Solving Problems 3

Conceptual Understanding of Story Problems Behaviours/Strategies			
<ol> <li>Student reads story problem, but is unable to model add-to and take-from situations with concrete materials.</li> <li>Observations/Documentatio</li> </ol>	<ul> <li>2. Student models and solves the problem, but cannot use symbols and equations to represent it.</li> <li>"The answer is 13. I don't know the number sentence."</li> </ul>	<ul> <li>3. Student successfully models and solves the problem and writes an addition sentence, but struggles to relate the addition problem to a subtraction problem.</li> <li>"29 + 13 = 42"</li> <li>"It's not a subtraction problem."</li> </ul>	<ul> <li>4. Student successfully models and solves the problem and uses symbols and equations to represent it.</li> <li>"29 + 13 = 42" "42 - 29 = 13" "His friend gave him 13 marbles."</li> </ul>
Addition Computational Behaviours/Strategies			
<ol> <li>Student models problem with counters, but struggles to coordinate number words with counting actions.</li> <li>One" One"</li> </ol>	<ol> <li>Student counts three times to add or subtract quantities.</li> <li>"1, 2, 3,, 41, 42" counts all</li> <li>"1, 2, 3,, 28, 29" counts to remove</li> <li>"1, 2, 3,, 12, 13" counts leftover</li> </ol>	<ul> <li>3. Student counts on or back with counters to add or subtract quantities.</li> <li>"30, 31, 32,, 40, 41, 42"</li> </ul>	<ul> <li>4. Student uses mental strategies flexibly and accurately to add or subtract quantities.</li> <li>"29 and 1 more is 30. 30 and 10 more is 40. 40 and 2 more is 42. 1 + 10 + 2 = 13."</li> </ul>
Observations/Documentation			