

Unit 2**Essential Question: What Are Some Properties of Solids, Liquids, and Gases?****Major Understandings:**

PS 2.1C Water is recycled by natural processes on Earth.

Evaporation: Changing of water into water vapor

Condensation: Changing of water vapor into water

Precipitation: Rain, sleet, snow and hail

Runoff: Water flowing on Earth's surface

Groundwater: Water that moves downward into the ground

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

PS 3.1D Measurements can be made with standard metric units and non-standard units.

PS 3.1E The material an object is made up of determine some specific properties of the object (sink/float, conductivity, magnetism). Properties can be observed of measured with tools such as hand lenses, metric rulers, thermometers, balances, magnets, circuit testers, and graduated cylinders.

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 the object exists. For example: temperature – hot or cold; lighting – shadows or color; moisture- wet or dry.

PS 3.2A Matter exists in three states: solid, liquid and gas.

PS 3.2C Changes in the properties of materials of objects can be observed and described.

Grade 1

Lesson 1 – Water Solutions**Objective(s):**

- To promote scientific inquiry.
- To use a scientific method to plan and conduct a long term investigation.
- To design an experiment to learn how water temperature affects how solids dissolve.

PS 3.1f, PS 3.2c, PS 3.1c, d, e, g

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Science Background TE 95a Preparation TE 95a	Unit 1 Experiment Experiment Lesson Plan TE 95a-95b	Options for Inquiry TE 95a	

Grade 1

Lesson 2 – What Is Matter?**Objective(s):**

- To classify solid objects based on size, shape, and color.
- To recognize that everything around us is matter.
- To recognize that objects can be made up of parts too small to see without a hand lens.

PS 3.2a; PS 3.1e

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Plan Ahead for Activities TE 96b Science Background TE 96 Video Segment 1000 When Minutes Count TE 98	Unit 2, 3.1 Assess Prior Knowledge TE 98 Investigate TE 99	Investigate Further TE 99, LM 42 Daily Inquiry TE 98, DI 11 Inquiry Skill Mini-Lesson TE 99, IS 11	

Lesson 3 – What Is Matter?**Objective(s):**

- To classify solid objects based on size, shape, and color.
- To recognize that everything around us is matter.
- To recognize that objects can be made up of parts too small to see without a hand lens.

PS 3.2a; PS 3.1e

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
	Unit 2, 3.1 Reading in Science TE 100-103 Insta-Lab TE 101	Reaching All Learners • ESL/ESOL TE 102 Reading Review TE 103 Reading Support: RS 22 and 23	Curriculum Integration Art – TE 101 Writing – TE 103

Grade 1

Lesson 4 – What Can We Observe About Solids?**Objective(s):**

- To understand that a solid is matter that keeps its shape.
- To measure and compare physical properties and solid objects.

PS 3.2a; PS 3.1e

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Plan Ahead for Activities TE 96b Science Background TE 104 Video Segment 1001 When Minutes Count TE 104	Unit 2, 3.2 Assess Prior Knowledge TE 104 Investigate TE 105	Investigate Further TE 105, LM 44 Daily Inquiry TE 104, DI 12 Inquiry Skill Mini-Lesson TE 105, IS 12	

Lesson 5 – What Can We Observe About Solids?**Objective(s):**

- To understand that a solid is matter that keeps its shape.
- To measure and compare physical properties and solid objects.

PS 3.2a; PS 3.1e

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
	Unit 2, 3.2 Reading in Science TE 106-111 Insta-Lab TE 109	Reaching All Learners <ul style="list-style-type: none"> • ESL/ESOL TE 109 • Enrichment TE 104 • Challenge TE 108 Reading Review TE 111 Reading Support: RS 24 and 25	Math TE 107, 111 Writing TE 106 Social Studies TE 110

Grade 1

Lesson 6 – What Can We Observe About Liquids?**Objective(s):**

- To understand that matter that flows is a liquid.
- To understand that matter may sink, float, mix, or dissolve in liquids.
- To observe and measure liquids, using tools such as a balance and a measuring cup.

PS 3.2a, PS 3.1e, PS 3.1f, PS 3.2c

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Plan Ahead for Activities TE 96b Video Segment 1002 When Minutes Count TE 112	Unit 2, 3.3 Assess Prior Knowledge TE 112 Investigate TE 113	Investigate Further TE 113, LM 46 Daily Inquiry TE 112, DI 13 Inquiry Skill Mini-Lesson TE 113, IS 13	

Lesson 7 – What Can We Observe About Liquids?**Objective(s):**

- To understand that matter that flows is a liquid.
- To understand that matter may sink, float, mix, or dissolve in liquids.
- To observe and measure liquids, using tools such as a balance and a measuring cup.

PS 3.2a, PS 3.1e, PS 3.1f, PS 3.2c

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Science Background TE 115	Unit 2, 3.3 Reading in Science TE 114-119 Insta-Lab TE 117	Reaching All Learners ESL TE 117 Reading Review TE 119 Reading Support & Homework RS 26-27	Curriculum Integration Writing – TE 118 Health – TE 116, 119 Math – TE 114

Grade 1

Lesson 8 – What Can We Observe About Gases?**Objective(s):**

- To understand that gas is matter that does not have a shape of its own and spreads out to fill its container.
- To observe the effects of heating and cooling on different kinds of matter.
- To recognize that steam and ice are forms of water.

PS 3.2a; PS 2.1c; PS 3.2c; PS 3.1 c, d, e, g

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Plan Ahead for Activities TE 96b Video Segment 1003 When Minutes Count TE 120 Science Background TE 120	Unit 2, 3.4 Assess Prior Knowledge TE 120 Investigate TE 121	Investigate Further TE 121, LM 48 Daily Inquiry TE 120, DI 14 Inquiry Skill Mini-Lesson TE 121, IS 14	

Lesson 9 – What Can We Observe About Gases?**Objective(s):**

- To understand that gas is matter that does not have a shape of its own and spreads out to fill its container.
- To observe the effects of heating and cooling on different kinds of matter.
- To recognize that steam and ice are forms of water.

PS 3.2a; PS 2.1c; PS 3.2c; PS 3.1 c, d, e, g

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
	Unit 2, 3.4 Reading in Science TE 122-127 Insta-Lab TE 123	Reaching All Learners ESL/ESOL TE 125 Intervention TE 123 Reading Review TE 127 Reading Support: PS 28 and 29	Curriculum Integration Writing – TE 124 Art – TE 126, 127

Grade 1

Lesson 10 – What Is Heat?**Objective(s):**

- To investigate how the sun supplies heat to Earth.
- To explain why some things warm up faster than other things, depending on the surface.
- To identify ways can be produced.

PS 3.1 c, d, e, g

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Plan Ahead for Activities TE 134a Science Background TE 134 Video Segment 1006 When Minutes Count TE 136	Unit 2, 4.1 Assess Prior Knowledge TE 136 Investigate TE 137	Investigate Further TE 137, LM 50 Daily Inquiry TE 136 DI 15 Inquiry Skill Mini-Lesson TE 137, IS 15	

Lesson 11 – What Is Heat?**Objective(s):**

- To investigate how the sun supplies heat to Earth.
- To explain why some things warm up faster than other things, depending on the surface.
- To identify ways can be produced.

PS 3.1 c, d, e, g

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Science Background TE 138	Unit 2, 4.1 Reading in Science TE 138-141 Insta-Lab TE 139	Reaching All Learners ESL/ESOL TE 139 Reading Review TE 141 Reading Support & Homework RS 31-32	Curriculum Integration Social Studies – TE 140 Writing – TE 141

Grade 1

Lesson 12 – What Can Light Do?

Objective(s):

- To draw conclusions about why shadows change.
- To recognize that the sun supplies light to Earth.
- To identify sources of light.
- To predict which materials will allow light to pass through.

PS 3.1c, d, e, g

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Plan Ahead for Activities TE 134a Video Segment 1007 When Minutes Count TE 142	Unit 2, 4.2 Assess Prior Knowledge TE 142 Investigate TE 143	Investigate Further TE 143, LM 52 Daily Inquiry TE 142, DI 16 Inquiry Skill Mini-Lesson TE 143, IS 16 Enrichment TE 143	

Lesson 13 – What Can Light Do?

Objective(s):

- To draw conclusions about why shadows change.
- To recognize that the sun supplies light to Earth.
- To identify sources of light.
- To predict which materials will allow light to pass through.

PS 3.1c, d, e, g

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Science Background: TE 146	Unit 2, 4.2 Reading in Science TE 144-147 Transparency: RS 16 Insta-Lab: TE 145	Reaching All Learners ESL/ESOL TE 145 Reading Review TE 147 Reading Support & Homework RS 33-34	Curriculum Integration Math – TE 147

Grade 1

Lesson 14 – What Is Sound?

Objective(s):

- To identify that sound travels through air.
- To explain that sound is made when an object vibrates.
- To describe differences in sounds.

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Plan Ahead for Activities TE 134a Video Segment 1008 When Minutes Count TE 148	Unit 2, 4.3 Assess Prior Knowledge TE 148 Investigate TE 149	Investigate Further TE 148, LM 54 Daily Inquiry TE 148 DI 117 Inquiry Skill Mini-Lesson TE 149, IS 17	

Lesson 15 – What Is Sound?

Objective(s):

- To identify that sound travels through air.
- To explain that sound is made when an object vibrates.
- To describe differences in sounds.

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
	Unit 2, 4.3 Reading in Science TE 150-155 Insta-Lab 153	Reaching All Learners Reteach TE 150 ESL TE 153 Reading Review TE 155 Reading Support & Homework RS 35-36	Curriculum Integration Writing – TE 151 Health – TE 152 Music – TE 155