



Fourth Grade Science

Purpose

The rubrics help teachers and students authentically monitor growth and progress toward end-of-the-year learning standards. They support district consistency across teachers and grading practices. The rubrics provide a broad lens to the intricate and multifaceted learning that takes place throughout the school year. Additional ongoing assessments are utilized to provide detailed data regarding student progress.

Philosophy Statement

Waukee students will construct knowledge about the natural world through exploration, questions, and critical thinking. Learners will utilize process skills and innovative thinking to collaboratively participate in ongoing scientific inquiry for the future.

Fourth Grade Science

Statement	Exceeds	Secure	Developing	Beginning
Observes patterns through organization, classification, and relationships. (Patterns)	Uses patterns to identify cause and effect relationships and use graphs and charts to identify patterns in data.*	Uses observable data and evidence to make predictions to support explanations for changes.	Analyzes and interprets data for evidence to identify patterns (of change over time).	Recognizes patterns to note change over time.
Investigates and explains causal relationships through mechanisms across contexts. (Cause and Effect)	Designs and conducts investigations where components are changed to predict the outcome of those investigations. Constructs an argument to support that prediction.*	Designs and conducts investigations where components (causes) are changed to create different results (effects).	Designs, investigates, and explains cause and effect relationships across contexts with evidence.	Designs, investigates, and explains cause and effect relationships across contexts.
Examines systems and system models for components and their interactions. (Systems and System Models)	Constructs models that demonstrate interactions between components of multiple systems.*	Constructs models that demonstrate interactions between components of an individual system.	Identifies interactions between components within a system.	Identifies the components of a system.
Tracks the transfers of energy and matter within, into, or out of any system. (Energy and Matter)	Manipulates variables to demonstrate and explain how energy can be transferred.*	Demonstrates and explains how energy can be transferred in various ways and between objects.	Explains how energy can be transferred in various ways between objects.	Recognizes the transfer of energy between objects.

The asterisk (*) denotes one possible way a student could demonstrate enrichment or extension that would be designated as Exceeds Standard.