

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

Processes, Content Statements & Expectations (Disciplinary Knowledge)	I Can Statement
Life Science – Organisms in Their Environment	
<b>K-7 Standard L.OL: Develop an understanding that plants and animals (including humans) have basic requirements for maintaining life which include the need for air, water and a source of energy. Understand that all life forms can be classified as producers, consumers, or decomposers as they are all part of a global food chain where food/energy is supplied by plants which need light to produce food/energy. Develop an understanding that plants and animal can be classified by observable traits and physical characteristics. Understand that all living organisms are composed of cells and they exhibit cell growth and division. Understand that all plants and animals have a definite life cycle, body parts, and systems to perform specific life functions.</b>	
<b>L.OL.E.1 Life Requirements- Organisms have basic needs. Animals and plants need air, water, and food. Plants also require light. Plants and animals use food as a source of energy and as a source of building material for growth and repair.</b>	
L.OL.04.15 - Determine that plants require air, water, light, and a source of energy and building material for growth and repair.	I can determine that plants require air, water, light, and a source of energy in building material for growth and repair.
L.OL.04.16 - Determine that animals require air, water, and a source of energy and building material for growth and repair.	I can determine that animals require air, water, and a source of energy and building material for growth and repair.
<b>K-7 Standard L.EV: Develop an understanding that plants and animals have observable parts and characteristics that help them survive and flourish in their environments. Understand that fossils provide evidence that life forms have changed over time and were influenced by changes in environmental conditions. Understand that life forms either change (evolve) over time or risk extinction due to environmental changes and describe how scientists identify the relatedness of various organisms based on similarities in anatomical features.</b>	
<b>L.EV.E.2 Survival- Individuals of the same kind differ in their characteristics, and sometimes the differences give individuals an advantage in surviving and reproducing.</b>	
L.EV.04.21 - Identify individual differences (for example: color, leg length, size, wing size) in organisms of the same kind.	I can identify individual differences (for example, color, leg length, size, wing size) in organisms of the same kind.
L.EV.04.22 - Identify how variations in physical characteristics of individual organisms give them an advantage for survival and reproduction.	I can identify how variations in physical characteristics of individual organisms give them an advantage for survival and reproduction.

K-7 Standard L.EC: Develop an understanding of the interdependence of the variety of populations, communities and ecosystems, including those in the Great Lakes region. Develop an understanding of different types of interdependence and that biotic (living) and abiotic (non-living) factors affect the balance of an ecosystem. Understand that all organisms cause changes, some detrimental and others beneficial, in the environment where they live.

L.EC.E.1 Interactions- Organisms interact in various ways including providing food and shelter to one another. Some interactions are helpful: others are harmful to the organism and other organisms.

L.EC.04.11 - Identify organisms as part of a food chain or food web.	I can identify organisms as part of a food chain or food web.
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L.EC.E.2 Changed Environment Effects- When the environment changes, some plants and animals survive to reproduce; others die or move to new locations.

L.EC.04.21 - Explain how environmental changes can produce a change in the food web.	I can explain how environmental changes can produce a change in the food web.
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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 summarize information from charts and graphs to answer scientific questions.
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S.IP.04.12 - Generate questions based on observations.	I can share ideas about science through purposeful conversation in collaborative groups.
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S.IA.04.13 - Communicate and present findings of observations and investigations. I can communicate and present finding of observations and investigations.	I can communicate and present finding of observations and investigations.
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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.	I can develop research strategies and skills for information gathering and problem solving.
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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 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.	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.	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.	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.	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.	I can identify current problems that may be solved through the use of technology.
S.RS.04.18 – Describe the effect that humans and other organisms have on the balance of the natural world.	I can describe the effect of human and other organisms have on the balance of the natural world.
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.	I can describe how people have contributed to science throughout history and across cultures.