

## Children's Story Problem-Solving Strategies

(Source: Thomas Carpenter et al.)

Direct Modeling Strategy	Counting Strategy	Derived Facts Strategy
<ol style="list-style-type: none"> <li>1. Physically constructs <b>all sets</b> described in the story.</li> <li>2. Represents the sets <b>following the sequence</b> of the story.</li> <li>3. Joins the sets together and counts all of them.</li> <li>4. Separates the sets apart and counts remaining set.</li> </ol>	<ol style="list-style-type: none"> <li>1. Begins <b>counting on</b> from the first set or larger set.</li> <li>2. Begins <b>counting down</b> to the smaller set.</li> <li>3. Use some method, like tally marks, to <b>keep track</b> of the count and know when to stop.</li> <li>4. Counts by 2's, 5's, 10's, etc.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use <b>number facts</b> to solve the story problems, i.e., sum of doubles, sum to tens, etc.</li> <li>2. Readily <b>recall number</b> facts, &amp; use number facts to recall</li> <li>3. Understand number <b>relations</b> and use number facts to find solutions.</li> </ol>
<b>Distinctions</b>		
<ol style="list-style-type: none"> <li>1. Each quantity is explicitly represented. [DMS]</li> <li>2. Counts the solution set after done with the action. [DMS]</li> <li>3. Recognition that it is not needed to represent both sets. [CS]</li> <li>4. Show a level of numbers as abstract entities. [CS]</li> </ol>		