Building Blocks Science					
Lesson	**Big Idea**	**Essential Question**	**Vocabulary**	**Standard**	**Assessment**
Lesson 1 Push, Pull, Roll Investigation A	Push, Pull, Roll	What do you know about force and Motion?	force, push, pull, motion, friction	K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.	Pre Assessment of force and motion
Lesson 1 Push, Pull, Roll Investigation B	Push, Pull, Roll	roll a ball?	friction	K-2-ETS1-1: Ask questions, make observations and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.	Draw a picture to show what you know about force and motion.
Lesson 1 Push, Pull, Roll Investigation C	Push, Pull, Roll	Can you count and sort pieces to build a ramp?	ramp, force, push, pull, motion, friction	K-2-ETS1-1: Ask questions, make observations and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.	Draw a picture of your ramp.
Lesson 1 Push, Pull, Roll Investigation D	Push, Pull, Roll	Can you measure a distance?	measure, ramp, force, push, pull, motion, friction	K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.	Write about how you can make a ball roll faster. Measure using blocks how far the ball rolls on 2 surfaces.

Lesson 2 Push, Pull, Swing Investigation A	Push, Pull, Swing	How does a swing move?	force, motion, back forward, swing, up, back and forth, friction, swing	K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object. K-2-ETS1-2: Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	Draw a picture of your swing. Write how you make a swing move.
Lesson 3 Push, Pull, Tumble Investigation A	Push, Pull, Tumble	How can I make dominoes tumble?	force, motion, gravity, tumble	K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object. K-2-ETS1-2: Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	Draw to describe your domino.
Lesson 3 Push, Pull, Tumble Investigation B	Push, Pull, Tumble	What is a system?	system, force, motion, gravity, tumble, ordinal numbers	K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object. K-2-ETS1-2: Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	Draw how you can make all of the dominos fall with one push.

Lesson 4 Push, Pull, Spin Investigation A	Push, Pull, Spin	Have you seen something that spins or twirls?	force, twirl, spin, gravity, tilt, wobble, balance, twist	K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object. K-2-ETS1-2: Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	Draw your top.
Lesson 4 Push, Pull, Spin Investigation B	Push, Pull, Spin	How does a top spin?	force, twirl, spin, gravity, tilt, wobble, balance, twist	K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object. K-2-ETS1-2: Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	Write how you can make your top spin.
Lesson 5 Push, Pull, Invent Investigation A	Push, Pull, Invent	Can you use a ball to tumble dominoes?	Push, pull, motion, friction, force, twirl, spin, balance, twist, system, motion, gravity, tumble, ordinal numbers, back forward, swing, up, back and forth, swing, measure, ramp,	K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object. K-2-ETS1-2: Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	Describe and share their invention. Teacher will take pictures to document.

Lesson 5 Push, Pull, Invent Investigation B	Push, Pull, Invent	Can you combine systems to tumble dominoes?	Push, pull, motion, friction, force, twirl, spin, balance, twist, system, motion, gravity, tumble, ordinal numbers, back forward, swing, up, back and forth, swing, measure, ramp,	K-PS2-1 Pland and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object. K-2-ETS1-2: Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	Describe and share their invention. Teacher will take pictures to document.
Lesson 5 Push, Pull, Invent Investigation C	Push, Pull, Invent	How can we fix problems with our inventions?	Push, pull, motion, friction, force, twirl, spin, balance, twist, system, motion, gravity, tumble, ordinal numbers, back forward, swing, up, back and forth, swing, measure, ramp,	K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object. K-2- K-PS-2-2: Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.	Describe and share their invention. Teacher will take pictures to document.
Lesson 5 Push, Pull, Invent Investigation D	Push, Pull, Invent	What have you learned about force and motion?	Push, pull, motion, friction, force, twirl, spin, balance, twist, system, motion, gravity, tumble, ordinal numbers, back forward, swing, up, back and forth, swing, measure, ramp,	K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.	Post-Unit Assessment
Lesson	**Big Idea**	**Essential Question**	**Vocabulary**	**Standard**	**Assessment**
Lesson 1 Living & Nonliving Things Investigation A	LIving and Nonliving Things	How are living things different from nonliving things?	Bessbug, habitat, observation, seed	K-LS1-1:Use oservation to describe patterns of what plants and animals need to survive.	In Science Journal: Sort the Living and Non-Living Pictures.
Lesson 1 Living & Nonliving Things Investigation B	LIving and Nonliving Things	How are living things different from nonliving things?	Bessbug, habitat, observation, seed	K-LS1-1:Use oservation to describe patterns of what plants and animals need to survive.	Science Journal:Circle the pictures of what living things need.

Lesson 1 Living & Nonliving Things Investigation C	LIving and Nonliving Things	How are living things different from nonliving things?	Bessbug, habitat, observation, seed	K-LS1-1:Use oservation to describe patterns of what plants and animals need to survive.	Science Journal:Label the Bessbugs.
Lesson 1 Living & Nonliving Things Investigation D	LIving and Nonliving Things	How are living things different from nonliving things?	Bessbug, habitat, observation, seed	K-LS1-1:Use oservation to describe patterns of what plants and animals need to survive.	Science Journal: Complete the plant observation sheet. Assessment Observation Sheet
Lesson 2 Needs of Living Things Investigation A	Needs of Living Things	What do all living things need to survive?	Control, data, experiment, prediction, seedling	K-LS1-1:Use oservation to describe patterns of what plants and animals need to survive.	Science Journal: Prediction of Seeds
Lesson 2 Needs of Living Things Investigation B	Needs of Living Things	What do all living things need to survive?	Control, data, experiment, prediction, seedling	K-LS1-1:Use oservation to describe patterns of what plants and animals need to survive.	Student Activity Sheet 2B
Lesson 2 Needs of Living Things Investigation C	Needs of Living Things	What do all living things need to survive?	Control, data, experiment, prediction, seedling	K-LS1-1:Use oservation to describe patterns of what plants and animals need to survive.	Science Journal:Plant Observation, Assessment Observation Sheet
Lesson 3 Living Things and Their Enviroments Investigation A	Living Things and Their Environment	What is an environment?	Conclude, environment, observation	K-ESS2-2:Construct an argument supported by evidence for how plants and animals can change the environment and meet their needs.	Discussion of Environment Photo Cards
Lesson 3 Living Things and Their Enviroments Investigation B	Living Things and Their Environment	What is an environment?	Conclude, environment, observation	K-ESS3-1:Use a model to represent the relationship between the needs of different plants or animals	Student Activity Sheet 3
Lesson 3 Living Things and Their Enviroments Investigation C	Living Things and Their Environment	What is an environment?	Conclude, environment, observation	K-ESS3-1:Use a model to represent the relationship between the needs of different plants or animals	Science Journal: Assessment Observation Sheet of Plant
Lesson 4 Protecting the Enviroment Investigation A	Protecting the Environment	How can humans change their local environment?	Bessbug, habitat, observation, seed, control, data, experiment, prediction, seedling, conclude, environment, observation	K-ESS3-3:Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.	Science Journal: Assessment Observation Sheet of Plant

Lesson 4 Protecting the Enviroment Investigation B	Protecting the Environment	How can humans change their local environment?	Bessbug, habitat, observation, seed, control, data, experiment, prediction, seedling, conclude, environment, observation	K-ESS3-3:Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.	Class Discussion of Living Things' Needs
Lesson 4 Protecting the Enviroment Investigation C	Protecting the Environment	How can humans change their local environment?	Bessbug, habitat, observation, seed, control, data, experiment, prediction, seedling, conclude, environment, observation	K-ESS3-3:Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.	Science Journal: Students draw an example of humans changing their environment.
Lesson 4 Protecting the Enviroment Investigation D	Protecting the Environment	How can humans change their local environment?	Bessbug, habitat, observation, seed, control, data, experiment, prediction, seedling, conclude, environment, observation	K-ESS3-3:Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.	End of Unit Assessment
Lesson	**Big Idea**	**Essential Question**	**Vocabulary**	**Standard**	**Assessment**
Lesson 1 Observing the Sky Investigation A	Weather and Sky	What do we know about weather?	Atmosphere, Daytime, Earth, Moon, Nighttime, Sun, Sunrise, Sunset, Temperature, and Weather	K-ESS2-1- Use and share observations of local weather conditions to describe patterns over time.	In Science Journal: What is one question you have about weather? Draw or write your idea.
Lesson 1 Observing the Sky Investigation B	Weather and Sky	What can I observe in the daytime sky?	Atmosphere, Daytime, Earth, Moon, Nighttime, Sun, Sunrise, Sunset, Temperature, and Weather	K-ESS2-1- Use and share observations of local weather conditions to describe patterns over time.	In Science Journal: Draw or write one thing that you see in the daytime sky.
Lesson 1 Observing the Sky Investigation C	Weather and Sky	What can I observe in the nightime sky?	Atmosphere, Daytime, Earth, Moon, Nighttime, Sun, Sunrise, Sunset, Temperature, and Weather	K-ESS2-1- Use and share observations of local weather conditions to describe patterns over time.	In Science Journal: Draw or write down one thing you wouldn't see in the nighttime sky.

Lesson 1 Observing the Sky Investigation D	Weather and Sky	How do the daytime and nighttime skies compare?	Atmosphere, Daytime, Earth, Moon, Nighttime, Sun, Sunrise, Sunset, Temperature, and Weather	K-ESS2-1-Use and share observations of local weather conditions to describe patterns over time.	In Science Journal: Sometimes you can see the Moon in the daytime and the nighttime sky. Draw or write why you think this is.
Lesson 2 Weather Watchers Investigation A	Weather and Sky	Can I describe temperature?	Cloud Cover, Pattern, Precipitation, Temperature, Weather Forecast, Weather Reporter, and Wind	K-ESS2-1- Use and share observations of local weather conditions to describe patterns over time.	In Science Journal: Put the words cool, warm, cold, and hot in order from lowest temperature to highest temperature.
Lesson 2 Weather Watchers Investigation B	Weather and Sky	Can I model precipitation?	Cloud Cover, Pattern, Precipitation, Temperature, Weather Forecast, Weather Reporter, and Wind	K-ESS2-1- Use and share observations of local weather conditions to describe patterns over time.	In Science Journal: Draw or descirbe a place that would get no snow or ice.
Lesson 2 Weather Watchers Investigation C	Weather and Sky	Can I identitify cloud cover?	Cloud Cover, Pattern, Precipitation, Temperature, Weather Forecast, Weather Reporter, and Wind	K-ESS2-1- Use and share observations of local weather conditions to describe patterns over time.	In Science Journal: What do you like to do outside on a sunny day?
Lesson 2 Weather Watchers Investigation D	Weather and Sky	Can I describe wind patterns?	Cloud Cover, Pattern, Precipitation, Temperature, Weather Forecast, Weather Reporter, and Wind	K-ESS2-1- Use and share observations of local weather conditions to describe patterns over time.	In Science Journal: What is something you could use to see how fast the wind is blowing?
Lesson 2 Observing the Sky Investigation E	Weather and Sky	What can I observe about the weather today?	Cloud Cover, Pattern, Precipitation, Temperature, Weather Forecast, Weather Reporter, and Wind	K-ESS2-1-Use and share observations of local weather conditions to describe patterns over time.	In Science Journal: Draw a picture of how you would dress for a rainy day, a windy day, and a cold day. Share your drawings with a partner.
Lesson 3 Dangerous Weather Investigation A	Weather and Sky	How do we use weather patterns to understand dangerous weather?	Absorb, Dangerous Weather, Flood, Hazard, Hurricane, Lightning, Thunder, Thunderstorm, Tornado, and Vortex	K-ESS3-2- Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.	In Science Journal: What is a question you have about dangerous weather?

Lesson 3 Dangerous Weather Investigation B	Weather and Sky	What happens when too much rain falls?	Absorb, Dangerous Weather, Flood, Hazard, Hurricane, Lightning, Thunder, Thunderstorm, Tornado, and Vortex	K-ESS3-2- Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.	In Science Journal: What is one thing you should not do if you hear there is a flood warning in your area?
Lesson 3 Dangerous Weather Investigation C	Weather and Sky	How can wind turn into dangerous weather?	Absorb, Dangerous Weather, Flood, Hazard, Hurricane, Lightning, Thunder, Thunderstorm, Tornado, and Vortex	K-ESS3-2- Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.	In Science Journal: Draw a picture of your model tornado. What did you do to make the tornado form?
Lesson 4 Warming the Earth Investigation A	Weather and Sky	How can we measure temperature?	Celsius, Degrees, Fahrenheit, Thermometer	K-PS3-1- Make observations to determine the effect of sunlight on Earth's surface.	In Science Journal: Draw a picture of a thermometer on a hot summer day.
Lesson 4 Warming the Earth Investigation B	Weather and Sky	How does temperature change during the day?	Celsius, Degrees, Fahrenheit, Thermometer	K-PS3-1- Make observations to determine the effect of sunlight on Earth's surface.	In Science Journal: Draw a picture of what the thermometer would look like on a day that it is snowing outside.
Lesson 4 Warming the Earth Investigation C	Weather and Sky	How does the Sun change objects?	Celsius, Degrees, Fahrenheit, Thermometer	K-PS3-1- Make observations to determine the effect of sunlight on Earth's surface.	In Science Journal: What is another object that you have seen warmed by the Sun? Draw a picture.

Lesson 5 In the Heat of the Sun Investigation A	Weather and Sky	How can I stay cool?	Engineer, all vocab. from previous lessons	K-PS3-2- Use tools and materials provided to design and build a structure that will reduce the warming effect of sunlight on Earth's surface. K-2-ETS1-1- Ask questions, make observations and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool. K-2-ETSI-2- Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as need to solve a given problem.	In Science Journal: Draw a picture of a way to block the Sun's rays and a second picture of a way to cool warm air.
Lesson 5 In the Heat of the Sun Investigation B	Weather and Sky	Can we design and build something to block the Sun's rays?	Engineer, all vocab. from previous lessons	K-PS3-2- Use tools and materials provided to design and build a structure that will reduce the warming effect of sunlight on Earth's surface. K-2-ETS1-1- Ask questions, make observations and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool. K-2-ETSI-2- Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as need to solve a given problem.	Observation Sheet : Plan and build structures.

Lesson 5 In the Heat of the Sun Investigation C	Weather and Sky	How can we test and improve our structure?	Engineer, all vocab. from previous lessons	K-PS3-2- Use tools and materials provided to design and build a structure that will reduce the warming effect of sunlight on Earth's surface. K-2-ETS1-1- Ask questions, make observations and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool. K-2-ETSI-2- Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as need to solve a given problem.	Observation Sheet: Test the structures they built.
Lesson 5 In the Heat of the Sun Investigation D	Weather and Sky	What have I learned about weather?	Engineer, all vocab. from previous lessons	K-PS3-2- Use tools and materials provided to design and build a structure that will reduce the warming effect of sunlight on Earth's surface. K-2-ETS1-1- Ask questions, make observations and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool. K-2-ETSI-2- Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as need to solve a given problem.	Summative Assessment