



## *Christ the Teacher Catholic Schools*

### **Science Assessment Rubrics**

Christ the Teacher Catholic Schools expresses its gratitude to the following individuals who generously shared their time and expertise to develop assessment rubrics for Science:

Trevor Baker	St. Paul's School
Susan Cochrane	École St. Michael's School
Robin Dubiel	CTT Division Office
Gary Forgeron	École St. Michael's School
Kelly Gerein	St. Alphonsus School
Paul Hartman	St. Paul's School
Nicki Hoffman	École St. Michael's School
Lana Klemetski	St. Theodore School
Heather Lajambe	École St. Michael's School

#### **Design**

The rubrics are designed to track triangulated evidence of student learning—evidence stemming from products, conversations, and observations. On this rubric, teachers may record a student's progress toward an outcome noted in a conversation. In addition, when they observe a student demonstrating abilities related to an outcome, they can add those observations to the rubric. When the student creates a product as a demonstration of learning, that evidence can be plotted on the rubric as well.

These rubrics reflect a move away from assessing tasks and from giving a grade on a task to using tasks to gather evidence of learning with respect to a group of outcomes and to tracking this evidence of learning against specified criteria.

The levels on the rubric are cumulative. Students who achieve level 4 have already demonstrated the competencies described in levels 1, 2, and 3.

#### **Rubrics and the Curriculum**

These rubrics reflect the integrity of the curriculum, and work in conjunction with it. **They do not replace the curriculum.** Teachers must continue to rely on the indicators of the curriculum as suggestions of ways a student can demonstrate the achievement of the outcome.

## Language of the Rubrics

As much as possible, the writers have used language suitable for the student in a specific grade and appropriate for the pedagogy of the grade. Still, there are some expressions which carry particular meaning:

- **Including:** all of the enumerated concepts or skills are compulsory. For example, in Science Grade 4, **HC 4.1 Investigate the interdependence of plants and animals, including humans, within habitats and communities**, evidence of student achievement of that outcome would need to include humans in the interdependence relationship, not just plants and animals.
- **Such as:** refers to examples that a teacher or student might consider; they are **not** compulsory.

- **Levels of Scientific Inquiry**

The verbs “investigate” or “explore” in an outcome direct the teacher and student to use scientific processes to gather information. These processes might involve experimentation, surveys, interviews, or research using books or websites.

- *Level 4: I can design and carry out an accurate investigation/process to . . .*  
The student can **create and carry out** a process to gather information, such as an experiment, a survey, interviews, or independent research using books or websites.
- *Level 3 I can carry out processes accurately to . . .*  
The student can **carry out accurately a teacher-directed process to gather information**, such as an experiment, a survey, interviews, or research using books or websites.
- *Level 2 I can carry out simple processes with some accuracy to . . .*  
The student can **carry out a simple teacher-directed process to gather information**, such as an experiment, a survey, interviews, or research using books or websites. The process will demonstrate developing accuracy.
- *Level 1 I can carry out simple processes to . . .*  
The student is focused on carrying out a **simple teacher-directed process to gather information**, such as an experiment, a survey, interviews, or research using books or websites. The process will demonstrate the beginnings of accuracy.

## Feedback

The rubric developers have used their skill, knowledge, and experience to create a tool which is at once comprehensive and easy to use. Still, some revisions may be needed. Please keep track of issues with the rubrics, and email any suggested changes to Yvette at [yvette.beutel@cttcs.ca](mailto:yvette.beutel@cttcs.ca) so that adjustments can be made.