

## Appendix D

Evaluating student work was based on a variety of tools including this rubric from The Ontario Math Curriculum document.

### Achievement Levels: Mathematics, Grades 1-8

Knowledge/Skills	Level 1	Level 2	Level 3	Level 4
<b>Problem solving</b>	<b>The student solves problems:</b>			
	– with assistance	– with limited assistance	– independently	– independently
	– with a limited range of appropriate strategies	– with appropriate strategies	– by choosing the most appropriate strategies	– by modifying known strategies or creating new strategies
	– rarely accurately	– frequently accurately	– usually accurately	– almost always accurately
<b>Understanding of concepts</b>	<b>The student shows understanding of concepts:</b>			
	– with assistance	– independently	– independently	– independently
	– by giving partially complete but inappropriate explanations	– by giving appropriate but incomplete explanations	– by giving both appropriate and complete explanations	– by giving both appropriate and complete explanations, and by showing that he or she can apply the concepts in a variety of contexts
	– using only a few of the required concepts	– using more than half of the required concepts	– using most of the required concepts	– using all of the required concepts
<b>Application of mathematical procedures</b>	<b>The student applies mathematical procedures:</b>			
	– with assistance	– with limited assistance	– independently	– independently
	– that are considered to be basic in solving problems	– that are considered to be appropriate in solving problems	– that are considered to be the most appropriate in solving problems	– that are considered to be the most appropriate in solving problems, and justifies the choice
	– with major errors and/or omissions	– with several minor errors and/or omissions	– with a few minor errors and/or omissions	– with practically no minor errors and/or omissions
<b>Communication of required knowledge related to concepts, procedures, and problem solving</b>	<b>The student communicates the required knowledge:</b>			
	– with assistance	– independently	– independently	– independently
	– unclearly and imprecisely	– with some clarity and some precision	– clearly and precisely	– clearly, precisely, and confidently
	– rarely using appropriate mathematical terminology	– sometimes using appropriate mathematical terminology and symbols	– usually using appropriate mathematical terminology and symbols	– always using appropriate mathematical terminology and symbols