

4th Grade Science: I Can Statements

Processes, Content Statements & Expectations (Disciplinary Knowledge)	I Can Statement
Physical Science - States of Matter	
<i>P.PM.E.1 Physical Properties- All objects and substances have physical properties that can be measured.</i>	
P.PM.04.16 - Measure the weight (spring scale) and mass (balances in grams or kilograms) of objects.	I can measure the weight and mass of objects.
P.PM.04.17 - Measure volumes of liquids and capacities of containers in milliliters and liters.	I can measure volumes of liquids and capacities of containers in mL and L.
<i>P.PM.E.2 States of Matter- Matter exists in several different states: solids, liquids, and gases. Each state of matter has unique physical properties. Gases are easily compressed, but liquids and solids do not compress easily. Solids have their own particular shapes, but liquids and gases take the shape of the container.</i>	
P.PM.04.23 - Compare and contrast the states (solids, liquids, gases) of matter.	I can compare the states of matter. I can tell how states of matter are different.
<i>P.CM.E.1 Changes in State- Matter can be changed from one state (liquid, solid, gas) to another and then back again. This may be caused by heating and cooling.</i>	
P.CM.04.11 - Explain how matter can change from one state (liquid, solid, gas) to another by heating and cooling.	I can explain how matter can change from one state to another by heating and cooling.
<i>S.IP.E.1 Inquiry involves generating questions, conducting investigations, and developing solutions to problems through reasoning and observation.</i>	
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 create 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 aid observation in 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 using measurement tools.
S.IP.04.16 - Construct simple charts and graphs from data and observations.	I can make simple charts and graphs from data and observations.
<i>S.IA.E.1 Inquiry includes an analysis and presentation of findings that lead to future questions, research, and investigations.</i>	
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 findings of observations and investigations.
S.IA.04.14 - Develop research strategies and skills for information gathering and problem solving.	I can create 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.
<i>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.</i>	
S.RS.04.11 - Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.	I can demonstrate 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.04.19 - 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 other cultures.