships in the natural and designed world in order to answer scientific questions and solve problems.
K	0E.2.1.1.2 Make daily and seasonal observations of local weather conditions to describe patterns over time.** Examples of qualitative observations may include descriptions of the weather (such as sunny, cloudy, rainy, and warm). Examples of quantitative observations may include numbers of sunny, windy, and rainy days in a month. Examples of patterns may include that it is usually cooler in the morning than in the afternoon and that different months have different numbers of sunny days versus cloudy days in different months.
K	0L.2.1.1.3 Record and use observations to describe patterns of what plants and animals (including humans) need to survive.** Examples of patterns may include that animals need to take in food, but plants do not; different animals need different kinds of food; plants require light; and that all living things need water.
1	1P.2.1.1.1 Identify and describe patterns obtained from testing different materials and determine which materials have the properties that are best suited for producing and/or transmitting sound.* Examples of materials may be wood, paper, string, plastics, cloth, etc.
2	2E.2.1.1.1 Represent data to describe typical weather conditions expected during a particular season. Examples of data may include temperature, precipitation, and wind direction. Data displays can include pictographs and bar graphs.
2	2E.2.1.1.2 Analyze data from tests of objects designed to reduce the impacts of weather-related hazards and compare the strengths and weaknesses of how each performs.* Emphasis is on data from tests of student- designed objects. Examples of design solutions to weather-related hazards may include barriers to prevent flooding or snow drifting, structures for sun shading, materials for clothing, and orientation of bus shelters.
3	3E.2.1.1.1 Record observations of the sun, moon, and stars and use them to describe patterns that can be predicted.** Examples of patterns may include that the sun and moon appear to rise in one part of the sky, move across the sky, and set; and stars other than our sun are visible at night but not during the day.
5	5P.2.1.1.1 Analyze and interpret data to show that energy can be transferred from place to place by sound, light, heat, and electric currents. Emphasis of the practice is on analyzing student observations and data to serve as evidence to support a claim.