

LOOK FOR A PATTERN		
UNDERSTAND	Definition	Students use their knowledge of patterns and their understanding of mathematics to help them solve a problem.
	When to Teach This Strategy	Teach this strategy when students are working with problems in which the information follows a particular pattern or repetition.
PREPARE	Why We Teach It	When students recognize a pattern or repetition within a problem, they can use this information to support them with finding a solution. Also, recognizing these patterns frees them to work on solving the problem accurately and efficiently.
	Secrets to Success	For students to be successful with this strategy they must <ul style="list-style-type: none"> <li>look for important information within a problem,</li> <li>have the ability to recognize patterns within the context of a problem, and</li> <li>visualize what is taking place within the problem (provide context for themselves when it is absent).</li> </ul>
TEACH	How We Teach It	<p>Modeling a think-aloud during the “I Do” focus lesson:</p> <p>Explain to students that they are going to learn a math strategy that will help them recognize any patterns or repetitions within a given problem. This will help them when they’re organizing a plan for finding a solution.</p> <p>First, read through the problem. Then, ask yourself what the problem is asking you to do. Also ask if there is any information that follows the same “rule” or pattern. (For example, I see that the values given within the problem are increasing by two times the previous amount each time.)</p> <p>Model how you identify a particular pattern within a problem and make sense of the information to help you with finding a solution.</p> <p>After modeling this strategy three or four times with several different math problems, we provide students with chances to practice during the “We Do” focus lesson. Students work individually or in pairs to practice the strategy Look for a Pattern, using several different types of math problems.</p> <p><b>Suggested Language</b></p> <ul style="list-style-type: none"> <li><i>Do I see any information in the problem that repeats or that follows a particular pattern?</i></li> <li><i>Have I solved a problem like this one before?</i></li> <li><i>If so, how did I solve that problem? Will the same plan work now?</i></li> </ul>
SUPPORT	Instructional Pivots	<ul style="list-style-type: none"> <li>Teach students to mark up the problem (for example, underline the patterns that they see within the problem).</li> <li>Teach students to identify the “rule” that the pattern follows.</li> <li>Teach students to visualize the problem, drawing a picture when necessary. This will help them recognize any patterns that exist.</li> </ul>
	Partner Strategies	<p>These strategies may provide support before, during, and after teaching this strategy:</p> <ul style="list-style-type: none"> <li>Draw a Picture</li> <li>Estimate</li> <li>Use a Math Formula</li> <li>Think Aloud</li> <li>Create an Organized List</li> <li>Work Backward</li> <li>Monitor and Adjust</li> </ul>