

# 1<sup>st</sup> Nine Weeks

**Matter and its properties.** The student knows that matter has physical properties that determine how it is described, classified, and used. The student is expected to:

**2.6A** classify matter by observable physical properties, including texture, flexibility, and relative temperature, and identify whether a material is a solid or liquid

**2.6B** conduct a descriptive investigation to explain how physical properties can be changed through processes such as cutting, folding, sanding, melting, or freezing

**2.6C** demonstrate that small units such as building blocks can be combined or reassembled to form new objects for different purposes and explain the materials chosen based on their physical properties (NEW)

## **Changes to the TEKS In Matter and its Properties:**

- This is a priority TEKS. There have been changes to the progression with the addition of a new TEKS.
- 2<sup>nd</sup> grade students no longer compare changes in materials caused by heating and cooling.
- 2<sup>nd</sup> grade students no longer combine materials that when put together can do things that they cannot do by themselves such as building a tower or a bridge and justify the selection of those materials based on their physical properties.
- The students will need guidance and support as they conduct a descriptive investigation. A descriptive investigation does not have a hypothesis and focuses on making observations and measuring. An example of this type of investigation might be: How many cm do snails move in 10 minutes?

**Describe and classify physical properties of matter.**

Yearly Target	Nine Weeks Target	TEKS	Priority Topic: Describe and classify physical properties of matter.
<b>Extension</b>			<ul style="list-style-type: none"> <li>• Use inferences and applications that go beyond the standard.</li> </ul>
<b>3.0</b>	1 <sup>st</sup>	Content: 2.6C SEPs: 2.1CDEF RTC: 2.5CEFG	I can: <ul style="list-style-type: none"> <li>• Demonstrate that small units such as building blocks can be combined or reassembled to form new objects for different purposes and explain the materials chosen based on their physical properties.</li> <li>• Communicate thinking using diagrams/illustrations, labels, and sentences.</li> </ul>
<b>2.5</b>			<ul style="list-style-type: none"> <li>• In addition to 2.0 content, partial knowledge of 3.0 is evident.</li> </ul>
<b>2.0</b>		Content: 2.6B SEPs: 2.1ABCDEF 2.3BC RTC: 2.5CEFG	I can: <ul style="list-style-type: none"> <li>• Conduct an investigation to explain how physical properties can be changed through processes such as cutting, folding, sanding, melting, or freezing.</li> <li>• Communicate observations and data using diagrams/illustrations and labels.</li> </ul>
<b>1.5</b>			<ul style="list-style-type: none"> <li>• In addition to 1.0 content, partial knowledge of 2.0 is evident.</li> </ul>
<b>1.0</b>		Content: 2.6A SEPs: 2.1CDF RTC: 2.5E	I can: <ul style="list-style-type: none"> <li>• Classify matter by observable physical properties, including texture, flexibility, and relative temperature.</li> <li>• Identify whether a material is a solid or liquid.</li> <li>• Communicate observations.</li> </ul>
<b>0.5</b>			<ul style="list-style-type: none"> <li>• With help, a partial understanding of the 1.0 content is evident</li> <li>• With help, communicate observations.</li> </ul>

## 2nd Nine Weeks

**Force, motion, and energy.** The student knows that forces cause changes in Motion and position in everyday life. The student is expected to:

**2.7A** explain how objects push on each other and may change shape when they touch or collide; (NEW)

**2.7B** plan and conduct a descriptive investigation to demonstrate how the strength of a push and pull changes an object's motion. (NEW)

**Force, motion, and energy.** The student knows that energy is everywhere and can be observed in everyday life. The student is expected to:

**2.8A** demonstrate and explain that sound is made by vibrating matter and that vibrations can be caused by a variety of means, including sound (NEW)

**2.8B** explain how different levels of sound are used in everyday life such as a whisper in a classroom or a fire alarm (NEW)

**2.8C** design and build a device using tools and materials that uses sound to solve the problem of communicating over a distance (NEW)

### Changes to the TEKS In Force, Motion, and Energy:

- This is a priority TEKS. The progression has changed due to the new TEKS. This is the only grade level where sound is studied in depth.
- The students will need guidance and support as they plan and conduct a descriptive investigation. A descriptive investigation does not have a hypothesis and focuses on making observations and measuring. An example of this type of investigation might be: How many cm do snails move in 10 minutes?
- Students no longer study heat or light.
- Students no longer observe and identify how magnets are used in everyday life.
- In 2<sup>nd</sup> grade, they no longer trace and compare the patterns of movement by objects such as sliding, rolling, and spinning.

## Investigate and explain force, motion, and energy

Yearly Target	Nine Weeks Target	TEKS	Priority topic: Investigate and explain force, motion, and energy
<b>Extension</b>			<ul style="list-style-type: none"> <li>Use inferences and applications that go beyond the standard.</li> </ul>
<b>3.0</b>	2 <sup>nd</sup>	Content: 2.7B, 2.8C SEPs: 2.1ABCDEFG 2.2AD, 2.3BC RTC: 2.5ABG	I can: <ul style="list-style-type: none"> <li>Design and build a device that uses sound to solve the problem of communicating over a distance.</li> <li>Plan and conduct an investigation to demonstrate how the strength of a push and pull changes an object's motion.</li> <li>Communicate thinking using diagrams/illustrations, labels, and sentences.</li> </ul>
<b>2.5</b>			<ul style="list-style-type: none"> <li>In addition to 2.0 content, partial knowledge of 3.0 is evident.</li> </ul>
<b>2.0</b>		Content: 2.7A, 2.8B SEPs: 2.1CDEF 2.3BC RTC: 2.5ABG	I can: <ul style="list-style-type: none"> <li>Explain how different levels of sound are used in everyday life.</li> <li>Explain how objects push on each other and may change shape when they touch or collide.</li> <li>Communicate observations and data using diagrams/illustrations and labels.</li> </ul>
<b>1.5</b>			<ul style="list-style-type: none"> <li>In addition to 1.0 content, partial knowledge of 2.0 is evident.</li> </ul>
<b>1.0</b>		Content: 2.7A, 2.8A SEPs: 2.1CDEF RTC: 2.5ABG	I can: <ul style="list-style-type: none"> <li>Demonstrate and explain that sound is made by vibrating matter which can be caused in many ways.</li> <li>Observe how objects push on each other and may change shape when they touch or collide.</li> <li>Communicate observations.</li> </ul>
<b>0.5</b>			<ul style="list-style-type: none"> <li>With help, partial understanding of the 1.0 content is evident</li> <li>With help, communicate observations.</li> </ul>

## 3rd Nine Weeks

**Earth and space.** The student knows that there are recognizable patterns in the natural world and among objects in the sky. The student is expected to:

**2.9A** describe the Sun as a star that provides light and heat and explain that the Moon reflects the Sun's light

**2.9B** observe and compare how objects in the sky are more visible and can appear different using tools such as a telescope than with an unaided eye.

**Earth and space.** The student knows that earth materials and products made from these materials are important to everyday life. The student is expected to:

**2.11A** distinguish between natural and manmade resources

**2.11B** describe how human impact can be limited by making choices to conserve and properly dispose of materials such as reducing use of, reusing or recycling paper, plastic, and metal.

### Changes to the TEKS In Earth and Space:

- This is a priority TEKS. The progression has changed.
- The Sun is described as a star and students need to explain how the Moon reflects the Sun's light. Students do not record the patterns of the Moon in the TEKS now.
- Students no longer study rocks but investigate and describe how wind and water move them.
- Students no longer identify and compare the properties of water.

### Additional TEKS to be taught:

**2.10A** investigate and describe how wind and water move soil and rock particles across the Earth's surface such as wind blowing sand into dunes on a beach or a river carrying rocks as it flows; (NEW)

**2.10B** measure, record, and graph weather information, including temperature and precipitation

**2.10C** investigate different types of severe weather events such as a hurricane, tornado, or flood and explain that some events are more likely than others in a given region(NEW)

**Identify the importance of patterns in the natural world and importance of natural resources**

Yearly Target	Nine Weeks Target	TEKS	Priority Topic: <b>Identify the importance of patterns in the natural world and importance of natural resources</b>
<b>Extension</b>			<ul style="list-style-type: none"> <li>• Use inferences and applications that go beyond the standards.</li> </ul>
<b>3.0</b>	3 <sup>rd</sup>	Content: 2.9B, 2.11B SEPs: 2.1CDEF RTC: 2.5BG	I can: <ul style="list-style-type: none"> <li>• Observe and compare how objects in the sky are more visible and can appear different using tools such as a telescope than with an unaided eye.</li> <li>• Describe how human impact can be limited by choices made to conserve and properly dispose of materials.</li> <li>• Communicate thinking using diagrams/illustrations, labels, and sentences.</li> </ul>
<b>2.5</b>			<ul style="list-style-type: none"> <li>• In addition to 2.0 content, partial knowledge of 3.0 is evident.</li> </ul>
<b>2.0</b>		Content: 2.9A, 2.11B SEPs: 2.1E 2.3B RTC: 2.5AF	I can: <ul style="list-style-type: none"> <li>• Explain that the Moon reflects the Sun's light.</li> <li>• Describe ways to conserve and properly dispose of materials.</li> <li>• Communicate observations and data using diagrams/illustrations and labels.</li> </ul>
<b>1.5</b>			<ul style="list-style-type: none"> <li>• In addition to 1.0 content, partial knowledge of 2.0 is evident.</li> </ul>
<b>1.0</b>		Content: 2.9A, 2.11A SEPs: 2.1E 2.3B RTC: 2.5AF	I can: <ul style="list-style-type: none"> <li>• Describe the Sun as a star that provides light and heat.</li> <li>• Distinguish between natural and manmade resources.</li> <li>• Communicate observations.</li> </ul>
<b>0.5</b>			<ul style="list-style-type: none"> <li>• With help, partial understanding of the 1.0 content is evident.</li> <li>• With help, communicate observations.</li> </ul>

## 4<sup>th</sup> Nine Weeks

**Organisms and environments.** The student knows that living organisms have basic needs that must be met through interactions within their environment.

The student is expected to:

**2.12A** describe how the physical characteristics of environments, including the amount of rainfall, support plants and animals within an ecosystem

**2.12B** create and describe food chains identifying producers and consumers to demonstrate how animals depend on other living things

**2.13B** record and compare how the structures and behaviors of animals help them find and take in food, water, and air

### **Changes to the TEKS In Organisms and their Environments:**

- This is a priority TEKS. There are changes to the progression. The emphasis is on animals
- There are 2 new TEKS.
- Be sure to notice the language of the TEKS. There is more rigor involved.
- 2<sup>nd</sup> grade life cycles include butterflies and frogs.
- Students do not identify the basic needs of plants and animals in isolation.

### **Additional TEKS to be taught:**

**2.12C** Explain and demonstrate how some plants depend on other living things, wind, or water for pollination and to move their seeds around. (NEW)

**2.13A** identify the roots, stems, leaves, flowers, fruits, and seeds of plants and compare how those structures help different plants meet their basic needs for survival

**2.13C** record and compare how being part of a group helps animals obtain food, defend themselves, and cope with changes; (NEW)

**2.13D** investigate and describe some of the unique life cycles of animals where young animals do not resemble their parents, including butterflies and frogs.

## Identify and compare characteristics, behaviors, and the environments of organisms

Yearly Target	Nine Weeks Target	TEKS	Priority Topic: Identify and compare characteristics, behaviors, and the environments of organisms
4.0			<ul style="list-style-type: none"> <li>Use inferences and applications that go beyond the standards.</li> </ul>
3.0	4 <sup>th</sup>	Content: 2.12B, 2.13B SEPs: 2.1EF 2.3BC RTC: 2.5DF	I can: <ul style="list-style-type: none"> <li>Describe food chains identifying producers and consumers to demonstrate how animals depend on other living things.</li> <li>Compare how the structures and behaviors of animals help them find and take in food, water, and air.</li> <li>Communicate thinking using diagrams/illustrations, labels, and sentences.</li> </ul>
2.5			<ul style="list-style-type: none"> <li>In addition to 2.0 content, partial knowledge of 3.0 is evident</li> </ul>
2.0		Content: 2.12B, 2.13B SEPs: 2.1EF 2.3BC RTC: 2.5DF	I can: <ul style="list-style-type: none"> <li>Create food chains identifying producers and consumers to demonstrate how animals depend on other living things.</li> <li>Record how the structures and behaviors of animals help them find and take in food, water, and air.</li> </ul>
1.5			<ul style="list-style-type: none"> <li>In addition to 1.0 content, partial knowledge of 2.0 is evident</li> </ul>
1.0		Content: 2.12A 2.13AB SEPs: 2.1EF 2.3BC RTC: 2.5DF	I can: <ul style="list-style-type: none"> <li>Describe how the physical characteristics of environments support plants and animals within an ecosystem.</li> <li>Identify the structures and behaviors of animals help them find and take in food, water, and air.</li> <li>Communicate observations.</li> </ul>
0.5			<ul style="list-style-type: none"> <li>With help, partial understanding of the 1.0 content is evident.</li> <li>With help, communicate observations.</li> </ul>