

## THINK ALOUD

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UNDERSTAND	Definition	Students verbalize what the problem is asking of them, as well as the steps they will take to arrive at a solution.
	When to Teach This Strategy	<ul> <li>When solving a word problem, thinking aloud helps students pull out the problem's important elements.</li> <li>This strategy can also be used when solving written equations. It slows the student down, helping them focus on what the problem is asking.</li> </ul>
PREPARE	Why We Teach It	Thinking aloud provides students the opportunity to organize their thoughts and focus their attention on the important elements of the problem at hand.
	Secrets to Success	<ul> <li>For students to be successful with this strategy they must</li> <li>look for important information within a problem,</li> <li>have the ability to make sense of the problem and draft a plan for finding a solution, 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	Modeling a think-aloud during the "I Do" focus lesson:
		Explain to students that they are going to learn a math strategy that will help them build a mental picture of the problem. This will help them make sense of the problem and create a plan to find a solution. When you talk through what you know about a problem, it helps you slow down and focus on the important parts. This helps you organize your thoughts and the steps you'll need to take to arrive at your solution. This also helps you recognize when any errors have been made.
		First, read through the problem. Then ask yourself what the important parts of the problem are that will help you find a solution. You might recognize a particular word or symbol, or you may see a pattern that will help you create a strategy to solve the problem. Once you can pull out the important pieces of the problem, you can talk through how you will organize your work to arrive at a solution. By thinking aloud, you are able to make sense of the problem and create a mental image of what's taking place. This helps you stay organized and focused, ultimately supporting you in finding a solution.
		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 thinking aloud using several different math problems.
		Suggested Language
		• What is the important information in this problem that will help me find a solution?
		What is this problem asking me to do?
		<ul> <li>Have I solved a problem like this one before?</li> <li>If so, how did I solve this problem? Will the same plan work now?</li> </ul>
	Instructional	<ul> <li>Teach students to mark up the problem (for example, underline the important information).</li> </ul>
SUPPORT	Pivots	Teach students to summarize how they have solved a problem (the steps they took) using
		words.
	Partner	• Teach students to visualize the problem, drawing a picture when necessary. These strategies may provide support before, during, and after teaching this strategy:
	Strategies	Draw a Picture
		Estimate
		Use a Math Formula
		<ul> <li>Look for a Pattern</li> <li>Create an Organized List</li> </ul>
		Work Backward
		Monitor and Adjust
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