

Grade 5 Science Performance Level Descriptors

Advanced: The student demonstrates superior performance on challenging subject matter. Consistent demonstration of a thorough understanding of science processes, knowledge, and reasoning required for applying core ideas in each of the major science disciplines of the physical, life, and earth/space sciences is evident. Students performing at this level consistently and thoroughly demonstrate the ability to recognize and apply scientific processes as defined by the Oklahoma Academic Science Standards. The student consistently and effectively can use many different strategies for evaluating, organizing, and analyzing scientific data in order to solve complex problems that demand multi-step reasoning to justify a conclusion.

Proficient: The student demonstrates mastery of appropriate grade-level subject matter and is ready for the next grade or course of education as applicable. A general understanding of science processes, knowledge, and reasoning required for applying core ideas in each of the major science disciplines of 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 5 is evident. In addition to demonstrating a general understanding and application of the science skills at previous levels, students performing at the Proficient level will make predictions and inferences regarding qualitative and quantitative changes; classify objects, organisms, and events by observable properties; evaluate the components of experimental design and arrange the steps of a scientific problem in a logical order; use data (single and multiple sets) to construct explanations and predictions; interpret and apply information from models; communicate the results of a scientific investigation based on data; and practice safety and recognize potential hazards in all science investigations. Solve routine problems that demand multi-step reasoning to justify a conclusion.

Limited Knowledge: The student demonstrates partial mastery of the essential knowledge and skills appropriate to their grade level as applicable. Knowledge and reasoning required for applying core ideas in each of the major science disciplines of the physical, life, and earth/space sciences at a level appropriate to Grade 5 is performed inconsistently in their work. Some gaps in knowledge and skills are evident and may require additional instruction in order to achieve a proficient level of understanding.

Unsatisfactory: The student does not perform at least at the Limited Knowledge level. A student in this range should be given comprehensive science instruction in order to achieve a Proficient level of understanding.