

Physical & Life Sciences - 3rd Grade I Can Statements

Processes, Content Statements & Expectations (Disciplinary Knowledge)	I Can Statement
Physical Science – Force and Motion	
P.FM.E.2 Gravity – Earth pulls down on all objects with a force called gravity. With very few exceptions, objects fall to the ground no matter where the objects is on the Earth.	
P.FM.03.22 – Identify the force that pulls objects towards the Earth.	I can identify gravity as a pulling force.
P.FM.E.3 Force – A force is either a push or a pull. The motion of objects can be changed by forces, The sizes of the change is related to the size of the force. The change is also related to the weight (mass) of the object on which force is being exerted. When an object does not move in response to a force, it is because another force is being applied by the environment.	
P.FM.03.35 – Describe how a push and pull is a force.	I can describe a push or a pull as a force.
P.FM.03.36 – Relate a change in motion of an object to the force that caused the change of motion.	I can determine how a force causes an object to change its direction
P.FM.03.37 – Demonstrate how the change in motion of an object is related to the strength of the force acting upon the object and to the mass of the object.	I can demonstrate how a greater force causes and object to go a greater distance. I can model how the weight of an object changes the amount of force needed to move the object.
P.FM.03.38 – Demonstrate when an object does not move and responds to a force it is because another force is acting on it.	I can demonstrate how a balanced force will keep an object from moving.
P.FM.E.4 Speed – An object is in motion when its position is changing, The speed of an object is defined by how far it travels in a standard amount of time. *	
P.FM.03.41 – Describe the motion of objects in terms of direction.	I can show path and direction to describe the motion of an object.
P.FM.03.42 – Identify changes in motion (change direction, speeding up, and slowing down)	I can. Demonstrate how an object can change direction. I can demonstrate how an object can speed up or slow down.

P.FM03.43 – Relate the speed of an object to the distance it travels in a standard amount of time	I can demonstrate how speed affects the time and distance an object will travel.
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moving object.	object.
S.IA.03.12 Share ideas about changes in motion through purposeful conversation in collaborative groups.	I can share ideas about changes in motion with others in a group.
S.IA.03.13 Communicate and present findings of investigations that describe the motion of objects in terms of direction.	I can give a presentation about the direction of a moving object.
S.IA.03.14 Develop research strategies and skills for information gathering and problem solving about determining the speed of a moving object.	I can read and understand text to gather information. I can use information from the text to solve problems. (Process Unit)
S.IA.03.15 Compare and contrast sets of data from multiple trials of an investigation on the motion of objects to explain reasons for differences.	I can compare and contrast to explain differences in data during investigations of motion.
Reflection and Social Implications	
S.RS.03.11 Demonstrate similarities and differences in the motion of objects in terms of direction through various illustrations, performances or activities.	I can demonstrate similarities and differences about direction of a moving object by completing an illustration, presentation or activity.
S.RS.03.14 Use data/samples as evidence to separate fact from opinion about the speed of an object.	I can use examples to separate fact from opinion about the speed of an object.
S.RS.03.15 Use evidence when communicating, comparing and contrasting the motion of objects in terms of path and direction.	I can show the path and direction of a moving object.
S.RS.03.16 Identify technology used in everyday life to measure speed.	I can use technology to measure and record speed.
S.RS.03.17 Identify current problems about changes in the motion of objects that may be solved through the use of technology.	I can use technology to solve problems about motion of objects.
S.RS.03.19 Describe how people such as al Jazari, Isaac Newton, the Wright Brothers, Sakichi Toyota, and Henry Ford have contributed to science throughout history and across cultures.	I can describe how famous inventors have made contributions to science.

P.EN.E.1 Forms of Energy – Heat, electricity, light, and sound are forms of energy.	
P.EN.03.11 – Identify light and sound as forms of energy.	I can identify light and sound as forms of energy.
P.EN.E.2 Light Properties – Light travels in a straight path. Shadows result from light not being able to through an object. When light travels at an angle from one substance to another (air and water), it changes direction.*	
P.EN.03.21 – Demonstrate that light travels in a straight path that shadows are made by placing an object in a path of light.	I can show that light travels in a straight path. I can show that shadows are made by placing an object in the path of light.
P.EN.03.22 – Observe what happens to light when it travels from air to water (a straw half in the water and half in the air looks bent)	I can explain/illustrate what happens to light when it travels from air to water.
P.EN.E.3 Sound – Vibrating objects produce sound. The pitch of sound vibrates by changing the rate of vibration.	
P.EN.03.31 – Relate sounds to their sources of vibrations (for example: a musical note produced by a vibrating guitar string, sounds of a vibrating drum made by a vibrating drum head)	I can match a sound to the source of vibration.
P.EN.03.32 – Distinguish the effect of fast or slow vibrations as pitch.	I can recognize that pitch is determined by the speed of a vibration.
P.PM.E.5 Conductive and Reflective Properties- Object vary to the extent they absorb and reflect light energy and conduct heat and electricity.	
P.PM.03.51 – Demonstrate how some materials are heated more than others by light that shines on them.	I can demonstrate how light heats some materials more than others
P.PM.03.52 – Explain how we need light to see objects: light from a source reflects off objects and enters our eyes.	I can describe how we need light to see objects.

Inquiry Process	
S.IP.03.11 Make purposeful observations concerning sound and light	I can record observations about light. I can record observations about sound.
S.IP.03.12 Generate questions based on observations to understand sound and light.	I can ask questions to better understand light. I can ask questions to better understand sound.
S.IP.03.13 Plan and conduct simple and fair investigations of sound and light.	I can do investigations of light. I can do investigations of sound.
S.IP.03.14 Manipulate simple tools that aid observation and data collection in investigations of sound and light.	I can use tools to observe and collect information about light. I can use tools to observe and collect information about sound.
S.IP.03.15 Make accurate measurements with appropriate units for the measurement tool.	I can use tools to measure.
S.IP.03.16 Construct simple charts and graphs from data and observations dealing with sound and light.	I can make a chart or graph that shows information about light. I can make a chart or graph that shows information about sound.
Inquiry Analysis and Communication	
S.IA.03.11 Summarize information from data tables and graphs to answer scientific questions about sound and light.	I can use a table or graph to answer questions about light. I can use a table or graph to answer questions about light.
S.IA.03.12 Share ideas about sound and light through purposeful conversation in collaborative groups.	I can discuss with a group my ideas about light. I can discuss with a group my ideas about sound.
S.IA.03.13 Communicate and present findings of observations and investigations about sound and light using evidence.	I can present my observations about light. I can present my observations about sound.
Reflection and Social Implications	
S.RS.03.11 Demonstrate scientific concepts concerning sound and light through various illustrations, performances, models, exhibits, and activities.	I can demonstrate what I learned about light.(illustrate, model, exhibit, activity) I can demonstrate what I learned about sound.(illustrate, model, exhibit, activity)

S.RS.03.14 Use data/samples as evidence to separate fact from opinion regarding sound and light.	I can use examples to separate fact from fiction about light. I can use examples to separate fact from fiction about sound.
S.RS.03.15 Use evidence in making scientific decisions about sound and light.	I can use evidence to tell about light. I can use evidence to tell about sound.
S.RS.03.16 Identify technology associated with sound and light.	I can use light technology. I can use sound technology.
S.RS.03.17 Identify current problems on sound and light that may be solved through the use of technology.	I can use technology to solve problems about light. I can use technology to solve problems about sound.
S.RS.03.17 Describe how people have contributed to the science of sound and light throughout history and across cultures.	I can describe how people have made contributions to science about light and sound.
S.RS.03.18 Describe the effect invasive species have on the balance of the natural world.	I can describe how invasive species have changed the balance of our natural world.
S.RS.03.19 Describe how people such as Barbara McClintock and Jean Lamarck have contributed to science throughout history and across cultures	I can describe how famous scientist have contributed to science throughout history/cultures.

LIFE SCIENCE

L.OL.E.3 Structures and Functions-Organisms have different structures that serve different functions in growth, survival, and reproduction.

L.OL.03.31 Describe the function of the following plant parts: flower, stem, root , and leaf.	I can tell about the function of the parts of a plant. (flower, stem, roots, leaves)
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<p>L.OL.03.32 Identify and compare structure in animals used for controlling body temperature/support, movement, food getting, and protection. (for example: fur, wings, teeth, scales)</p>	<p>I can identify and compare parts of animals that control their body temperature.</p> <p>I can identify and compare parts of animals that give them support.</p> <p>I can identify and compare parts of animals that help them move.</p> <p>I can identify and compare parts of animals that help them get food.</p> <p>I can identify and compare parts of animals that give them protection. (fur, wings, teeth, claws, scales)</p>
<p>L.OL.E.4 Classification - Organisms can be classified on the basis of observable characteristics</p>	
<p>L.OL.03.41 Classify plants on the basis of observable physical characteristics (roots, leaves, stems and flowers)</p>	<p>I can classify plants by their observable parts. (roots, leaves, stems, flowers)</p>
<p>L.OL.3.42 Classify animals on the basis of observable physical characteristics (backbone, body covering and limbs)</p>	<p>I can classify animals by their physical characteristics. (backbone, body covering. Limbs)</p>
<p>EVOLUTION</p>	
<p>L.EV.E.1 Environmental Adaption – Different kinds of organisms have characteristics that help them to live in different environments.</p>	
<p>L.EV.03.11 Relate characteristic and functions of observable parts in a variety of plants that allow them to live in their environment (leaf shape, thorns, odor, color)</p>	<p>I can identify characteristics of a plant that help it survive in its environment</p>
<p>L.EV.03.12 Relate characteristic and functions of observable body parts to the ability of animals to live in their environment. (sharp teeth, claws, color, and body coverings)</p>	<p>I can identify characteristics of an animal that help it survive in its environment.</p>

Inquiry Processes	Learning Targets
S.IP.03.11 Make purposeful observations of plants and animals using the appropriate senses.	I can use my senses to describe plants. I can use my senses to describe animals.
S.IP.03.12 Generate questions based on observations of plants and animals.	I can develop questions based on my observations of plants. I can develop questions based on my observations of animals.
S.IP.03.13 Plan and conduct simple and fair investigations.	I can do experiments about plants. I can do experiments about animals.
S.IP.03.14 Manipulate simple tools that aid observation and data collection (hand lens, thermometer, tape measure).	I can use tools to observe and collect information. (plants/animals) (tape measure, hand lens, thermometer)
S.IP.03.15 Make accurate measurements with appropriate units (Celsius, centimeters).	I can use metric units to measure temperature and

	length.
S.IP.03.16 Construct simple charts and graphs from data and observations of plants and animals.	I can make a graph/chart of information about plants/animals.
Inquiry Analysis and Communication	
S.IA.03.11 Summarize information from charts about structures and functions of plant and animal parts.	I can use information from charts and graphs to answer questions about plants/animals.
S.IA.03.12 Share ideas about plant and animal structures and functions through purposeful conversation in collaborative groups.	I can share ideas about plants/animals with others in a group.
S.IA.03.13 Communicate and present findings of observations and investigations.	I can give a presentation about plants/animals.
S.IA.03.14 Develop research strategies and skills for information gathering and problem solving about plants and animals.	I can read and understand text to gather information. I can use information from the text to solve problems.
Reflection and Social Implications	
S.RS.03.11 Demonstrate understanding of plant and animal structures and functions through illustrations, descriptions, or discussions.	I can demonstrate similarities and differences about plants/animals by completing an illustration, presentation or activity.
S.RS.03.14 Use samples as evidence to separate fact from opinion when classifying plants and animals.	I can use examples to separate facts from opinions about plants/animals.
S.RS.03.15 Use evidence when communicating about plants and animals.	I can give examples when telling about plants/animals.
S.RS.03.16 Identify technology used in everyday life when taking temperatures, making measurements, and making a Power Point presentation.	I can identify the technology needed to take the temperature, measure length, and create a

	Power Point presentation of plants/animals.
S.RS.03.17 Identify current problems about plants and animals that may be solved through the use of technology.	I can use technology to find ways to solve problems about plants/animals.
S.RS.03.18 Describe the effect invasive species have on the balance of the natural world.	I can describe how invasive species have changed the balance of our natural world.
S.RS.03.19 Describe how people such as Barbara McClintock and Jean Lamarck have contributed to science throughout history and across cultures	I can describe how famous scientist have contributed to science throughout history/cultures.