Manitoba Report Card Grade Scale Mathematics Achievement Profiles – Grades 1 to 8 Subject Category: Mental Mathematics and Estimation					
Category Indicator	Extent to which the student is meeting grade-level* learning outcomes across the provincial report card grading scale				
	Not demonstrated (ND)	Limited (1)	Basic (2)	Good (3)	Very good to excellent (4)
Connects and applies mental math and estimation strategies with skills and knowledge.	Does not yet demonstrate the required understanding and application of concepts and skills.	<ul> <li>Requires considerable, ongoing teacher support and/or direction to</li> <li>connect knowledge of mental math and/or estimation to the understanding of number properties and relationships</li> <li>use mental math and/or estimation strategies and/or must work through the strategies on paper or with concrete objects</li> <li>May have computational errors.</li> </ul>	Requires occasional teacher or peer support to connect knowledge of mental math and/or estimation to the understanding of number properties and relationships. Chooses and uses modelled and familiar mental math and/or estimation strategies. May have computational errors.	Accurately connects knowledge of mental math and/or estimation to the understanding of number properties and relationships. Uses mental math and/or estimation strategies accurately.	Flexibly and efficiently connects knowledge of mental math and estimation to the understanding of number properties and relationships. Efficiently and flexibly chooses and uses mental math and estimation strategies.
Communicates mental mathematics and estimation strategies concretely orally written pictorial/diagrams words symbolic/numbers graphs/charts		Uses very little mathematical vocabulary. Requires considerable, ongoing teacher support to describe mental math and estimation strategies used for computation.	Requires occasional teacher or peer support to use mathematical vocabulary and describe the mental math and estimation strategies used for computation.	Requires occasional prompting for clarification. Uses mathematical vocabulary to explain the mental math and estimation strategies used for computation.	Uses a broad range of mathematical vocabulary clearly, completely, and precisely to explain the mental math and estimation strategies used for computation.

<sup>\*</sup>As developmentally appropriate for the time of year towards attaining end-of-grade academic outcomes or academic outcomes described in an individual education plan. References in the table to 'assistance', etc., do not refer to adaptations defined as 'a change in the teaching process, materials, assignments or pupil products to assist a pupil to achieve the expected learning outcomes.' (www.edu.gov.mb.ca/k12/specedu/programming/adaptation.html)