

Course: 3rd Math			Designated Six Weeks: Ongoing		
Unit: Problem Solving			Days to teach: On-Going		
TEKS	Guiding Questions/ Specificity	Assessment	Vocabulary	Instructional Strategies	Resources/ Weblinks
PROBLEM SOLVING TEKS PRACTICED EACH SIX WEEKS					

3.14 The student applies Grade 3 mathematics to solve problems connected to everyday experiences and activities in and outside of school.					
3.14A Identify the mathematics in everyday situations. Readiness	<p>Look at a question and be able to tell what information is missing.</p> <p>Explain how math can be used in their everyday life.</p> <p>Show the answer to a problem in a variety of ways.</p>	Steven had \$30. He bought a T-shirt, a hat, and a model car set. He spent a total of \$11 on the T-shirt and hat together. What other information is needed to find how much money Steven had left after leaving the store?	ELPS Strategies 1C, 1E, 2E, 3E, 3H, 4D, 4F	<p>Brainstorm ways we use math each day.</p> <p>Do Think-aloud to guide students through the problem solving process by using the problem solving board.</p> <p>Model how to create story problems that reflect everyday situations.</p> <p>Students collaborate to create problems.</p>	<p>Problem solving board</p> <p>Envisions Problem of the Day</p> <p>Problem Solving Journal</p> <p>Promethean Planet flipcharts</p>
3.14B Solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness. Readiness	<p>Use the problem solving board to help them create a plan.</p> <p>Transfer the procedures from the problem solving board to various problem solving situations.</p> <p>Create number sentences that accurately express the problem situations.</p>	A school bus had 16 seats. There were 2 children sitting on each seat. At the first bus stop 8 children got off. How many children were left on the bus?		<p>Model creating a plan to solve problems using manipulatives and the problem solving board.</p> <p>Model strategies with various problems.</p> <p>Students draw pictures and use words to represent their problem solving plan. Include number sentences.</p>	<p>Problem solving board</p> <p>Envisions Problem of the Day</p> <p>Problem Solving Journal</p> <p>Promethean Planet flipcharts</p> <p>Safari-Math TV</p>

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3.14C Select or develop an appropriate problem-solving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem. Readiness	Use a variety of different strategies for solving a problem. Explain the most appropriate strategy for a given problem.	Seth feeds his cat 2 times a day. How many times will he feed the cat in a week? <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Day</th> <th>Feed</th> </tr> </thead> <tbody> <tr><td>1</td><td>2</td></tr> <tr><td>2</td><td>4</td></tr> <tr><td>3</td><td>6</td></tr> <tr><td>4</td><td>8</td></tr> <tr><td>5</td><td>10</td></tr> <tr><td>6</td><td>12</td></tr> <tr><td>7</td><td>?</td></tr> </tbody> </table>	Day	Feed	1	2	2	4	3	6	4	8	5	10	6	12	7	?		Demonstrate each problem solving strategy. Expose students to a variety of problems. Give feedback as they discuss with partners. Students can collaborate to create problem solving situations that require different strategies. Students will justify their reason for choosing a specific problem solving strategy.	Problem solving board Envisions Problem of the Day Problem Solving Journal Promethean Planet flipcharts
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1	2																				
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3.14D Use tools such as real objects, manipulatives, and technology to solve problems. Readiness				Guide in how to use technology and virtual manipulatives to solve problems.	Problem solving board Envisions Problem of the Day Problem Solving Journal Computers																

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3.15 The student communicates about Grade 3 mathematics using informal language.					
3.15A Explain and record observations using objects, words, pictures, numbers, and technology. Readiness	Express mathematical thinking in a variety of ways.	Calli has a bag of tiles. Four are red, three are black, and seven are green. Compare the tiles using math symbols such as $>$, $<$, and $=$. Journal writing with pictures, words, and numbers.		Demonstrate using symbols, words, and pictures to explain a problem. Work together on Problem Solving Board. Explain steps in journal.	Problem solving board Envisions Problem of the Day Problem Solving Journal Promethean Planet flipcharts
3.15B Relate informal language to mathematical language and symbols. Readiness	Decide which equation could be used to solve a problem. Explain why an equation could not be used to solve a problem.	Which story problem below can be described by the equation $7 \times 4 = 28$?	sum difference product	Model the process of writing number sentences for word problems. Give students an equation and they will create a word problem. Students will match equations to story problems. Centers: Play number sentence Go Fish.	Problem solving board Envisions Problem of the Day Problem Solving Journal Math Glossary Promethean Planet flipcharts Engaging Mathematics

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3.16 The student uses logical reasoning.					
3.16A Make generalizations from patterns or sets of examples and non-examples. Readiness	Examine an assortment of sets (pictures, equations, numbers, etc) and be able to tell why they do or do not belong to the set. Create set and non-set problems.	Nadia sorted her flash cards into two sets. Set A and Set B. Which of these flash cards could belong in Set A?		Give one example of an item that belongs to a set. Then, give other pictorial examples and ask if they belong in the same category or not. Students will collaborate to create examples and non-examples in problem solving. For example: attributes of shapes (Which one does not belong?)	Problem solving board Envisions Problem of the Day Problem Solving Journal
3.16B Justify why an answer is reasonable and explain the solution process. Readiness	Explain how to check work and be able to use words to explain the solution process.	Miguel has 5 cookies and Maya has 3. They want to share the cookies so they both have the same amount. Miguel thinks he has to give 2 cookies to Maya so she will have the same number as him. What is wrong with this thinking? Explain in words and pictures.		Students will utilize the “Explain” section of the problem solving board to justify their answer and the operations they chose.	Problem solving board Envisions Problem of the Day Problem Solving Journal Roads to Reasoning