

Problem Solving (CGI) Anticipatory Framework 3rd - 5th

Teacher:		Grade:	Date:																		
<table border="1"><tr><td>JRU</td><td>JCU</td><td><del>JSU</del></td></tr><tr><td>SRU</td><td>SCU</td><td>SSU</td></tr><tr><td>PPW-WU</td><td colspan="2">PPW-PU</td></tr><tr><td><del>CDU</del></td><td>CQU</td><td>CRU</td></tr><tr><td>Mx</td><td>MD</td><td>PD</td></tr><tr><td>Multi-step</td><td>ES</td><td>Area</td></tr></table> <p>Problem: (circle type/s above)</p> <p>Equation to match the problem context:</p>		JRU	JCU	<del>JSU</del>	SRU	SCU	SSU	PPW-WU	PPW-PU		<del>CDU</del>	CQU	CRU	Mx	MD	PD	Multi-step	ES	Area	<p>Rationale/Goal:</p> <p><i>Misconceptions:</i></p>	
JRU	JCU	<del>JSU</del>																			
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Multi-step	ES	Area																			
Comprehension Question:																					
Anticipated Strategy		Anticipated Strategy																			
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## Tools for getting to purposeful mathematics discourse:

- 1) **Choose** a meaningful task
- 2) **Anticipate** student strategies
- 3) **Monitor** students' work on engagement with the tasks
- 4) **Select** particular students to present their mathematical work
- 5) **Sequence** students' responses in a specific order for discussion
- 6) **Connect** different students' responses and connect the responses to key mathematical ideas

### 3) **Monitor** students' work on engagement with the tasks

Question Types	For Your Task	Examples
<b>Exploring</b> - underlying mathematical relationships and meanings		*How does your array relate to what we know about multiplication and division? *What conjecture can you make about that?
<b>Probing</b> - getting students to explain their thinking		*How do you know? *Why did you _____? *I'm not clear on how you did _____. *Can you explain more about ____?
<b>Generating</b> - motivating thought		*How might you prove that 51 is the solution? *How can you use what you know to get started? *What information/tool might you need to figure this out?
<b>Gathering Information:</b> students are asked to recall facts, definitions, or procedures		*What does the symbol = mean? *What happened in the story? *What is the formula for that?

### 6) **Connect** different students' responses and connect the responses to key mathematical ideas (Talk Moves)

Talk Move	Used For	Used Today	Effective?
Re-voicing (teacher) Focusing (Not Funneling)	Making a child's statement more clear/precise. <sup>1</sup>		
Repeat (student)	Asking a student to repeat what another student said in their own words.		
Reason reflect	Asking a student if they agree or disagree with someone else's reasoning.		
Prompting	Asking for more ideas: <i>Would someone like to add on?</i>		
Wait time	Allow for thought processing		
Others (Use additional moves list)			