

# Task Specific Rubric: Hot Chocolate

Level	Understanding	Strategies, Reasoning, & Procedures	Communication
<b>Novice</b>	<ul style="list-style-type: none"> <li>✓ There are no solutions or the solutions have no relationship to the task.</li> <li>✓ The student does not understand that to fill each mug s/he needs 3 ladles of hot chocolate.</li> </ul>	<ul style="list-style-type: none"> <li>✓ The student cannot start the task or s/he has started the task using manipulatives or representations but cannot complete the task. Sample Strategies: The student draws mugs, ladles, and children but cannot connect the information together to complete the task.</li> </ul>	<ul style="list-style-type: none"> <li>✓ There is little or no communication, the student did not label the work and his/her thinking is difficult to follow.</li> <li>✓ The student has drawn mugs &amp; ladles, but incorrectly represents the number of mugs &amp; ladles.</li> <li>✓ The student makes no attempt to summarize his/her results.</li> </ul>
<b>Apprentice</b>	<ul style="list-style-type: none"> <li>✓ The student understands enough of the task to address one/two aspects of the problem, but cannot complete the task to a full solution. For example: S/he correctly identify the 5 mugs and the 3 ladles for each mug, but cannot connect that to 15 total ladles of hot chocolate needed.</li> </ul>	<ul style="list-style-type: none"> <li>✓ The student has chosen an appropriate strategy to solve the task and can establish that there are 5 children, 5 mugs, and 3 ladles; but cannot calculate the exact number of ladles of hot chocolate needed to fill all 5 mugs. Sample Strategies: The student draws mugs, places the #3 under the mugs, and then records a final answer of 8 (5 mugs + 3 ladles); adds 5 children, 5 mugs, and 3 ladles for an answer of 13; and/or s/he cannot hold all of the pieces of the problem to arrive at an accurate solution.</li> </ul>	<ul style="list-style-type: none"> <li>✓ The student has attempted to communicate his/her findings by labeling their work, but does not attempt to summarize his/her work by stating their final answer.</li> <li>✓ The student has accurately drawn the mugs and ladles; but does not use the information to draw conclusions or summarize their results.</li> </ul>
<b>Practitioner</b>	<ul style="list-style-type: none"> <li>✓ The student understands that the 3 ladles of hot chocolate are needed to fill each of the 5 mugs.</li> </ul>	<ul style="list-style-type: none"> <li>✓ The student uses an accurate and appropriate strategy to solve the problem, stating that the children will need 15 ladles of hot chocolate. Sample Strategies: The student uses a tally system to record their answers, can hold all pieces of the problem, and shows a conservation of 3's. (i.e. Each mug needs 3 ladles to fill it.)</li> </ul>	<ul style="list-style-type: none"> <li>✓ The student shows an accurate representation of children, ladles and mugs of hot chocolate.</li> <li>✓ The student has communicated their findings by labeling and summarizing his/her results.</li> </ul>
<b>Expert</b>	<ul style="list-style-type: none"> <li>✓ The student understands all of the parameters of the problem and can make generalizations about these understandings. For Example: The student can convert from a counting strategy to a repeated addition of 3's, and/or describe signs of multiplicative structures.</li> </ul>	<ul style="list-style-type: none"> <li>✓ The student accurately solves the problem, stating that the children will need 15 ladles of hot chocolate.</li> <li>✓ The student may have started using a tally system to record his/her answer, then converts to a numerical representation (shows a conservation of 3's with signs of multiplicative structures). For example: <math>3 + 3 + 3 + 3 + 3 = 15</math> Two 3's is 6 or three 3's is 9</li> </ul>	<ul style="list-style-type: none"> <li>✓ The student shows an accurate representation of students, ladles and mugs of hot chocolate.</li> <li>✓ The student has provided a complete summary of their results and has presented any generalizations they may have found. For example: I do not have to count each ladle, I can count by 3's.</li> </ul>