

**Unit 2****Essential Question: How Do We Observe and Describe Objects?****Major Understandings:**

**PS 3.1b** Matter has properties (color, hardness, odor, sound, taste, etc.) that can be observed through the senses.

**PS 3.1c** Objects have properties that can be observed, described and/or measured: length, width, volume, size, shape, mass or weight, temperature, flexibility, reflectiveness of light.

**PS 3.1d** Measurements can be made with standard metric units and nonstandard units.

**PS 3.1e** The material(s) an object is made up of determine some specific properties of the object. Properties can be observed or measured with tools.

**PS 3.1f** Objects and/or materials can be sorted or classified according to their properties.

**PS 3.1g** Some properties of an object are dependent upon the conditions of the present surroundings in which an object exists.

Kindergarten

**Lesson 1 – What Is Matter?**

**Objective(s):**

- To sort cards by type of matter.
- To know that matter exists in different states.
- To identify and describe solids and liquids.
- To describe how matter can change from one state to another.

PS 3.1c, d, e, g; PS 3.1f

<b>Advanced Planning/ Notes to Teachers</b>	<b>Core Lesson</b>	<b>Differentiated Support/ Homework</b>	<b>Connections</b>
Getting Ready to Investigate TE 19 Science Background TE 24	<b>Unit 2, 1.1</b> Assess Prior Knowledge TE 24 Investigate TE 25	Inquiry Skill Mini-Lesson TE 25, AB 13 Reteach TE 25	

**Lesson 2 – What Is Matter?**

**Objective(s):**

- To sort cards by type of matter.
- To know that matter exists in different states.
- To identify and describe solids and liquids.
- To describe how matter can change from one state to another.

PS 3.1c, d, e, g; PS 3.1f

<b>Advanced Planning/ Notes to Teachers</b>	<b>Core Lesson</b>	<b>Differentiated Support/ Homework</b>	<b>Connections</b>
	<i>Big Book</i> , p. 7	AB, p. 14 ESOL TE 27	Math – TE 28 Writing – TE 28 Art – TE 29 Physical Education – TE 29 Language Arts – TE 29

Kindergarten

**Lesson 3 – How Can Matter Be Sorted?**

**Objective(s):**

- To describe how different objects are the same and different.
- To describe, compare, sort, and group objects by shape, color, size and weight.
- To identify colors.
- To demonstrate that objects are made of parts.

PS 3.1c, d, e, g; PS 3.1f

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Getting Ready to Investigate TE 19 Science Background TE 30	<b>Unit 2, 1.2</b> Assess Prior Knowledge TE 30 Investigate TE 31	Inquiry Skill Mini-Lesson TE 11, AB 15 Reteach TE 31	

**Lesson 4 – How Can Matter Be Sorted?**

**Objective(s):**

- To describe how different objects are the same and different.
- To describe, compare, sort, and group objects by shape, color, size and weight.
- To identify colors.
- To demonstrate that objects are made of parts.

PS 3.1c, d, e, g; PS 3.1f

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
	<b>Unit 2, 1.2</b> Reading in Science TE 32-33; <i>Big Book</i> , pp. 9-11	Concept Review: AB 16 ESOL TE 33, 37 Reteach TE 35	Math – TE 34, 39 Language Arts – TE 36, 39 Music – TE 38 Art – TE 38 Writing – TE 39

**Lesson 5 – How Can Matter Be Described?**

**Objective(s):**

- To describe the texture of an object.
- To know that objects have many observable forms, textures, and positions.
- To understand that objects are made of different materials.
- To describe, compare, sort, and group objects by property and the materials from which they are made.

PS 3.1b, c, e; PS 3.1f

<b>Advanced Planning/ Notes to Teachers</b>	<b>Core Lesson</b>	<b>Differentiated Support/ Homework</b>	<b>Connections</b>
Getting Ready to Investigate TE 19 Science Background TE 40	<b>Unit 2, 1.3</b> Assess Prior Knowledge TE 40 Investigate TE 41	Inquiry Skill Mini-Lesson TE 41, AB 17 Reteach TE 41	

**Lesson 6 – How Can Matter Be Described?**

**Objective(s):**

- To describe the texture of an object.
- To know that objects have many observable forms, textures, and positions.
- To understand that objects are made of different materials.
- To describe, compare, sort, and group objects by property and the materials from which they are made.

PS 3.1b, c, e; PS 3.1f

<b>Advanced Planning/ Notes to Teachers</b>	<b>Core Lesson</b>	<b>Differentiated Support/ Homework</b>	<b>Connections</b>
	<b>Unit 2, 1.3</b> Reading in Science TE 42-47 <i>Big Book</i> , pp. 13-15	Concept Review: TE 47, AB 18 Reteach TE 43, 45 ESOL TE 47	Curriculum Integration Math – TE 48 Writing – TE 49 Social Studies – TE 48 Art – TE 48 Drama – TE 44 Language Arts – TE 46 Physical Education – TE 49

Kindergarten

**Lesson 7 – How Can Matter Be Changed?**

**Objective(s):**

- To describe how paper can be changed.
- To know that materials can be changed by cutting, folding, tearing, bending, and mixing.
- To recognize the physical changes of matter.

PS 3.1b, c, e

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Plan Ahead for Activities TE 19 Science Background TE 50	<b>Unit 2, 1.4</b> Assess Prior Knowledge TE 50 Investigate TE 50-51 <i>Big Book</i> , p. 16	Reteach TE 51 Inquiry Skill Mini-Lesson TE 51, AB 16	

**Lesson 8 – How Can Matter Be Changed?**

**Objective(s):**

- To describe how paper can be changed.
- To know that materials can be changed by cutting, folding, tearing, bending, and mixing.
- To recognize the physical changes of matter.

PS 3.1b, c, e

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
	<b>Unit 2, 1.4</b> Reading in Science TE 52-53 <i>Big Book</i> , p. 17 Transparency 1	Reaching All Learners ESOL TE 53 Concept Review TE 53, AB 20	Curriculum Integration Writing – TE 54 Social Studies – TE 54 Art – TE 54 Math – TE 54 Health – TE 54

## Kindergarten

**Lesson 9 – What Is Life on Earth?****Objective(s):**

- To sort animal pictures by where the animals live.
- To know that life exists on land, in water, and in the air.
- To recognize that water, land and living things are found on Earth and that air surrounds Earth.

LE 3.1a

<b>Advanced Planning/ Notes to Teachers</b>	<b>Core Lesson</b>	<b>Differentiated Support/ Homework</b>	<b>Connections</b>
Plan Ahead for Activities TE 126 Science Background TE 130, 132	<b>Unit 2, 4.1</b> Assess Prior Knowledge TE 130, 132 Investigate TE 133 <i>Big Book</i> , p. 40	Reteach TE 130, 132 Inquiry Skill Mini-Lesson TE 133, AB 43	

**Lesson 10 – What Is Life on Earth?****Objective(s):**

- To sort animal pictures by where the animals live.
- To know that life exists on land, in water, and in the air.
- To recognize that water, land and living things are found on Earth and that air surrounds Earth.

LE 3.1a

<b>Advanced Planning/ Notes to Teachers</b>	<b>Core Lesson</b>	<b>Differentiated Support/ Homework</b>	<b>Connections</b>
	<b>Unit 2, 4.1</b> Reading in Science TE 134-137 <i>Big Book</i> , pp. 41-42	Reaching All Learners ESOL 136 Reteach 135 Concept Review TE 137, AB 44	Curriculum Integration Writing – TE 139 Math – TE 138 Social Studies – TE 136 Art – TE 139 Phys Ed – TE 138 Language Arts – TE 138

Kindergarten

**Lesson 11 – What Is Land Made Of?**

**Objective(s):**

- To observe and compare Earth’s materials.
- To know that Earth’s surface is composed of various solid materials.
- To identify and describe parts of Earth’s surface.

PS 3.1b, c, d, e, g

<b>Advanced Planning/ Notes to Teachers</b>	<b>Core Lesson</b>	<b>Differentiated Support/ Homework</b>	<b>Connections</b>
Plan Ahead for Activities TE 126 Science Background TE 140	<b>Unit 2, 4.2</b> Assess Prior Knowledge TE 140 Investigate TE 141 <i>Big Book</i> , p. 87	Reteach TE 141 Inquiry Skill Mini-Lesson TE 141, AB 45	

**Lesson 12 – What Is Land Made Of?**

**Objective(s):**

- To observe and compare Earth’s materials.
- To know that Earth’s surface is composed of various solid materials.
- To identify and describe parts of Earth’s surface.

PS 3.1b, c, d, e, g

<b>Advanced Planning/ Notes to Teachers</b>	<b>Core Lesson</b>	<b>Differentiated Support/ Homework</b>	<b>Connections</b>
	<b>Unit 2, 4.2</b> Reading in Science TE 142-145 <i>Big Book</i> , pp. 44-45	Reaching All Learners Reteach TE 143 ESOL TE 145 Concept Review TE 145, AB 46	Curriculum Integration Math – TE 146 Social Studies – TE 144, 146 Language Arts – TE 146 Writing – TE 146 Art – TE 146

## Kindergarten

**Lesson 13 – What Is Water Like?****Objective(s):**

- To know that objects can be described and sorted by observable properties.
- To sort objects by whether they sink or float.

PS 3.1f; PS 3.1b, c, e

<b>Advanced Planning/ Notes to Teachers</b>	<b>Core Lesson</b>	<b>Differentiated Support/ Homework</b>	<b>Connections</b>
Plan Ahead for Activities TE 126 Science Background TE 148	<b>Unit 2, 4.3</b> Assess Prior Knowledge TE 148 Investigate TE 148	Reteach TE 149 Inquiry Skill Mini-Lesson TE 149, AB 47	

**Lesson 14 – What Is Water Like?****Objective(s):**

- To know that objects can be described and sorted by observable properties.
- To sort objects by whether they sink or float.

PS 3.1f; PS 3.1b, c, e

<b>Advanced Planning/ Notes to Teachers</b>	<b>Core Lesson</b>	<b>Differentiated Support/ Homework</b>	<b>Connections</b>
	<b>Unit 2, 4.3</b> Reading in Science TE 150 <i>Big Book</i> , p. 47	Reaching All Learners ESOL 151 Concept Review TE 151, AB 48	Curriculum Integration Writing – TE 152 Math – TE 153 Social Studies – TE 152 Art – TE 153 Health – TE 153

Kindergarten

**Lesson 15 – How Can We Care for Earth?**

**Objective(s):**

- To show how objects can be reused and recycled.
- To know ways to care for Earth at home and school.
- To understand how reusing and recycling help us conserve resources.
- To understand how the misuse of resources affects human health and environmental conditions.

PS 3.1b, c, e

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Plan Ahead for Activities TE 126 Science Background TE 154	<b>Unit 2, 4.4</b> Assess Prior Knowledge TE 154 Investigate TE 153 <i>Big Book</i> , p. 48	Reteach TE 155 Inquiry Skill Mini-Lesson TE 155, AB 49	

**Lesson 16 – How Can We Care for Earth?**

**Objective(s):**

- To show how objects can be reused and recycled.
- To know ways to care for Earth at home and school.
- To understand how reusing and recycling help us conserve resources.
- To understand how the misuse of resources affects human health and environmental conditions.

PS 3.1b, c, e

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
	<b>Unit 2, 4.4</b> Reading in Science TE 156 <i>Big Book</i> , p. 49	Reaching All Learners ESL/ESOL TE 159 Reteach TE 158 Concept Review TE 159, AB 50	Curriculum Integration Art – TE 160 Math – TE 160 Music – TE 160 Language Arts – TE 160 Social Studies – TE 160

