

Unit 1**Essential Question: How Are Animals Alike and Different?****Major Understandings:**

- LE 1.1a** Animals need air, food and water in order to thrive.
- LE 2.1a** Some traits of living things have been inherited (e.g. colors of flowers and number of limbs of animals).
- LE 2.2a** Plants and animals closely resemble their parents and other individuals in their species.
- LE 2.2b** Plants and animals can transfer specific traits to their offspring when they reproduce.
- LE 3.1a** Each animal has different structures that serve different functions in growth, survival and reproduction.
- LE 3.1c** In order to survive in their environment, plants and animals must be adapted to that environment.
- LE 4.1a** Plants and animals have life cycles. These may include beginning of a life, development into adulthood, reproduction as an adult, and eventually death.
- LE 4.1e** Each generation of adults goes through changes in form from young to adult. The completed sequence of changes in form is called a life cycle. Some insects change from egg to larva to pupa to adult.
- LE 4.1f** Each kind of animal goes through its own stages of growth and development during its life span.
- LE 4.1g** The length of time from an animal's birth to its death is called its life span. Life spans of different animals vary.

*Unit One also addresses the Process Skills as outlined in the NYC Science Scope and Sequence

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Lesson 1 – What Are Some Science Inquiry Tools?

Objective(s):

- To identify the senses.
- To identify the body part associated with each sense.
- To explain how the five senses help us learn.

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Plan Ahead for Activities TE viiiB Science Background TE viii, 2 Video Segment 0100 When Minutes Count	Ready, Set, Science Unit Assess Prior Knowledge TE viii Investigate TE 3	Investigate Further TE 3, LM 14 Daily Inquiry TE 2, DI 1 Inquiry Skill Mini-Lesson TE 3, IS 1 LM 1-8	

Lesson 2 – How Do We Use Our Senses?

Objective(s):

- To identify the senses.
- To identify the body part associated with each sense.
- To explain how the five senses help us learn.

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
	Ready, Set, Science Unit Reading in Science TE 4-7 Insta-Lab TE 5	LM 1-8 Reading Review TE 7	Curriculum Integration Writing Link TE 7

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Lesson 3 – What Is The Scientific Method?**Objective(s):**

- To draw conclusions based on observations.
- To identify skills used by scientists.
- To describe how to apply inquiry skills during investigations.

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Plan Ahead for Activities TE iiivB Science Background TE 8 Video Segment 0101 When Minutes Count TE 8	Ready, Set, Science Assess Prior Knowledge TE 8 Investigate TE 9	Investigate Further TE 9 LM 16 Daily Inquiry TE 18, DI 2 Inquiry Skill Mini-Lesson TE 9, IS 2	

Lesson 4 – How Do We Use Inquiry Skills?**Objective(s):**

- To draw conclusions based on observations.
- To identify skills used by scientists.
- To describe how to apply inquiry skills during investigations.

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Science Background TE 10	Ready, Set, Science Reading in Science TE 10-17 Insta-Lab TE 16		Curriculum Integration Math – TE 17

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Lesson 5 – How Do We Use Science Tools?**Objective(s):**

- To use a balance to compare the masses of objects.
- To identify tools used in scientific investigations.
- To describe how tools are use to see, to separate objects, and to measure size, mass, liquids, and temperature.

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Plan Ahead for Activities TE viiiB Science Background TE 18 Video Segment 0102 When Minutes Count TE 18	Ready, Set, Science Assess Prior Knowledge TE 18 Investigate TE 19	Investigate Further TE 19, LM 18 Daily Inquiry TE 18, DI 3 Inquiry Skill Mini-Lesson TE 19, IS 3	

Lesson 6 – What Is Matter?**Objective(s):**

- To use a balance to compare the masses of objects.
- To identify tools used in scientific investigations.
- To describe how tools are use to see, to separate objects, and to measure size, mass, liquids, and temperature.

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
	Ready, Set, Science Reading in Science TE 20-23 Insta-Lab TE 22	Reaching Review TE 23	Math – TE 23

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Lesson 7 – Animal Coverings**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 body coverings help animals live where they do.

LE 3.1a

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Science Background TE 27a Preparation TE 27a-27b	Unit 1 Experiment Experiment Lesson Plan TE 27a-27b	Options for Inquiry TE 27a	

Lesson 8 – What Are Living and Nonliving Things?**Objective(s):**

- To classify things as living and nonliving.
- To explain that living things all need food, water, and air.

LE 1.1a

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Plan Ahead for Activities TE 28B Science Background TE 28 Video Segment 1600 When Minutes Count TE 30	Unit 1, 1.1 Assess Prior Knowledge TE 28 Investigate TE 31	Investigate Further TE 31, LM 24 Daily Inquiry TE 30, DI 4 Inquiry Skill Mini-Lesson TE 31, IS 4	

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Lesson 9 – What Are Living and Nonliving Things?

Objective(s):

- To classify things as living and nonliving.
- To explain that living things all need food, water, and air.

LE 1.1a

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
	Unit 1, 1.1 Reading in Science TE 32-35 Insta-Lab TE 33 Transparencies RS 4	Reaching All Learners <ul style="list-style-type: none"> • Reteach TE 28C, 30 • Advanced TE 28C • On-Level TE 28C • ESL TE 28D, 32 Reading Review TE 35 Reading Support & Homework RS 5-6	Curriculum Integration Writing – TE 35 Health – TE 33

Lesson 10 – What Do Animals Need?

Objective(s):

- To observe animals meeting their needs.
- To explain that animals need food, water, air, and shelter to live.

LE 1.1a, LE 3.1a

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Plan Ahead for Activities TE 28B Video Segment 1601 When Minutes Count TE 36	Unit 1, 1.2 Assess Prior Knowledge TE 36 Investigate TE 37	Investigate Further TE 37, LM 26 Daily Inquiry TE DI 5 Inquiry Skill Mini-Lesson TE 37, IS 5	

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Lesson 11 – What Do Animals Need?

Objective(s):

- To observe animals meeting their needs.
- To explain that animals need food, water, air, and shelter to live.

LE 1.1a, LE 3.1a

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
	Unit 1, 1.2 Reading in Science TE 38-41	Reaching All Learners <ul style="list-style-type: none"> • Challenge TE 36 • ESL/ESOL TE 40 Reading Review TE 41 Reading Support: PS 7 and 8	Curriculum Integration Writing – TE 39 Math – TE 41 Physical Education – TE 38

Lesson 12 – How Can We Group Animals?

Objective(s):

- To classify animals into groups, based on observable characteristics.
- To identify physical characteristics of animals and their functions.

LE 3.1a

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Plan Ahead for Activities TE 28B Video Segment 1601 When Minutes Count TE 36	Unit 1, 1.2 Assess Prior Knowledge TE 36 Investigate TE 37	Investigate Further TE 37, LM 26 Daily Inquiry TE DI 5 Inquiry Skill Mini-Lesson TE 37, IS 5	

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Lesson 13 – What Do Animals Need?

Objective(s):

- To classify animals into groups, based on observable characteristics.
- To identify physical characteristics of animals and their functions.

LE 1.1a, LE 3.1a

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
	<p>Unit 1, 1.3 Reading in Science TE 44-49 Insta-Lab TE 48</p>	<p>Reaching All Learners</p> <ul style="list-style-type: none"> • ESL/ESOL TE 48 • Reteach TE 46 <p>Reading Review TE 49 Reading Support & Homework RS 9-10</p>	<p>Curriculum Integration Social Studies – TE 45 Art – TE 44, 49 Writing – TE 47</p>

Lesson 14 – How Do Animals Grow and Change?

Objective(s):

- To compare animals to see how they are similar, but not identical, to their parents.
- To identify ways animals change as they grow and mature.
- To recognize that animals grow in different ways over different lengths of time.

LE 1.1a, LE 3.1a, LE 2.2a, LE 2.1a, LE 2.2b, LE 4.1 a, e, f, g

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
<p>Plan Ahead for Activities TE 28B Video Segment 1603 When Minutes Count TE 50</p>	<p>Unit 1, 1.4 Assess Prior Knowledge TE 50 Investigate TE 51</p>	<p>Investigate Further TE 51, LM 30 Daily Inquiry TE 50 DI 7 Inquiry Skill Mini-Lesson TE 51, IS 7</p>	

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Lesson 15 – How Do Animals Grow and Change?

Objective(s):

- To compare animals to see how they are similar, but not identical, to their parents.
- To identify ways animals change as they grow and mature.
- To recognize that animals grow in different ways over different lengths of time.

LE 1.1a, LE 3.1a, LE 2.2a, LE 2.1a, LE 2.2b, LE 4.1 a, e, f, g

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Science Background: TE 54	Unit 1, 1.4 Reading in Science TE 52-57 Transparency: RS 7 Insta-Lab: TE 55	Reaching All Learners <ul style="list-style-type: none"> • ESL/ESOL TE 55 • Challenge TE 50 Reading Review TE 57 Reading Support & Homework RS 11-12	Curriculum Integration Math – TE 57 Writing – TE 56 Music – TE 53

Lesson 16 – What Is an Environment?

Objective(s):

- To communicate information about an animal’s environment.
- To classify living and nonliving things in an environment.
- To identify how people affect environments.

LE 3.1c

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Plan Ahead for Activities TE 64B Science Background TE 64 Video Segment 1608 When Minutes Count TE 66	Unit 1, 2.1 Assess Prior Knowledge TE 64, 66 Investigate TE 67	Investigate Further TE 67, LM32 Daily Inquiry TE, DI 8 Inquiry Skill Mini-Lesson TE 67, IS 8	

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Lesson 15 – How Do Animals Grow and Change?

Objective(s):

- To compare animals to see how they are similar, but not identical, to their parents.
- To identify ways animals change as they grow and mature.
- To recognize that animals grow in different ways over different lengths of time.

LE 1.1a, LE 3.1a, LE 2.2a, LE 2.1a, LE 2.2b, LE 4.1 a, e, f, g

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Science Background: TE 54	Unit 1, 1.4 Reading in Science TE 52-57 Transparency: RS 7 Insta-Lab: TE 55	Reaching All Learners <ul style="list-style-type: none"> • ESL/ESOL TE 55 • Challenge TE 50 Reading Review TE 57 Reading Support & Homework RS 11-12	Curriculum Integration Math – TE 57 Writing – TE 56 Music – TE 53

Lesson 16 – What Is an Environment?

Objective(s):

- To communicate information about an animal’s environment.
- To classify living and nonliving things in an environment.
- To identify how people affect environments.

LE 3.1c

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Plan Ahead for Activities TE 64B Science Background TE 64 Video Segment 1608 When Minutes Count TE 66	Unit 1, 2.1 Assess Prior Knowledge TE 64, 66 Investigate TE 67	Investigate Further TE 67, LM32 Daily Inquiry TE, DI 8 Inquiry Skill Mini-Lesson TE 67, IS 8	

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Lesson 17 – How Do Animals Grow and Change?

Objective(s):

- To communicate information about an animal’s environment.
- To classify living and nonliving things in an environment.
- To identify how people affect environments.

LE 3.1c

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
	<p>Unit 1, 2.1 Reading in Science TE 68-71 Insta-Lab 69</p>	<p>Reaching All Learners</p> <ul style="list-style-type: none"> • Reteach TE 64C, 66, 70 • On-Level TE 64C • Challenge TE 64C • ESL TE 64D, 68 <p>Reading Review TE 71 Reading Support & Homework RS 14-15</p>	<p>Curriculum Integration Art – TE 69 Writing – TE 71</p>

Lesson 18 – What Is an Environment?

Objective(s):

- To draw conclusions about how coloration helps some animals survive.
- To describe plant and animal adaptations and their functions.

LE 1.1a, LE 3.1a, LE 3.1c

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
<p>Plan Ahead for Activities TE 64B Science Background TE 72 Video Segment 1609 When Minutes Count TE 72</p>	<p>Unit 1, 2.2 Assess Prior Knowledge TE 72 Investigate TE 73</p>	<p>Investigate Further TE 73, LM 34 Daily Inquiry TE 72, DI 9 Inquiry Skill Mini-Lesson TE 73, IS 9</p>	

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Lesson 19 – How Do Animals Grow and Change?

Objective(s):

- To draw conclusions about how coloration helps some animals survive.
- To describe plant and animal adaptations and their functions.

LE 1.1a, LE 3.1a, LE 3.1c

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
	<p>Unit 1, 2.2 Reading in Science TE 74-79 Insta-Lab TE 77</p>	<p>Reaching All Learners</p> <ul style="list-style-type: none"> • Above TE 75 • ESL TE 76 <p>Reading Review TE 79 Reading Support & Homework 16-17</p>	<p>Curriculum Integration Music – TE 78 Writing – TE 77 Math – TE 79</p>

Lesson 20 – What Is an Environment?

Objective(s):

- To draw conclusions about how coloration helps some animals survive.
- To describe plant and animal adaptations and their functions.

LE 1.1a, LE 3.1a, LE 3.1c

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
<p>Plan Ahead for Activities TE 64B Science Background TE 72 Video Segment 1609 When Minutes Count TE 72</p>	<p>Unit 1, 2.2 Assess Prior Knowledge TE 72 Investigate TE 73</p>	<p>Investigate Further TE 73, LM 34 Daily Inquiry TE 72, DI 9 Inquiry Skill Mini-Lesson TE 73, IS 9</p>	

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Lesson 20 – How Do Plants and Animals Need Each Other?

Objective(s):

- To observe how animals use plants to meet their needs.
- To describe how animals help plants reproduce.
- To explain how living things are part of a food chain.

LE 4.1a, e, f, g

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
	Unit 1, 2.3 Assess Prior Knowledge TE 80 Investigate TE 81	Investigate Further TE 81, LM 36 Daily Inquiry TE 80 DI 10 Inquiry Skill Mini-Lesson TE 81, IS 10	Curriculum Integration Music – TE 78 Writing – TE 77 Math – TE 79

Lesson 21 – How Do Plants and Animals Need Each Other?

Objective(s):

- To observe how animals use plants to meet their needs.
- To describe how animals help plants reproduce.
- To explain how living things are part of a food chain.

LE 1.1a, LE 3.1a, LE 3.1c

Advanced Planning/ Notes to Teachers	Core Lesson	Differentiated Support/ Homework	Connections
Science Background TE 82	Unit 1, 2.3 Reading in Science TE 82-87 Insta-Lab TE 83	Reaching All Learners <ul style="list-style-type: none"> • Above-Level TE 84 • ESL TE 86 Reading Review TE 87 Reading Support & Homework 18-19	Curriculum Integration Social Studies – TE 83, 87 Writing Link – TE 85