

2nd Grade Science Q2

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 **Learning Progressions** which are comprised of four proficiency levels (developing (DV), progressing (PG), proficient (PG) and advanced (AV)) 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.

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 Scientific Explanation The student communicates observations and write scientific explanations using evidence.	X	X	X	X
C2 Matter The student classifies matter by physical properties, compares changes in materials caused by heating and cooling, and demonstrates actions that can be taken to change physical properties of materials.	X			
C3 Force, Motion, and Energy The student investigates the effects on objects by increasing or decreasing energy, and compares patterns of movement of objects over time.		X		
C4 Earth’s Surface The student observes, describes, and compares rocks by size, texture, and color.		X		
C5 Patterns in the Natural World The student records and describes patterns in weather information and among objects in the sky.			X	
C6 Organisms and Environments The student recognizes the basic needs of organisms, and compares how the structures of plants and animals and behaviors of animals help meet their basic needs.			X	X

Learning Progression for Competency 1: Scientific Explanations

The student communicates observations and write scientific explanations using evidence.

Developing	Progressing	Proficient	Advanced
<p>Makes an inaccurate claim</p> <p>Evidence is inappropriate or vague</p>	<p>Makes an accurate, but vague or incomplete claim</p> <p>Supports the claim, but does not include specific data</p>	<p>Makes an accurate and complete claim that answers the question</p> <p>Uses specific data (exact words and/or numbers) as evidence to support the claim</p>	<p>Makes an accurate and complete claim that answers the question</p> <p>Uses only relevant specific data (exact words and/ numbers) as evidence to support the claim</p> <p>Attempts to connect claim and evidence using scientific principles</p>
<p>Success Criteria for Proficient in Scientific Explanation:</p> <p>The student can:</p> <ul style="list-style-type: none"> answer a question by making a claim. use specific data as evidence to support the claim. 			

Learning Progression for Competency 3: Force, Motion, and Energy

The student investigates the effects on objects by increasing or decreasing energy, and compares patterns of movement of objects over time.

Developing	Progressing	Proficient	Advanced
<p>Describes light, heat, and sound energy using the senses</p> <p>Compares the ways objects move, such as straight line, zig zag, up and down, etc.</p>	<p>Describes how light, heat, and sound energy can be increased or decreased</p> <p>Identifies and traces patterns of movement of objects</p>	<p>Describes how objects look, sound, and feel before and after increasing or decreasing energy on them</p> <p>Traces and compares patterns of movement of objects</p>	<p>Predicts the effects of increasing and decreasing light, heat, and sound energy on objects</p> <p>Uses the shape of objects to predict patterns of movement</p>

Success Criteria for Proficient in Force, Motion, and Energy:

The student can:

- describes how objects look, sound, and feel before and after increasing or decreasing energy on them
 - o light energy
 - o heat energy
 - o sound energy
- trace and compare patterns of movement of objects.
 - o sliding
 - o rolling
 - o spinning

Learning Progression for Competency 4: Earth's Surface

The student observes, describes, and compares rocks by size, texture, and color.

Developing	Progressing	Proficient	Advanced
Observes the physical properties of rocks	Observes and describes the physical properties of rocks	Observes, describes, and compares rocks by physical properties	Compares and contrasts rocks by their physical properties
<p>Success Criteria for Proficient in Earth's Surface:</p> <p>The student can:</p> <ul style="list-style-type: none"> observe, describe, and compare physical properties of rocks. <ul style="list-style-type: none"> size color texture 			

