

Unit: Plant and Animal Parts

Content Area: **Science**
Course(s): **Science - Grade 1**
Time Period: **7 weeks**
Length: **7 Weeks**
Status: **Published**

Unit Overview

Students go on a “trip” to a zoo. They see and describe many different animals. They act out these animals. Then they sort animals by kind. Students play a series of games to practice matching parents to their offspring. Then they watch videos of young plants and animals and predict what the offspring will look like when they become adults. Students grow plants. They observe their roots, stems, and leaves. They use what they have learned about plant parts to design a tower that can stand up. Students play a game to identify different animal parts. They use what they know about animal parts to design a glove that will keep their hands warm. Students compare human and animal senses. First, they experience a picture or an event as a person. Then they experience how an animal would sense the same thing. Students watch videos of animals meeting their needs. They discuss the parts the animals are using to meet their needs. Then they find out some ways that engineers mimic animal parts. Students observe live hermit crabs. They identify the different parts of hermit crabs and discover ways they keep safe. Students act as scientists viewing animal parents and their young in the wild. They look for ways parents take care of their young. They create a book that shows how animal parents take care of their young.

Transfer

- Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena.
- Use materials to design a device that solves a specific problem or a solution to a specific problem
- Read grade-appropriate texts and use media to obtain scientific information to determine patterns in the natural world.

Meaning

Understandings

Students will understand that...

- Plants and animals are like others of the same kind.
- Plants and animals are like their parents.
- Plants have different parts.
- Animals have different parts.
- Plants and animals use their senses.
- Plants and animals take in water, food, air, and light.
- Plants and animals stay safe.
- Young plants and animals stay safe.

Essential Questions

Students will keep considering...

- How are plants and animals like others of the same kind?
- How are plants and animals like their parents?
- What different parts do plants have?
- What different parts do animals have?
- How do plants and animals sense things?
- How do plants and animals take in water, food, air, and light?
- How do plants and animals stay safe?
- How do young plants and animals stay safe?

Application of Knowledge and Skill

Students will know...

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- Plants and animals are like others of the same kind.

- Plants and animals are like their parents.
- Plants have different parts.
- Animals have different parts.
- Plants and animals use their senses.
- Plants and animals take in water, food, air, and light.
- Plants and animals stay safe.
- Young plants and animals stay safe.

Students will be skilled at...

Students will be skilled at...

- Constructing explanations and designing solutions.
- Obtaining, evaluating, and communicating information.

Academic Vocabulary

- animal
- plant
- offspring
- flower
- fruit
- leaf
- root
- seed
- stem
- fin
- scales
- sense
- gill
- quills
- seedling

Learning Goal 1 - Lessons 1 & 2

Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

- Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

SCI.1-LS3-1

Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

Target 1 - Lesson 1

Individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways.

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Target 2 - Lesson 2

Recognize how the offspring of plants and animals may look different than their parents until they grow up.

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Learning Goal 2 - Lessons 3, 4, 5, 6, 7

Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.

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SCI.1-LS1-1

Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.

Target 1 - Lesson 3

Plants have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow.

- All organisms have external parts. Plants have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow.

Target 2 - Lesson 4

Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air.

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Target 3 - Lesson 5

Compare the ways plants and animals sense things.

- Compare the ways plants and animals sense things.

Target 4 - Lesson 6

Compare the ways plants and animals take in water, food, air, and light.

- Compare the ways plants and animals take in water, food, air, and light.

Target 5 - Lesson 7

Discuss the major ways that plants and animals protect themselves.

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Learning Goal 3 - Lesson 8

Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.

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SCI.1-LS1-2

Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.

Target 1 - Lesson 8

Adult plants and animals can have young.

- Adult plants and animals can have young.

Target 2 - Lesson 8

In many kinds of animals, parents and the offspring themselves engage in behaviors that help the offspring to survive.

- In many kinds of animals, parents and the offspring themselves engage in behaviors that help the offspring to survive.

Formative Assessment and Performance Opportunities

- TCI Lesson Game: Students test their understanding of key concepts with an educational game.

- TCI Interactive Tutorial: Students can work independently to check their understanding in a safe environment that provides instant feedback but is not graded.
- TCI Interactive Student Notebook: Students record their understanding of both the reading and activity. Review during the lesson to gauge student understanding.
- TCI Vocabulary Cards: Students check their understanding of key vocabulary terms with digital flip cards.
- Supplemental teacher created performance activities as needed.

Summative Assessment

TCI Assessment: How are Plants and animals like others of the same kind?

Accommodations/Modifications

- Leveled Readers
- Differentiated Texts
- Small Group Instruction
- Investigation games
- Provide Descriptive Words
- Support the Act-It-Outs
- Support the Reading Notes
- Support the Investigation Games
- Assist by Preparing the Seeds and Plants
- Simplify the Reading Notes
- Create a Word Wall of Animal Parts
- Focus on One Sense at a Time
- Support the Note Taking
- Make the Engineering Connection More Concrete
- Give Specific Tasks During the Investigation
- Support the Processing Assignment
- Provide a Word Bank for the Processing Assignment
- Reduce the Amount of Writing

Unit Resources

- TCI online manual and student text books
- TCI Interactive Student Notebook

- TCI Vocabulary Cards
- TCI Teacher Material Kit
- TCI activity cards
- TCI reading further passages after each lesson

21st Century Life and Careers

CAEP.9.2.4.A.1	Identify reasons why people work, different types of work, and how work can help a person achieve personal and professional goals.
CAEP.9.2.4.A.2	Identify various life roles and civic and work - related activities in the school, home, and community.
CAEP.9.2.4.A.3	Investigate both traditional and nontraditional careers and relate information to personal likes and dislikes.
CAEP.9.2.4.A.4	Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

Interdisciplinary Connections

MA.K-12.2	Reason abstractly and quantitatively.
LA.RL.1.1	Ask and answer questions about key details in a text.
MA.K-12.5	Use appropriate tools strategically.
LA.RI.1.2	Identify the main topic and retell key details of a text.
MA.1.NBT.B.3	Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.
MA.1.NBT.C.4	Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models (e.g., base ten blocks) or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
LA.RI.1.10	With prompting and support, read informational texts at grade level text complexity or above.
MA.1.NBT.C.5	Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
MA.1.NBT.C.6	Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
MA.1.MD.A.1	Order three objects by length; compare the lengths of two objects indirectly by using a third object.
LA.W.1.7	Participate in shared research and writing projects (e.g., explore a number of “how-to” books on a given topic and use them to write a sequence of instructions).

