

# Grade 2

## Units Matter



Comparing the measurable properties of things in their daily life provides an automatic interest for children. Their natural curiosity leads them to explore the world by observing and manipulating the materials of their environment. By providing the instructional focus and introduction of age-appropriate tools and methods, teachers can lead students to develop the necessary precursors to the later introduction of more abstract properties in later grade levels.

During these learning experiences, students are introduced to the measurement of length with rulers and meter sticks, mass with double pan balances and gram stackers, volume with graduated containers, and temperature with thermometers. The units of centimeters, grams, milliliters, and degrees Celsius are introduced and reinforced through various problem-solving activities using hands-on materials. Students are also involved in designing "fair tests" and using patterns to make sense of their observations.

## Table of Contents

		page
◆	<b>Interdisciplinary Connections</b> Language Arts, Mathematics, Social Studies, Art	1
◆	<b>Overview of Learning Experiences</b> Targeted Science TEKS, Engage, Explore, Explain, Elaborate, Evaluate	2
◆	<b>Engage</b> Students participate in introductory activities to capture their interest about a problem or phenomenon and make connections to prior knowledge and experiences.	3
◆	<b>Explore</b> Students manipulate materials during hands-on activities to explore the concept further while sharing their observations and ideas with others.	<b>Length</b> 8
		<b>Mass</b> 14
		<b>Volume</b> 22
		<b>Temperature</b> 30
◆	<b>Explain</b> Students communicate their findings from the explore activity as the teacher guides the discussion using effective questioning strategies, introducing new terms as appropriate, and clarifying any misunderstandings.	<b>Length</b> 9
		<b>Mass</b> 15
		<b>Volume</b> 24
		<b>Temperature</b> 31
◆	<b>Elaborate</b> Students apply, extend, and enhance their understanding by participating in additional active learning opportunities.	33
◆	<b>Evaluate</b> Students demonstrate their understanding of concepts.	34
◆	<b>Materials Details Sheet</b> List and description of items required for each section of the learning experience	38
◆	<b>Background Information for Teachers</b> General summary of content information for teachers	44
◆	<b>Content Area TEKS</b> Texas Essential Knowledge and Skills statements for each of the content areas addressed in this learning experience	45
◆	<b>Reading Connections</b> List of suggested books and stories for students	51
◆	<b>References</b> List of books, articles, and websites used by developers of this learning experience	52
◆	<b>Master Copies</b> Student sheets and other materials to be copied by teacher when using this learning experiences in the classroom	A-R