

Fifth Grade Science Standards, Statements, and Expectations

The following information comes from the Michigan Grade Level Content Expectations for 5th graders.

SCIENCE PROCESSES

Inquiry Process

S.IP.M.1 Inquiry involves generating questions, conducting investigations, and developing solutions to problems through reasoning and observation.

S.IP.05.11 Generate scientific questions based on observations, investigations, and research.

S.IP.05.12 Design and conduct scientific investigations.

S.IP.05.13 Use tools and equipment (spring scales, stop watches, meter sticks and tapes, models, hand lens) appropriate to scientific investigations.

S.IP.05.14 Use metric measurement devices in an investigation.

S.IP.05.15 Construct charts and graphs from data and observations.

S.IP.05.16 Identify patterns in data.

Inquiry Analysis and Communication

S.IA.M.1 Inquiry includes an analysis and presentation of findings that lead to future questions, research, and investigations.

S.IA.05.11 Analyze information from data tables and graphs to answer scientific questions.

S.IA.05.12 Evaluate data, claims, and personal knowledge through collaborative science discourse.

S.IA.05.13 Communicate and defend findings of observations and investigations using evidence.

S.IA.05.14 Draw conclusions from sets of data from multiple trials of a scientific investigation.

S.IA.05.15 Use multiple sources of information to evaluate strengths and weaknesses of claims, arguments, or data.

Reflection and Social Implications

S.RS.M.1 Reflecting on knowledge is the application of scientific knowledge to new and different situations. Reflecting on knowledge requires careful analysis of evidence that guides decision-making and the application of science throughout history and within society.

S.RS.05.11 Evaluate the strengths and weaknesses of claims, arguments, and data.

S.RS.05.12 Describe limitations in personal and scientific knowledge.

S.RS.05.13 Identify the need for evidence in making scientific decisions.

S.RS.05.15 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.

S.RS.05.16 Design solutions to problems using technology.

S.RS.05.17 Describe the effect humans and other organisms have on the balance in the natural world.

S.RS.05.19 Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures

