NGSS Performance Expectation

Analysis KEY

Grade Level: The grade level(s) of the Performance

Expectation

DCI: Disciplinary Core Idea

Title of the Standard: Heading on the top of the

page of the standard

P.E.: Performance Expectation

AB: Assessment Boundary

CS: Clarification Statement

SEP: Science and Engineering Practice

CC: Crosscutting Concepts

CCSS: Common Core State Standards

RL: Reading Literature

RI: Reading Informational Text RF: Reading Foundational Skills

W: Writing

SL: Speaking & Listening

L: Language

RST: Reading Science & Technical Subjects **WHST:** Writing in History, Science, &

Technical Subjects

CC: Counting and Cardinality

OA: Operations & Algebraic Thinking **NBT:** Number & Operation in Base Ten **NF:** Number & operations-Fractions

MD: Measurement and Data

G: Geometry

RP: Ratios and Proportional Relationships

NS: Number System

EE: Expressions and Equations

F: Functions

SP: Statistics and Probability

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Science and Engineering Practices

- 1. Asking Questions (for science) and Defining Problems (for engineering)
- 2. Developing and Using Models
- 3. Planning and Carrying Out Investigations
- 4. Analyzing and Interpreting Data
- 5. Using Mathematics and Computational Thinking
- 6. Constructing Explanations (for science) and Designing Solutions (for engineering)
- 7. Engaging in Argument from Evidence
- 8. Obtaining, Evaluating, and Communicating Information

Disciplinary Core Ideas

PHYSICAL SCIENCES

PS1: Matter and Its Interactions

PS2: Motion and Stability: Forces and Interactions

PS3: Energy

PS4: Waves and Their Applications in Technologies

for Information Transfer

LIFE SCIENCES

LS1: From Molecules to Organisms: Structures

and Processes

LS2: Ecosystems: Interactions, Energy, and

Dynamics

LS3: Heredity: Inheritance and Variation of Traits

LS4: Biological Evolution: Unity and Diversity

EARTH AND SPACE SCIENCES

ESS1: Earth's Place in the Universe

ESS2: Earth's Systems

ESS3: Earth and Human Activity

ENGINEERING, TECHNOLOGY, AND APPLICATIONS

OF SCIENCE

ETS1: Engineering Design

ETS2: Links Among Engineering, Technology,

Science, and Society

Crosscutting Concepts

1. Patterns

2. Cause and Effect: Mechanisms and Explanation

3. Scale, Proportion, and Quantity

4. Systems and System Models

5. Energy and Matter: Flows, Cycles, and

Conservation

6. Structure and Function

7. Stability and Change

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