**SCIENCE** Safety Net Standards – Grade 4

*The goal in the development of the standard was to assure that the six strands and five unifying concepts are interwoven into a fabric of science that represents the true nature of science. Students have the opportunity to develop both the skills and content knowledge necessary to be scientifically literate members of the community.*

*Strands 1, 2, and 3 are designed to be explicitly taught and embedded within each of the content Strands 4, 5, and 6, and are not intended to be taught in isolation. The processes, skills, and content of the first three strands are designed to “umbrella” and complement the content of Life Science, Physical Science, and Earth and Space Science.*

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| **CODE** | **STANDARD** |
| **S1C1-PO1** | Differentiate inferences from observations |
| **S1C1-PO2** | Formulate a relevant question through observations that can be tested by an investigation. (See M04-S2C1-01) |
| **S1C1-PO3** | Formulate predictions in the realm of science based on observed cause and effect relationships. |
| **S1C1-PO4** | Locate information (e.g.*,* book, article, website) related to an investigation. (See W04-S3C6-01 and R04-S3C1-05) |
| **S1C2-PO1** | *Demonstrate safe behavior and appropriate procedures (e.g., use and care of technology, materials, organisms) in all science inquiry.* |
| **S1C2-PO2** | Plan a simple investigation that identifies the variables to be controlled. |
| **S1C2-PO3** | Conduct controlled investigations (e.g.*,* related toerosion, plant life cycles, weather, magnetism) in life, physical, and Earth and space sciences.  |
| **S1C2-PO4** | Measure using appropriate tools (e.g.*,* ruler, scale, balance) and units of measure (i.e.*,* metric, U.S. customary). (See M04-S4C4-03 and M04-S4C4-07) |
| **S1C2-PO5** | *Record data in an organized and appropriate format (e.g., t-chart, table, list, written log).* (See W04-S3C2-01 and W04-S3C3-01) |
| **S1C3-PO1** | Analyze data obtained in a scientific investigation to identify trends. (See M04-S2C1-03) |
| **S1C3-PO2** | Formulate conclusions based upon identified trends in data. (See M04-S2C1-03) |
| **S1C3-PO3** | Determine that data collected is consistent with the formulated question |
| **S1C3-PO4** | Determine whether the data supports the prediction for an investigation |
| **S1C3-PO5** | Develop new questions and predictions based upon the data collected in the investigation |
| **S1C4-PO1** | Communicate verbally or in writing the results of an inquiry. (See W04-S3C3-01) |
| **S1C4-PO1** | Choose an appropriate graphic representation for collected data: (See M04-S2C1-02)* bar graph • Venn diagram
* line graph • Model
 |
| **S1C4-PO3** | Communicate with other groups or individuals to compare the results of a common investigation. |
| **S6C2-PO1** | Identify the Earth processes that cause erosion. |
| **S6C2-PO2** | Describe how currents and wind cause erosion and land changes. |
| **S6C2-PO3** | Describe the role that water plays in the following processes that alter the Earth’s surface features:erosiondepositionweathering |
| **S6C2-PO4** | Compare rapid and slow processes that change the Earth’s surface, including:* rapid – earthquakes, volcanoes, floods
* slow – wind, weathering
 |
| **S6C2-PO5** | Identify the Earth events that cause changes in atmospheric conditions (e.g.*,* volcanic eruptions, forest fires).  |
| **S6C2-PO6** | Analyze evidence that indicates life and environmental conditions have changed (e.g.*,* tree rings, fish fossils in desert regions, ice cores). |
| **S6C3-PO3** | Concept3=Changes in the Earth and Sky |