

5th 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 four proficiency levels (developing (DV), progressing (PG), proficient (PF), and advanced (AV)) 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 Energy The student compares and contrasts matter by physical properties and determines how matter changes when substances are combined.	X			
C2 Forces and Motion The student explains how equal and unequal forces cause patterns of motion and designs experimental investigations to test the effects of forces.	X			
C3 Energy The student describes energy transformations, demonstrates the flow of electrical energy in circuits, and explains how light behaves when striking objects.		X		
C4 Patterns in the Natural World The student demonstrates that Earth rotates and explains its effects on Earth.		X		
C5 Processes and Patterns on Earth The student explains how the Sun and ocean interact in the water cycle and affect weather, describes the formation of sedimentary rocks and fossil fuels, and identifies the formation of landforms.			X	
C6 Natural Resources and their Management The student designs and explains solutions that can minimize environmental impact of the use of natural resources.			X	
C7 Interactions within Environments The student describes how organisms interact with biotic and abiotic factors of ecosystems, predicts the cycling of matter and flow of energy in food webs, and describes how human activities impact ecosystems.			X	X
C8 Structures and Growth of Organisms The student analyzes the structures and functions of different species and explains how behavioral traits increase chances of survival in animals.				X