

DRAW A PICTURE		
UNDERSTAND	<b>Definition</b>	Students use pencil and paper to draw a picture to help them make sense of a mathematical concept.
	<b>When to Teach This Strategy</b>	<ul style="list-style-type: none"> <li>When working on complex or multistep math problems</li> <li>When supporting students with explaining their thinking to others</li> </ul> <p><b>If you see students who . . .</b></p> <ul style="list-style-type: none"> <li>struggle to “see” what is happening in a given problem</li> </ul>
PREPARE	<b>Why We Teach It</b>	Drawing a picture gives students an opportunity to make sense of abstract mathematical concepts through a visual representation. Additionally, picture representations give students the ability to demonstrate their thinking to others.
	<b>Secrets to Success</b>	For students to be successful with this strategy they must <ul style="list-style-type: none"> <li>be able to select the important information that will help them create a visual representation and</li> <li>be efficient with their work. (The pictures do <i>not</i> need to be detailed and elaborate.)</li> </ul>
TEACH	<b>How We Teach It</b>	Modeling a think-aloud during the “I Do” focus lesson:
		<p>Explain to students that they are going to learn a math strategy that will help them see what’s happening in a math problem. When you can see the problem, it becomes easier to understand what is happening and arrive at an accurate solution.</p> <p>First, we read through the problem. Then, we reread the problem and look for the important information that will help us draw a picture showing what the problem is telling us.</p> <p>It is also important to explain that this strategy is useful because sometimes we won’t have a manipulative available and pictures are a way to help show your thinking to others.</p> <p>After modeling this strategy three or four times with several different types of math problems, we provide student practice during the “We Do” focus lesson by using several more math problems. We have students practice reading several different problems and then represent the problems by drawing a picture.</p> <p><b>Suggested Language</b></p> <ul style="list-style-type: none"> <li>How could I draw a picture to show what is happening in this problem?</li> <li>What is the best way to draw this problem so that I can be efficient <i>and</i> accurate?</li> </ul>
SUPPORT	<b>Instructional Pivots</b>	<ul style="list-style-type: none"> <li>For students to be successful with this strategy, they must be taught how to transfer a problem from words and numbers to a visual drawing.</li> <li>Additionally, students must have multiple opportunities to practice using this strategy.</li> <li>Teach students that a picture is a great way to visualize a problem when manipulatives are unavailable.</li> </ul>
	<b>Partner Strategies</b>	These strategies may provide support before, during, and after teaching this strategy: <ul style="list-style-type: none"> <li>Estimate</li> <li>Use a Math Formula</li> <li>Think Aloud</li> <li>Look for a Pattern</li> <li>Create an Organized List</li> <li>Work Backward</li> <li>Monitor and Adjust</li> </ul>