

## 4<sup>th</sup> Grade Science: I Can Statements

Processes, Content Statements & Expectations (Disciplinary Knowledge)	I Can Statement
<b>Earth Science-View From the Earth</b>	
<b>K-7 Standard E.ST: Develop an understanding that the sun is the central and largest body in the solar system and that Earth and other objects in the sky move in a regular and predictable motion around the sun. Understand that those motions explain the day, year, moon phases, eclipses and the appearance of motion of objects across the sky. Understand that gravity is the force that keeps the planets in orbit around the sun and governs motion in the solar system. Develop an understanding that fossils and layers of Earth provide evidence of the history of Earth's life forms, changes over long periods of time, and theories regarding Earth's history and continental drift.</b>	
<b>E.ST.E.1 Characteristics of Objects in the Sky- Common objects in the sky have observable characteristics.</b>	
E.ST.04.11 - Identify common objects in the sky, such as the sun and the moon.	I can identify common objects in the sky, such as the sun and moon.
E.ST.04.12 - Compare and contrast the characteristics of the sun, moon and Earth, including relative distances and abilities to support life.	I can compare and contrast the characteristics of the sun, moon, and Earth, including relative distances and abilities to support life.
<b>E.ST.E.2 Patterns of Objects in the Sky- Common objects in the sky have observable characteristics and predictable patterns of movement.</b>	
E.ST.04.21 - Describe the orbit of the Earth around the sun as it defines a year.	I can describe the orbit of the Earth around the sun as it defines a year.
E.ST.04.22 - Explain that the spin of the Earth creates day and night.	I can explain that the spin of the Earth creates day and night.
E.ST.04.23 - Describe the motion of the moon around the Earth.	I can describe the motion of the moon around the Earth.
E.ST.04.24 - Explain how the visible shape of the moon follows a predictable cycle which takes approximately one month.	I can explain how the visible shape of the moon follows a predictable cycle which takes approximately one month.
E.ST.04.25 - Describe the apparent movement of the sun and moon across the sky through day/night and the seasons.	I can describe the apparent movement of the sun and moon across the sky through day/night and the seasons.
<b>E.ST.E.3 Fossils- Fossils provide evidence about the plants and animals that lived long ago and the nature of the environment at that time.</b>	
E.ST.04.31 - Explain how fossils provide evidence of the history of the Earth.	I can explain how fossils provide evidence of the history of the Earth.

E.ST.04.32 - Compare and contrast life forms found in fossils and organisms that exist today.	I can compare and contrast life forms found in fossils and organism that exist today.
E.ES.E.2 – Weather-Weather changes from day to day and over the seasons.	I can explain how weather changes from day to day over the seasons.
E.ES.E.3 – Weather Measurement – Scientists use tools for observing, recording, and predicting weather changes.	I can use scientific tools to observe, record, and predict weather changes.
S.IP.E.1 Inquiry involves generating questions, conducting investigations, and developing solutions to problems through reasoning and observation.	
S.IP.04.11 - Make purposeful observation of the natural world using the appropriate senses.	I can make purposeful observations of the natural world using my senses.
S.IP.04.12 - Generate questions based on observations.	I can make questions based on observations.
S.IP.04.13 - Plan and conduct simple and fair investigations	I can plan, and conduct simple and fair investigations.
S.IP.04.14 - Manipulate simple tools that aid observation and data collection (for example: hand lens, balance, ruler, meter stick, measuring cup, thermometer, spring scale, stop watch/timer, graduated cylinder/beaker).	I can use simple tools that help aid observation and data collection.
S.IP.04.15 - Make accurate measurements with appropriate units (millimeters centimeters, meters, milliliters, liters, Celsius, grams, seconds, minutes) for the measurement tool.	I can make accurate measurements with appropriate units.
S.IP.04.16 - Construct simple charts and graphs from data and observations.	I can make simple charts and graphs for data and observations.
S.IA.E.1 Inquiry includes an analysis and presentation of findings that lead to future questions, research, and investigations.	
S.IA.04.11 - Summarize information from charts and graphs to answer scientific questions.	I can summarize information from charts and graphs to answer scientific questions.
S.IA.04.12 - Share ideas about science through purposeful conversation in collaborative groups.	I can share ideas about science through purposeful conversation in collaborative groups.
S.IA.04.13 - Communicate and present findings of observations and investigations.	I can communicate and present finding of observations and investigations.

S.IA.04.14 - Develop research strategies and skills for information gathering and problem solving.	I can develop research strategies and skills for information gathering and problem solving.
S.IA.04.15 - Compare and contrast sets of data from multiple trials of a science investigation to explain reasons for differences.	I can compare and contrast sets of data from multiple trials of a science investigation to explain reasons for differences.
S.RS.E.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.04.11 - Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.	I can show scientific concepts through various illustrations, performances, models, exhibits, and activities.
S.RS.04.14 - Use data/samples as evidence to separate fact from opinion.	I can use data/samples as evidence to separate fact from opinion.
S.RS.04.15 - Use evidence when communicating scientific ideas.	I can use evidence when communicating scientific ideas.
S.RS.04.16 - Identify technology used in everyday life.	I can identify technology used in everyday life.
S.RS.04.17 - Identify current problems that may be solved through the use of technology.	I can identify current problems that may be solved through the use of technology.
S.RS.04.19 - Describe how people have contributed to science throughout history and across cultures.	I can describe how people have contributed to science throughout history and across cultures.