1st Grade Science

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

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 three proficiency levels (developing (DV), progressing (PG), and proficient (PF)) and defines the knowledge and skills students will master on their pathway to proficiency. The Grading Progressions for each Competency are below the yearlong outline of the Competencies. The Grading Progressions 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 each individual competency 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
C1 Matter and its Properties The student classifies objects by physical properties, explains and predicts changes in materials caused by heating and cooling, and explains that a whole object is a system made of organized parts.	X			
C2 Forces and Motion The student plans and conducts an investigation to predict and explain how forces change the speed or direction of an object's motion.	X	X		
C3 Energy The student describes applications of heat in everyday life and how some changes from heat are reversible or not reversible.		X		
C4 Patterns in the Natural World The student describes and predicts patterns of seasons.		X		
C5 Earth Materials and Systems The student records the properties of soil, describes how water moves rocks and soil, compares bodies of water, and describes characteristics of weather.		X	X	
C6 Uses of Earth Materials The student describes how organisms use Earth materials, explains the importance of water conservation, and describes ways to conserve water.			X	X
C7 Interactions within Environments The student classifies living and nonliving things, describes how organisms depend on living and nonliving things, and identifies how organisms depend on each other in a food chain.				X
C8 Structures and Growth of Organisms The student compares structures of different animals that help them survive, records the life cycles of different animals, and compares how young animals resemble their parents.				X

Grading Progression for Competency 1: Matter and its Properties

The student classifies objects by physical properties, explains and predicts changes in materials caused by heating and cooling, and explains that a whole object is a system made of organized parts.

Developing	Progressing	Proficient
Makes or uses observations to describe objects based on observable physical properties: • Color • Shape • Texture • Material objects are made of	Makes or uses observations to sort objects based on observable physical properties: • Color • Shape • Texture • Material objects are made of	Makes or uses observations to classify objects based on observable physical properties: • Color • Shape • Texture • Material objects are made of
Measures or uses measurements to describe objects based on measurable physical properties: • Size by using non-standard units of measurement. • Weight by using a pan balance.	Measures or uses measurements to sort objects based on measurable physical properties: • Size by using non-standard units of measurement. • Weight by using a pan balance.	Measures or uses measurements to classify objects based on measurable physical properties: • Size by using non-standard units of measurement. • Weight by using a pan balance.
Makes or uses observations to describe objects based on their physical properties.	Uses evidence to identify the changes in the physical properties of objects caused by heating or cooling.	Use evidence to explain the changes in the physical properties of objects caused by heating and cooling. Uses evidence to predict changes in the materials of objects caused by heating and cooling.
Identifies that a whole object is made up parts.	Develops models to represent that a whole object is made up parts.	Develops models to explain that a whole object is a system made up of organized parts. Uses models to explain that a whole object or system can be taken apart and put together back again.

Grading Progression for Competency 2: Forces and Motion

The student plans and conducts an investigation to predict and explain how forces change the speed or direction of an object's motion.

Developing	Progressing	Proficient
Makes or uses observations to recognize and describe pushes and pulls in everyday life.	Makes or uses observations to describe an object's motion by its speed and direction.	Develops explanations for how pushes and pulls cause changes in the motion of objects.