

Content Expectations by Grade Span

Discipline: Earth Science (E)

Standard: Earth Systems (ES)

Grade Span: Elementary (K-4)

Content Statement Code	Content Statement
<i>E.ES.E.1</i>	<i>Solar Energy- The sun warms the land, air and water and helps plants grow.</i>
Content Expectation Code	Content Expectation
E.ES.01.11	Identify the sun as the most important source of heat which warms the land, air, and water of the Earth.
E.ES.01.12	Demonstrate the importance of sunlight and warmth in plant growth.

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Content Statement Code	Content Statement
<i>E.ES.E.2</i>	<i>Weather-</i> <i>Weather changes from day to day and over the seasons.</i>
Content Expectation Code	Content Expectation
E.ES.01.21	Compare daily changes in the weather related to temperature (cold, hot, warm, cool); cloud cover (cloudy, partly cloudy, foggy) precipitation (rain, snow, hail, freezing rain); wind (breezy, windy, calm).
E.ES.01.22	Describe and compare weather related to the four seasons in terms of temperature, cloud cover, precipitation and wind.
E.ES.01.23	Describe severe weather events.
E.ES.01.24	Describe precautions that should be taken for human safety during severe weather conditions (thunderstorms, lightning, tornadoes, high winds, blizzards, hurricanes).

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Content Statement Code	Content Statement
<i>E.ES.E.3</i>	<i>Weather Measurement- Scientists use tools for observing, recording, and predicting weather changes.</i>
Content Expectation Code	Content Expectation
E.ES.01.31	Identify the tools that might be used to measure temperature, precipitation, cloud cover and wind.
E.ES.01.32	Observe and collect data of weather conditions over a period of time.

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Content Statement Code	Content Statement
<i>E.ES.E.4</i>	<i>Natural Resources-</i> <i>The supply of many natural resources is limited. Humans have devised methods for extending their use of natural resources through recycle, reuse, and renewal.</i>
Content Expectation Code	Content Expectation
E.ES.03.41	Identify natural resources (metals, fuels, fresh water, farmland, and forests).
E.ES.03.42	Classify renewable (fresh water, farmland, forests) and non-renewable (fuels, metals) resources.
E.ES.03.43	Describe ways humans are protecting, extending, and restoring resources (recycle, reuse, reduce, renewal).
E.ES.03.44	Recognize that paper, metal, glass, and some plastics can be recycled.

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Content Statement Code	Content Statement
<i>E.ES.E.5</i>	<i>Human Impact- Humans depend on their natural and constructed environment. Humans change environments in ways that are helpful or harmful for themselves and other organisms.</i>
Content Expectation Code	Content Expectation
E.ES.03.51	Describe ways humans are dependent on the natural environment (forests, water, clean air, earth materials) and constructed environments (homes, neighborhoods, shopping malls, factories and industry).
E.ES.03.52	Describe helpful or harmful effects of humans on the environment (garbage, habitat destruction, land management, renewable and non-renewable resources).

Content Expectations by Grade Span

Discipline: Earth Science (E)

Standard: Solid Earth (SE)

Grade Span: Elementary (K-4)

Content Statement Code	Content Statement
<i>E.SE.E.1</i>	<i>Earth Materials-</i> Earth materials that occur in nature include rocks, minerals, soils, water, and the gases of the atmosphere. Some Earth materials have properties which sustain plant and animal life.
Content Expectation Code	Content Expectation
E.SE.00.11	Identify Earth materials (air, water, soil) that are used to grow plants.
E.SE.01.12	Describe how Earth materials contribute to the growth of plant and animal life.
E.SE.03.13	Recognize and describe different types of earth materials (mineral, rock, clay, boulder, gravel, sand, soil).
E.SE.03.14	Recognize that rocks are made up of minerals.

Content Expectations by Grade Span

Discipline: Earth Science (E)

Standard: Solid Earth (SE)

Grade Span: Elementary (K-4)

Content Statement Code	Content Statement
<i>E.SE.E.2</i>	<i>Surface Changes-</i> <i>The surface of Earth changes. Some changes are due to slow processes, such as erosion and weathering, and some changes are due to rapid processes, such as landslides, volcanic eruptions, and earthquakes.</i>
Content Expectation Code	Content Expectation
E.SE.02.21	Describe the major landforms of the surface of the Earth (mountains, plains, plateaus, valleys, hills).
E.SE.03.22	Identify and describe natural causes of change in the Earth's surface (erosion, glaciers, volcanoes, landslides, and earthquakes).

Content Expectations by Grade Span

Discipline: Earth Science (E)

Standard: Solid Earth (SE)

Grade Span: Elementary (K-4)

Content Statement Code	Content Statement
<i>E.SE.E.3</i>	<i>Using Earth Materials-</i> <i>Some Earth materials have properties that make them useful either in their present form or designed and modified to solve human problems. They can enhance the quality of life as in the case of materials used for building or fuels used for heating and transportation.</i>
Content Expectation Code	Content Expectation
E.SE.03.31	Identify Earth materials used to construct some common objects (for example: bricks, buildings, roads, glass).
E.SE.03.32	Describe how materials taken from the Earth can be used as fuels for heating and transportation.

Content Expectations by Grade Span

Discipline: Earth Science (E)

Standard: Fluid Earth (FE)

Grade Span: Elementary (K-4)

Content Statement Code	Content Statement
<i>E.FE.E.1</i>	<i>Water- Water is a natural resource and is found under the ground, on the surface of the earth, and in the sky. It exists in three states (liquid, solid, gas) and can go back and forth from one form to another.</i>
Content Expectation Code	Content Expectation
E.FE.02.11	Identify water sources (wells, springs, lakes, rivers, oceans).
E.FE.02.12	Identify household uses of water (drinking, cleaning, food preparation).
E.FE.02.13	Describe the properties (visible, flowing, melting, dew) of water as a liquid (lakes, rivers, streams, oceans).
E.FE.02.14	Describe the properties (hard, visible, freezing, ice) of water as a solid (ice, snow, iceberg, sleet, hail).

Content Expectations by Grade Span

Discipline: Earth Science (E)

Standard: Fluid Earth (FE)

Grade Span: Elementary (K-4)

Content Statement Code	Content Statement
<i>E.FE.E.2</i>	<i>Water movement- Water moves in predictable patterns.</i>
Content Expectation Code	Content Expectation
E.FE.02.21	Describe how rain collects on the surface of the Earth and flows downhill into bodies of water (streams, rivers, lakes, oceans), or into the ground.
E.FE.02.22	Describe the major bodies of water on the Earth's surface (lakes, ponds, oceans, rivers, streams).

Content Expectations by Grade Span

Discipline: Earth Science (E)

Standard: Earth in Time and Space (ST)

Grade Span: Elementary (K-4)

Content Statement Code	Content Statement
<i>E.ST.E.1</i>	<i>Characteristics of Objects in the Sky- Common objects in the sky have observable characteristics.</i>
Content Expectation Code	Content Expectation
E.ST.04.11	Identify common objects in the sky, such as the sun and the moon.
E.ST.04.12	Compare and contrast the characteristics of the sun, moon and Earth, including relative distances and abilities to support life.

Content Expectations by Grade Span

Discipline: Earth Science (E)

Standard: Earth in Time and Space (ST)

Grade Span: Elementary (K-4)

Content Statement Code	Content Statement
<i>E.ST.E.2</i>	<i>Patterns of Objects in the Sky- Common objects in the sky have observable characteristics and predictable patterns of movement.</i>
Content Expectation Code	Content Expectation
E.ST.04.21	Describe the orbit of the Earth around the sun as it defines a year.
E.ST.04.22	Explain that the spin of the Earth creates day and night.
E.ST.04.23	Describe the motion of the moon around the Earth.
E.ST.04.24	Explain how the visible shape of the moon follows a predictable cycle which takes approximately one month.
E.ST.04.25	Describe the apparent movement of the sun and moon across the sky through the day/night and the seasons.

Content Expectations by Grade Span

Discipline: Earth Science (E)

Standard: Earth in Time and Space (ST)

Grade Span: Elementary (K-4)

Content Statement Code	Content Statement
<i>E.ST.E.3</i>	<i>Fossils- Fossils provide evidence about the plants and animals that lived long ago and the nature of the environment at that time.</i>
Content Expectation Code	Content Expectation
E.ST.04.31	Explain how fossils provide evidence of the history of the Earth.
E.ST.04.32	Compare and contrast life forms found in fossils and organisms that exist today.