

## 1<sup>st</sup> Grade Science

The purpose of this document is to clarify what students should know and be able to do each grading period.

The **Competencies** listed in the table below are developed from the Texas Essential Knowledge and Skills (TEKS) for that grade level. The chart defines which quarter the Competency is reported (Q1 = Grading Period 1, Q2 = Grading Period 2, etc.)

Teachers will report on the competencies using the **Grading Progressions** which are comprised of four proficiency levels (developing (DV), progressing (PG), and proficient (PF)) and defines the knowledge and skills students will master on their pathway to proficiency. The Learning Progressions for each Competency are below the yearlong outline of the Competencies. Following the Learning Progression are the Competency Success Criteria, which define what a student knows and is able to do related to that competency at the end of a unit or quarter. To see what success on the competencies looks like in a particular unit, please see the **Public Overview** document for the course.

Students who receive a mark of “**Proficient**” meet the grade level expectation for that Competency.

Competencies	Q 1	Q 2	Q 3	Q 4
<b>C1 Matter</b> The student classifies objects by physical properties and predicts and identifies changes in objects caused by heating and cooling.	X			
<b>C2 Force, Motion, and Energy</b> The student identifies and discusses different forms of energy and demonstrates and records the ways objects can move.		X		
<b>C3 Earth’s Surface</b> The student sorts components of soil by physical properties and describes natural sources of water.		X		
<b>C4 Patterns in the Natural World</b> The student records weather information and changes in the appearance of objects in the sky.			X	
<b>C5 Ecosystems</b> The student sorts and classifies living and nonliving things and analyzes and records examples of interdependence.			X	
<b>C6 Organisms</b> The student identifies structures of organisms that relate to their environments and records life cycles of animals.				X
<b>C7 Scientific Practices</b> The student collects, records, and organizes data in order to communicate explanations about investigations.	X	X	X	X

**\*Grading Progressions for Q2-Q4 will be posted on 9/18/2020.**

**Learning Progression for Competency 1: Matter**

The student classifies objects by physical properties and predicts and identifies changes in objects caused by heating and cooling.

Developing	Progressing	Proficient
<p>Records the color, shape, and texture of objects</p> <p>Records the size of objects as bigger or smaller using nonstandard units of measurement</p> <p>Determines and records which object is heavier or lighter by using a primary balance</p>	<p>Classifies objects by color(s), shape, hardness, and texture</p> <p>Classifies objects based on their size (length and height) using nonstandard units of measurement</p> <p>Classifies objects into heavier or lighter by using a primary balance</p>	<p>Predicts changes in the physical properties of objects caused by heating and cooling</p> <p>Identifies changes in the physical properties of objects caused by heating or cooling</p>

**Success Criteria for Proficient in Matter:**

**The student can:**

- predict changes in physical properties of objects caused by heating and cooling.
  - o color or colors
  - o shape (irregular and basic shape)
  - o texture (smooth, sticky, and rough) and can distinguish between different types of rough surfaces (sharp, grainy, bumpy, and gritty)
  - o size (length or height, larger or smaller, longer or shorter, taller or shorter)
  - o heavier or lighter using a primary balance
- identify changes in physical properties of objects caused by heating and cooling.
  - o color or colors
  - o shape (irregular and basic shape)
  - o texture (smooth, sticky, and rough) and can distinguish between different types of rough surfaces (sharp, grainy, bumpy, and gritty)
  - o size (length or height, larger or smaller, longer or shorter, taller or shorter)
  - o heavier or lighter using a primary balance

**Learning Progression for Competency 7: Scientific Practices**

The student collects, records, and organizes data in order to communicate explanations about investigations.

Developing	Progressing	Proficient
Makes observations using tools	Records observations using pictures, numbers, and words	Organizes observational data using pictures, numbers, words, and charts
Answers a question about observations	Uses observations to make a claim	Uses organized data presented in a chart as evidence to support a claim

**Success Criteria for Proficient in Scientific Practices:**

**The student can:**

- collect data and makes observations using tools.
  - computer
  - hand lenses
  - primary balances
  - cups
  - bowls
  - magnets
  - collecting nets
  - notebooks
  - safety goggles
  - timing devices
  - non-standard measuring items
  - demonstration thermometers
  - wind socks
  - materials to support observations of habitats of organisms
- record and organizes data and observations.
  - pictures
  - numbers
  - words
  - charts (up to three categories)
- answer a question by making a claim.
- use data presented in a chart as evidence to support a claim.