ISTEP+: Grade 6 Science
Blueprint Beginning Spring 2012

There are six Indiana Standards for Grade 6 Science, and they are divided into six categories for reporting student achievement. Age-appropriate concepts are assessed within each category.

Reporting Category	Description	Percent Range*
Physical Science	Questions may include understanding how to measure the volume and mass of an object, the differences between mass and weight, and how the weight of a whole object is equal to the sum of its parts. Questions may also include understanding kinetic and potential energy, how energy can be transferred into different forms, and how the motion of particles in an object defines its state of matter and that mass is conserved when an object changes state.	20-30%
Earth Science	Questions may include understanding the composition and movements of objects in the solar system. This includes how the physical characteristics of all objects in the solar system, how Earth's movement causes the day-night cycle and the change in seasons, how the moon's movement creates its apparent changing shape over the course of a month, and how the sun's movement across the sky appears to change throughout the year.	15-25%
Life Science	Questions may include understanding the differences and roles of producers, consumers, decomposers, predators and prey in an ecosystem. Questions may include understanding how factors and changes in an ecosystem affect the organisms in that ecosystem and how plants and animals either create or consume energy needed to grow and function.	15-25%
Science, Engineering and Technology	Questions may include understanding the uses and importance of prototypes during the design process. Questions may include understanding the differences between kinetic and potential energy and how that energy transfers in a real-world scenario.	5-15%
The Nature of Science	Questions may include understanding how to develop testable questions, how to collect and interpret data from investigations, and how to analyze and communicate the results of investigations.	10-20%
The Design Process	Questions may include understanding how to identify a problem to be solved and to select the most appropriate solution to that problem, how to evaluate the most appropriate solution, and how to improve upon the solution based on how well the solution addresses the original problem.	5-15%

* This range represents the approximate emphasis for each reporting category on the assessment.