

Indicator	Standard	1 – Beginner Learner	2 – Developing Learner	3 – Proficient Learner	4 – Distinguished Learner	Evidence	Assessed
Uses science and engineering practices and reasoning skills to explore and understand matter	S2P1	Even with teacher support, does not -Ask questions to describe and classify different objects according to their physical propertiesConstruct an explanation for how structures made from small piecesProvide evidence from observations to construct an explanation that some changes in matter caused by heating or cooling can be reversed and some changes are irreversible.	With teacher support, does -Ask questions to describe and classify different objects according to their physical propertiesConstruct an explanation for how structures made from small piecesProvide evidence from observations to construct an explanation that some changes in matter caused by heating or cooling can be reversed and some changes are irreversible.	-Ask questions to describe and classify different objects according to their physical propertiesConstruct an explanation for how structures made from small piecesProvide evidence from observations to construct an explanation that some changes in matter caused by heating or cooling can be reversed and some changes are irreversible.	Student independently -Ask questions to describe and classify different objects according to their physical propertiesConstruct an explanation for how structures made from small piecesProvide evidence from observations to construct an explanation that some changes in matter caused by heating or cooling can be reversed and some changes are irreversible.	Options include but not limited to: Labs, Performance Task, Classroom Discussion, Formative Assessments, Assessment Probes, Teacher Observations, Presentations	Q2
Uses science and engineering practices and reasoning skills to explore and understand forces (Pushes and Pulls)	S2P2	Even with teacher support, does not  -Plan and carry out an investigation to demonstrate how pushing and pulling on an object affects the motion of the object	With teacher support, does  -Plan and carry out an investigation to demonstrate how pushing and pulling on an object affects the motion of the object	-Plan and carry out an investigation to demonstrate how pushing and pulling on an object affects the motion of the object -Design a device to change the speed of an object	Student independently -Plan and carry out an investigation to demonstrate how pushing and pulling on an object affects the motion of the object -Design a device to change the speed of an object	Options include but not limited to: Labs, Performance Task, Classroom Discussion, Formative Assessments, Assessment	Q2



	-Design a device to change the speed of an object - Record and analyze data to decide if a design solution works as intended to change the speed or direction of an object with a force (a push or a pull).	-Design a device to change the speed of an object - Record and analyze data to decide if a design solution works as intended to change the speed or direction of an object with a force (a push or a pull).	- Record and analyze data to decide if a design solution works as intended to change the speed or direction of an object with a force (a push or a pull).	- Record and analyze data to decide if a design solution works as intended to change the speed or direction of an object with a force (a push or a pull).	Probes, Teacher Observations, Presentations	
S2E1 S2E2	Even with teacher support, does not  -Ask questions to describe the physical attributes (size and brightness) of starsPlan and carry out an investigation to determine the effect of the position of the sun in relation to a fixed object on Earth at various times of the dayDesign and build a structure that demonstrates how shadows change throughout the dayRepresent data in tables and/or graphs of the length of the day and night to recognize the change in seasonsUse data from personal observations to describe, illustrate, and	With teacher support, does -Ask questions to describe the physical attributes (size and brightness) of starsPlan and carry out an investigation to determine the effect of the position of the sun in relation to a fixed object on Earth at various times of the dayDesign and build a structure that demonstrates how shadows change throughout the dayRepresent data in tables and/or graphs of the length of the day and night to recognize the change in seasons.	-Ask questions to describe the physical attributes (size and brightness) of starsPlan and carry out an investigation to determine the effect of the position of the sun in relation to a fixed object on Earth at various times of the dayDesign and build a structure that demonstrates how shadows change throughout the dayRepresent data in tables and/or graphs of the length of the day and night to recognize the change in seasons.	Student independently -Ask questions to describe the physical attributes (size and brightness) of starsPlan and carry out an investigation to determine the effect of the position of the sun in relation to a fixed object on Earth at various times of the dayDesign and build a structure that demonstrates how shadows change throughout the dayRepresent data in tables and/or graphs of the length of the day and night to recognize the change in seasonsUse data from personal observations to describe, illustrate, and predict how the appearance of	Options include but not limited to: Labs, Performance Task, Classroom Discussion, Formative Assessments, Assessment Probes, Teacher Observations, Presentations	Q3



		predict how the appearance of the moon changes over time in a pattern.	-Use data from personal observations to describe, illustrate, and predict how the appearance of the moon changes over time in a pattern.	-Use data from personal observations to describe, illustrate, and predict how the appearance of the moon changes over time in a pattern.	the moon changes over time in a pattern		
Uses science and engineering practices and reasoning skills to explore and understand seasonal changes/life cycles	S2L1	Even with teacher support, does not -Develop models to identify the parts of a plant—root, stem, leaf, and flower Ask questions to compare and contrast the basic needs of plants (air, water, light, and nutrients) and animals (air, water, food, and shelter) Design a solution to ensure that a plant or animal has all of its needs met	With teacher support, does -Develop models to identify the parts of a plant—root, stem, leaf, and flower Ask questions to compare and contrast the basic needs of plants (air, water, light, and nutrients) and animals (air, water, food, and shelter) Design a solution to ensure that a plant or animal has all of its needs met	-Develop models to identify the parts of a plant—root, stem, leaf, and flower Ask questions to compare and contrast the basic needs of plants (air, water, light, and nutrients) and animals (air, water, food, and shelter) Design a solution to ensure that a plant or animal has all of its needs met	Student independentlyDevelop models to identify the parts of a plant—root, stem, leaf, and flower Ask questions to compare and contrast the basic needs of plants (air, water, light, and nutrients) and animals (air, water, food, and shelter) Design a solution to ensure that a plant or animal has all of its needs met	Options include but not limited to: Labs, Performance Task, Classroom Discussion, Formative Assessments, Assessment Probes, Teacher Observations, Presentations	Q3



## **Second Grade**

Science								
Indicators	Related	Q1	Q2	Q3	Q4			
	Standard(s)							
Uses science and engineering practices and reasoning	S2P1, S2P2,							
skills to explore and understand science concepts	S2E1, S2E2,							
	S2L1							
Matter	S2P1							
Forces	S2P2							
Sun, stars and moon	S2E1, S2E2							
Life cycles	S2L1							