

## Day 1: Explore Right Angles





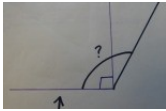

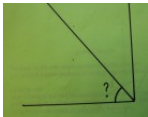
**Lesson Target:** Student will identify and sketch right angles.

Process	Activities/Expected Students' responses	Teacher's Support
Understand the Goal (5 min.)	<b>Can you make a right angle with two straws?</b>	<b>Prepare</b> index card for Right Angle Finder prior to the lesson. (see <i>Making Right Angle Finder</i> below)
Explore/ Investigate/Solve (25 min.)	<p><b>Define</b> "Angle" is the figure formed by <u>two lines</u> extending from the same point</p> <p><b>Introduce</b> <i>Right Angle Finder</i></p> <ol style="list-style-type: none"> <li>1. Write your name and "Right Angle Finder" on the index card.</li> <li>2. Put squares on the two bottom corners.</li> <li>3. Demonstrate how to put the right angle finder at the corner of desks, notebooks, and books.</li> </ol> <p><b>Find</b> Right Angles in the classroom with Right Angle Finder.</p> <p><b>Discuss/Share</b> their findings  <b>S:</b> White Board.  <b>S:</b> Vocabulary cards  <b>S:</b> A ruler  <b>S:</b> A ruler is a very long rectangle.</p> <p><b>Ask</b> if they can make right angles with two straws. How do you prove you made a right angle?  <b>S:</b> Use a Right Angle Finder.  <b>S:</b> It should look like a corner of the square.</p> <p><b>Explore</b> to make right angles with 2 straws.  <b>Check</b> their works with a <i>Right Angle Finder</i>.</p>	<p><b>Provide</b> 3x5 index card</p> <p><b>Explain</b> There are some different angles. The corners in squares/rectangles are called "right angles" that Right Angle Finder can fit. They are also called 90 degrees.</p> <p><b>Record</b> in the class chart.</p> <p><b>Facilitate</b> a discussion</p> <p><b>Provide</b> each student 2 straws</p>
Conclude (10 min.)	<p><b>Journal Entry:</b></p> <ol style="list-style-type: none"> <li>1. <b>Sketch a right angle and label it.</b></li> <li>2. <b>How do you prove it is a right angle or 90 degree?</b></li> <li>3. <b>In what kind of polygon right angles can be observed?</b></li> </ol>	

### Assessment:

- **Sketch** a right angle with a label accurately
- **Explain** how to find a right angle and how to prove it with some examples.

# How to Make Right Angle Finders

<p>1. <b>Put</b> 3 x 5 indent cards together. (Number of your students)</p>	
<p>2. <b>Flip</b> open cards. <b>Align</b> both sides straight. <b>Color</b> the top section so each card gets colored on one side.</p>	
<p>3. Hand out each card to a student. If a colored line doesn't show, make it clear individually.</p>	
<p>4. Put your name and "Right Angle Finder" on the same side. Put the right angle marks at the bottom corners.</p>	
<p>5. For an Obtuse Angle, put a Right Angle Finder's colored line on the bottom line.</p>	
<p>6. When a Right Angle Finder covers an obtuse angle, you can see another line outside of the finder. This is bigger than 90 degrees.</p>	
<p>7. For an Acute Angle, put a Right Angle Finder's colored line on the bottom line.</p>	
<p>8. When a Right Angle Finder covers an acute angle, you can see another line in the middle of the finder. This is smaller than 90 degrees.</p>	