Manitoba Report Card Grade Scale—Science Achievement Profiles (Grades 1 to 8)
Subject Category: Scientific Inquiry

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)**
Engages in science practices[1] to carry out investigations, and communicates scientific reasoning. Practices related to science inquiry include ▪ asking questions and making predictions or hypotheses ▪ planning and/or carrying out investigations ▪ making observations and interpreting data ▪ obtaining, evaluating, and communicating information[2]	Does not yet demonstrate the required understanding and application of concepts and skills.	Requires considerable, ongoing teacher[3] support to ▪ carry out investigations ▪ explain and justify reasoning ▪ express scientific thinking ▪ apply appropriate science vocabulary	Requires occasional teacher or peer support to ▪ carry out investigations ▪ explain and justify reasoning ▪ express scientific thinking ▪ apply appropriate science vocabulary	Requires occasional prompting when carrying out investigations to ▪ explain and justify reasoning ▪ express scientific thinking ▪ apply appropriate science vocabulary ▪ generalize to similar contexts	When carrying out investigations, consistently ▪ explains and justifies reasoning ▪ expresses scientific thinking ▪ applies appropriate science vocabulary ▪ generalizes to similar and other contexts Demonstrates curiosity, creativity, and perseverance when engaging in science inquiry.
Applies science knowledge while engaging in science inquiries.		Requires considerable, ongoing teacher support to ▪ make connections between science concepts and science inquiry ▪ apply prior knowledge or science concepts to interpret and explain results of science inquiries	Requires occasional teacher or peer support to ▪ make connections between science concepts and science inquiry ▪ apply prior knowledge or science concepts to interpret and explain results of science inquiries	Requires occasional prompting to ▪ make connections between science concepts and science inquiry ▪ apply prior knowledge or science concepts to interpret and explain results of science inquiries	Consistently and accurately ▪ makes connections between science concepts and science inquiry ▪ applies prior knowledge or science concepts to interpret and explain results of science inquiries

[1] The use of the term *science practices* indicates that the skills and attitudes related to science inquiry and the design process are not separate from science concepts. Students engaging in science investigations simultaneously use both knowledge and skills, which deepens their understanding of concepts.

[2] Depending on the grade level, students are not necessarily expected to independently engage in all aspects of science inquiry processes. For these levels, student independence refers to the degree to which a student participates in and contributes to the processes (with the class or within a small group) without teacher prompting or assistance. Specific learning outcomes specify what constitute grade-appropriate levels of independence.

[3] Teacher support may include an educational assistant, resource teacher, et cetera, as directed by the teacher.

*Grades are based on what is developmentally appropriate for the time of year toward attaining end-of-grade learning outcomes or learning outcomes described in an individual education plan. References in the table to "support," "prompt," et cetera, 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" (Manitoba Education and Training, www.edu.gov.mb.ca/k12/specedu/programming/adaptation.html).