



# Measuring Area

## Lesson Plan

Lesson Overview: In this lesson, students will use concrete models to show and count the area of rectangles, conclude that the area of a rectangle is the number of non-overlapping rectangles it takes to completely cover the rectangle, and then solve problems involving the area of rectangles. TEKS: 2.9F

	Procedures	Facilitation Questions	Advance Preparation
Engage	<ul style="list-style-type: none"> <li>Provide each student with a copy of the <b>Engage Activity Sheet</b> and color tiles.</li> <li>Play the video for the class.</li> <li>Assist students as needed as they complete the activity.</li> <li>If desired, display the <b>Engage Answer Key</b>.</li> </ul>	<ul style="list-style-type: none"> <li>Are your tiles touching each other as you cover the rectangle?</li> <li>Are any of the tiles overlapping?</li> <li>How many tiles does it take to cover the part of the rectangle next to one of the sides?</li> </ul>	<ul style="list-style-type: none"> <li>Copies of the <b>Engage Activity Sheet</b> for each student.</li> <li>Color tiles (12 for each student)</li> </ul>
Explore	<ul style="list-style-type: none"> <li>Provide students with the <b>Explore Activity Sheet</b> and 2 rectangles from grid paper (<b>Explore Activity Master</b>).</li> <li>Play the video for the class.</li> <li>Assist students as needed as they complete the activity.</li> <li>If desired, display the <b>Explore Answer Key</b>.</li> <li>Use the video to facilitate a whole-class discussion of the debriefing questions.</li> </ul>	<ul style="list-style-type: none"> <li>How many squares are in each row of the rectangle?</li> <li>How many rows are in each rectangle?</li> </ul>	<ul style="list-style-type: none"> <li>Copies of the <b>Explore Activity Sheet</b> for each student</li> <li>Grid paper cut up into rectangles to be used with the Journal Entry (use <b>Explore Activity Master</b> if necessary), 2 rectangles for each student</li> </ul>
Explain	<ul style="list-style-type: none"> <li>Arrange students in pairs.</li> <li>Provide students with the <b>Explain Activity Sheet</b>.</li> <li>Play the video.</li> <li>Pause the video while students record their Journal Entry in their <b>Math Journals</b>.</li> <li>Provide each student pair with 2 dice (number cubes).</li> <li>Follow the directions in the <b>Explain Answer Key</b> to facilitate an activity with students.</li> <li>To differentiate for the struggling learner, provide students with square-inch grid paper (<b>Mission Support Sheet</b>) and/or color tiles.</li> <li>Facilitate students as needed.</li> </ul>	<ul style="list-style-type: none"> <li>What do the 2 numbers you rolled tell you about the size of the rectangle?</li> <li>How can you build that with color tiles?</li> <li>How can you skip count to determine the area of your rectangle?</li> </ul>	<ul style="list-style-type: none"> <li>Copies of the <b>Explain Activity Sheet</b> for each student pair</li> <li>Color tiles (up to 36 for each student pair), optional</li> <li>Dice (2 for each student pair)</li> <li>Make copies of square-inch grid paper (<b>Mission Support Sheet</b>) for students as needed.</li> </ul>
Elaborate	<ul style="list-style-type: none"> <li>Provide each student with the <b>Elaborate Activity Sheet</b> and color tiles.</li> <li>Play the video.</li> <li>Pause the video while students record their Journal Entry in their <b>Math Journals</b>.</li> <li>Assist students as needed as they solve the problems on the activity sheet.</li> <li>Facilitate students as needed.</li> <li>To differentiate for the struggling learner, provide students with square-inch grid paper (<b>Mission Support Sheet</b>) and/or color tiles.</li> <li>If desired, display the <b>Elaborate Answer Key</b>.</li> </ul>	<ul style="list-style-type: none"> <li>How can you draw the rectangle?</li> <li>Label the side lengths of each rectangle. How can you use that information to solve the problem?</li> <li>How could skip counting help you determine the area of the rectangle?</li> </ul>	<ul style="list-style-type: none"> <li>Copies of the <b>Elaborate Activity Sheet</b> for each student</li> <li>Color Tiles (12 for each student)</li> <li>Make copies of the <b>Mission Support Sheet</b> for students as needed.</li> </ul>
Evaluate	<ul style="list-style-type: none"> <li>Display the <b>Evaluate Activity Sheet</b>.</li> <li>Have students complete the activity in their <b>Math Journal</b>.</li> </ul>		<ul style="list-style-type: none"> <li>Access to Math Journals</li> <li>If desired make a copy of the <b>Evaluation Questions</b> for each student.</li> </ul>

