

## Grade 8 Science Performance Level Descriptors

**Advanced:** Students consistently demonstrate a thorough understanding of science processes as related to the knowledge and reasoning required for understanding the physical, life, and earth/space sciences. As well, students performing at this level consistently and thoroughly demonstrate the ability to recognize and use scientific processes (e.g., observing and measuring, classifying, experimenting, interpreting, communicating, and practicing safety). The students regularly demonstrate a thorough and comprehensive understanding of the science processes and consistently apply many different strategies for evaluating, organizing, analyzing, and synthesizing scientific data.

**Satisfactory:** Students demonstrate a general understanding of science processes as related to the knowledge and reasoning required for understanding the physical, life, and earth/space sciences, as well as the ability to apply their understanding to practical situations at a level appropriate to Grade 8. In addition to demonstrating a general understanding and application of the science skills at previous levels, students performing at the Satisfactory level will:

- Make qualitative and quantitative observations of the living and non-living world using Systems International units of measurement.
- Classify objects, organisms, and events.
- Arrange the steps of a scientific problem in a logical order, identify simple variables, and identify testable hypotheses for an experiment.
- Interpret line, bar, and circle graphs, and recognize patterns in scientific data.
- Communicate scientific procedures and explanations.
- Practice safety and recognize potential hazards in all science investigations.

**Limited Knowledge:** Students demonstrate a partial understanding of science processes as related to the knowledge and reasoning required for understanding the physical, life, and earth/space sciences at a level appropriate to Grade 8. These students are partially able to interpret information, design simple investigations, and explain scientific processes and experimental procedures.

**Unsatisfactory:** Students do not demonstrate at least a minimal understanding of the science processes as related to the knowledge and reasoning required for understanding the physical, life, and earth/space sciences at a level appropriate to Grade 8. Students in this range should be given comprehensive science instruction.