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A Grades K–1 Correlation of
Tigtag Jr.
to the
2014 Oregon Science Standards

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Step 1 Click on the Tigtag Jr. logo below.



Step 2 Play any video or view an activity within this correlation by clicking on the "green circle" beside each of the Tigtag titles.

Forces and Interactions: Pushes and Pulls

K-PS2-2 Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or pull.

PS2.A
Forces and motion

Pushes and pulls can have different strengths and directions.

Exploring forces

What makes things move?

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.

PS2.A
Forces and motion

Pushing or pulling an object can change the speed or direction of its motion and can start or stop it.

What makes things move?

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.

PS2.B
Types of interactions

When objects touch or collide, they push on one another and can change motion.

Speed

Speed and strength

What makes things stop?

What makes things stop?

Forces and Interactions: Pushes and Pulls

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.

PS2.B
Relationship between energy and forces

A bigger push or pull makes things speed up or slow down more quickly.

- Dung beetle**
- How do brakes work?**
- Ice skating**

- Low and high speeds**
- What makes things stop?**

K-PS2-2 Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or pull.

ETS1.A
Defining engineering problems

A situation that people want to change or create can be approached as a problem to be solved through engineering. Such problems may have many acceptable solutions.

- Gravity**
- Astronauts**

- Speed and strength**
- What makes things move?**

Interdependent Relationships in Ecosystems: Animals, Plants and Their Environments.

K-LS1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive.

LSC.1

Organization for Matter and Energy Flow in Ecosystems: Animals, Plants, and Their Environment

All animals need food in order to live and grow. They obtain food from plants or from other animals. Plants need water and light to live and grow.

- What do plants need?
- What do plants eat?
- Peregrine falcon
- What do animals eat?

- What do plants need?
- Plant growth
- Growing seeds
- What do animals eat?
- Herbivores, carnivores and omnivores

K-ESS3-1 Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.

ESS3.A

Natural Resources

Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do.

- What are plants used for?
- Chocolate
- Seed dispersal
- Plant life cycle

- Plant uses
- Plant uses
- Which part of the plant do we eat?
- Observing seeds
- Plant life cycles
- Seed cars

Interdependent Relationships in Ecosystems: Animals, Plants and Their Environments.

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.

ESS3.C

Human Impacts on Earth Systems

Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things.

Where do animals live?

Beaver lodge

Where do you live?

Animal homes

Build a wormery

Build a wormery

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.

ETS1.B

Developing Possible Solutions

designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people.

Red crab spider

K-PS3-1 Make observations to determine the effect of sunlight on Earth's surface.

PS3.B

Conservation of Energy and Energy Transfer

Sunlight warms Earth's surface.



Day and night



Nocturnal animals



Day and night



Make a model sunshade

K-ESS2-1 Use and share observations of local weather conditions to describe patterns over time.

ESS2.D

Weather and Climate

Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time. People measure these conditions to describe and record the weather and to notice patterns over time.



Thunderstorm



Where does rain come from?



Make a weather vane



Types of weather



Thunder and lightning



Does rain fall evenly?



Video



Activity



Quiz



Game

K-ESS3-2 Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to severe weather.

ESS3.B

Natural Hazards

Some kinds of severe weather are more likely than others in a given region. Weather scientists forecast severe weather so that communities can prepare for and respond to these events.

ETS1.A

Defining and Delimiting an Engineering Problem

Asking questions, making observations, and gathering information are helpful in thinking about problems.

 **Tornadoes**

 **Living by the river**



Waves: Light and Sound

1-PS4-2 Make observations to construct an evidence-based account that objects can be seen only when illuminated.

PS4.B

Electromagnetic Radiation

Objects can be seen if light is available to illuminate them or if they give off their own light.

- Light
- Reflectors
- How do we see?

- Light and sight
- Light

1-PS4-3 Plan and conduct an investigation to determine the effect of placing objects made with different materials in the path of a beam of light

PS4.B

Electromagnetic Radiation

Some materials allow light to pass through them, others allow only some light through and others block all the light and create a dark shadow on any surface beyond them, where the light cannot reach. Mirrors can be used to redirect a light beam.

- What is a shadow?
- Rainforest shadow

- What are shadows?
- Shadows
- Making shadow shapes
- Mirror balls

1-PS4-4 Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.*

PS4.C

Information Technologies and Instrumentation

People also use a variety of devices to communicate (send and receive information) over long distances.

 **Vibrations**



Video



Activity



Quiz



Game

1-LS1-2 Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.

LS1.B

Growth and Development of Organisms

Adult plants and animals can have young. In many kinds of animals, parents and the offspring themselves engage in behaviors that help the offspring to survive.

 **Vertebrates and invertebrates**

1-LS1-1 Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.

LS1.D

Information Processing

Animals have body parts that capture and convey different kinds of information needed for growth and survival. Animals respond to these inputs with behaviors that help them survive. Plants also respond to some external inputs.

 **Seals**
 **Touch**
 **Do jellyfish have brains?**

 **Touch and feel**
 **Touch**
 **What's in the box?**
 **Touch**

Space Systems: Patterns and Cycles

1-ESS1-1 Use observations of the sun, moon, and stars to describe patterns that can be predicted.

ESS1.A

The universe and its stars

Patterns of the motion of the sun, moon and stars in the sky can be observed, described, and predicted.

- The Moon
- The Sun

- The Sun and Moon
- Chocolate moons
- The Sun and Moon

1-ESS1-2 Make observations at different times of the year to relate the amount of daylight to the time of year.

ESS1.B

Earth and the solar system

Seasonal patterns of sunrise and sunset can be observed, described, and predicted.

- Day and night
- Nocturnal animals

- Day and night
- Day, night and nocturnal animals
- Day and night
- Day and night

2-LS2-2 Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

LS2.A

Interdependent Relationships in Ecosystems

Plants depend on animals for pollination or to move their seeds around.

 Seed dispersal

 Observing seeds

 Plant life cycles

 Seed cars

 Plant life cycle



Interdependent Relationships in Ecosystems

2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats.

LS4.D

Biodiversity and Humans

There are many different kinds of living things in any area, and they exist in different places on land and in water.

- Where do animals live?
- Red crab spider

- Where do animals live?
- Animal homes
- Build a wormery
- Where do animals live?
- Parts of plants
- Cress heads
- Plants

2-LS2-2 Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

ETS1.B

Developing Possible Solutions

Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people.

- Amazing plants

- Seed cars
- Plant life cycle

2-ESS1-1 Use information from several sources to provide evidence that Earth events can occur quickly or slowly.

<p>ESS1.C The History of Planet Earth Some events happen very quickly; others occur very slowly, over a time period much longer than one can observe.</p>	<p> Volcanoes</p>	<p> The Earth's layers  Making a volcano</p>
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2-ESS2-2 Develop a model to represent the shapes and kinds of land and bodies of water in an area.

<p>ESS2.B Plate Tectonics and Large-Scale System Interactions Maps show where things are located. One can map the shapes and kinds of land and water in any area.</p>	<p> Living by the river  Planet Earth</p>	<p> Earth's surface  Modeling the world around us  Make a mountain  The world around us</p>
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2-ESS2-3 Obtain information to identify where water is found on Earth and that it can be solid or liquid.

ESS2.C

The Roles of Water in Earth's Surface Processes

Water is found in the ocean, rivers, lakes, and ponds. Water exists as solid ice and in liquid form.

- Living by the river
- Planet Earth

- Earth's surface
- Modeling the world around us
- Make a mountain
- The world around us