



Lesson Plan: Life Cycles of Plants and Animals

Grade Level: 3

Subject: Life Science

Duration: 45-60 min

NGSS 3-LS1-1: Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.

Learning Objectives

By the end of this lesson, students will be able to:

- **Identify** the distinct stages in the life cycles of plants and animals.
- **Describe** processes such as germination, metamorphosis, and reproduction.
- **Compare** the similarities and differences between plant and animal life cycles.



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Materials Needed: (all links are included in this PDF)

- Life Cycles of Plants and Animals Worksheet 1
(<https://newpathworksheets.com/api/worksheet/worksheet-science-grade-3-life-cycles-of-plants-and-animals-2063-0.pdf>)
- Life Cycles of Plants and Animals Worksheet 2
(<https://newpathworksheets.com/api/worksheet/worksheet-science-grade-3-life-cycles-of-plants-and-animals-2063-1.pdf>)



- Life Cycles of Plants and Animals Vocabulary 1
(<https://newpathworksheets.com/api/vocabulary/vocabulary-science-grade-3-life-cycles-of-plants-and-animals-2063-1.pdf>)
- Life Cycles of Plants and Animals Vocabulary 2
(<https://newpathworksheets.com/api/vocabulary/vocabulary-science-grade-3-life-cycles-of-plants-and-animals-2063-2.pdf>)
- Life Cycles of Plants and Animals Vocabulary 3
(<https://newpathworksheets.com/api/vocabulary/vocabulary-science-grade-3-life-cycles-of-plants-and-animals-2063-3.pdf>)

Lesson Procedure

Step 1: Introduction (5 minutes)

- Teacher Prompt: 'How do you think a tiny seed becomes a tall tree, or a crawling caterpillar



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variations. (<https://newpathworksheets.com/api/vocabulary/vocabulary-science-grade-3-life-cycles-of-plants-and-animals-2063-1.pdf>)

- Have students work in pairs to match terms on Vocabulary 2.
(<https://newpathworksheets.com/api/vocabulary/vocabulary-science-grade-3-life-cycles-of-plants-and-animals-2063-2.pdf>)

Step 4: Independent Practice (15 minutes)



- Have students independently complete Worksheet 2 to practice identifying adaptations, traits, and life cycles. (<https://newpathworksheets.com/api/worksheet/worksheet-science-grade-3-life-cycles-of-plants-and-animals-2063-1.pdf>)
- Instruct students to complete Vocabulary 3 to reinforce complex terms like chrysalis, embryo, and environments. (<https://newpathworksheets.com/api/vocabulary/vocabulary-science-grade-3-life-cycles-of-plants-and-animals-2063-3.pdf>)

Step 5: Assessment (10 minutes)

- Distribute Worksheet 1 as an independent quiz to evaluate students' understanding of frog/butterfly metamorphosis, plant needs, and inherited traits. (<https://newpathworksheets.com/api/worksheet/worksheet-science-grade-3-life-cycles-of-plants-and-animals-2063-0.pdf>)
- Collect the assessments and briefly review the most challenging questions as a class before concluding the lesson.



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observation journal of its germination and growth.

- Create a 'Life Cycles' poster comparing a mammal's continuous growth to an amphibian's metamorphosis.

Complete List of Available Resources:

- Topic: Life Cycles of Plants and Animals (<https://newpathworksheets.com/science/grade-3/life-cycles-of-plants-and-animals-2063>)



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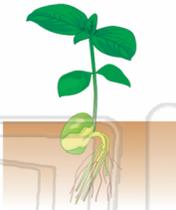
NEW PATH LEARNING



Name _____ Class _____ Date _____

1 What do plants **not** need to grow?

- A water
- B sunlight
- C soil
- D saltwater



2 A cactus growing in the desert can **store water in its stem** for a long time. How does this affect its ability to survive?

- A It helps the cactus survive until the next rainfall.
- B It helps the cactus grow very deep roots to absorb water deep under the desert sand.
- C It helps the cactus taste better so that more desert animals will feed on it.
- D It helps the cactus change color to blend in to its surroundings.



3 What are the stages in the **metamorphosis of a frog**?

- A egg, larva, adult
- B egg, tadpole, growing tadpole (froglet), adult
- C egg, larva, pupa, adult



4 What are the stages of a **dragonfly life cycle**?



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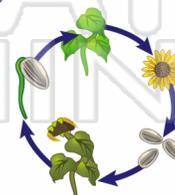
9 Match the term with the correct definition:

- roots
- stem
- leaves
- flowers

- A. part of a plant that grows into the ground, absorbs nutrients and moisture from the soil
- B. part of a plant that supports the plant and carries water and nutrients from the roots to the rest of the plant
- C. part of a plant where the plant's own food is made

10 All the **changes** a flowering plant goes through during its **lifetime** is called its _____.

- A death
- B life cycle
- C leaves
- D fertilization

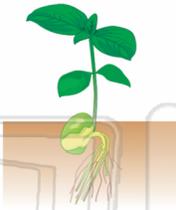




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D

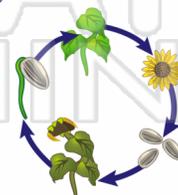
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- A death
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- 3 What are the **life cycle stages** of a bean plant?
- A egg, seed, adult
 - B seedling, seed, mature plant
 - C seed, sprouting seed



- 4 Which of the following is a list of **invertebrate groups**?
- A mammals, birds, fish
 - B insects, worms, crabs
 - C snakes, frogs, salamanders



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- C a sea turtle
- D a frog



- energy, and protection from the environment it lives in
- D a life cycle with only 2 stages

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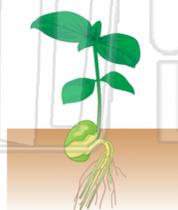
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Name _____ Class _____ Date _____

Match each of the following terms to its definition:

Chrysalis

Complete metamorphosis

Incomplete Metamorphosis

Embryo

Environment

Adaptation

Caterpillar

Gills

1. - a trait or characteristic that helps a living thing survive in its environment ; an example is a turtle's hard shell which serves as a defense against hungry predators



2. - the larva of a butterfly or moth; it may be hairy or spiny to deter predators



3. of a bu
event



4. stages

5. matur

6. made

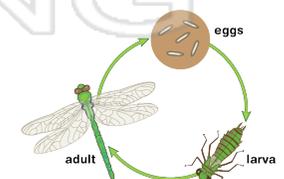
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7. - an organ of animals that live in water that is used to breath oxygen dissolved in the water; tadpoles use gills to breathe underwater



8. - insect development life cycle with three stages: Egg, Larva, and Adult





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Match each of the following terms to its definition:

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Environment

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Gills

1. Adaptation - a trait or characteristic that helps a living thing survive in its environment ; an example is a turtle's hard shell which serves as a defense against hungry predators



2. Caterpillar - the larva of a butterfly or moth; it may be hairy or spiny to deter predators



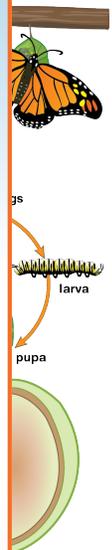
3. Chrysalis - the pupal stage of an insect, especially a butterfly or moth, in which the larva undergoes metamorphosis



4. Complete metamorphosis - a four-stage process of development in insects, including egg, larva, pupa, and adult

5. Embryo - the early stage of development of an animal, from the fertilized egg to the hatching of the young

6. Environment - the surroundings or conditions in which an organism lives, including the physical and biological factors that affect its growth and survival



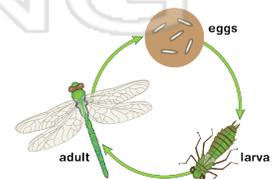
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8. Incomplete Metamorphosis - insect development life cycle with three stages: Egg, Larva, and Adult





Name _____ Class _____ Date _____

Match each of the following terms to its definition:

Mature plant

Seed

Offspring

Incomplete Metamorphosis

Photosynthesis

Metamorphosis

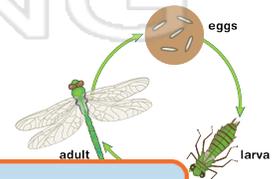
Inheritance

Gills

1. that is used to breathe oxygen dissolved in the water; tadpoles use gills to breathe underwater



2. stages: Egg, Larva, and Adult



3. charac



4. grown

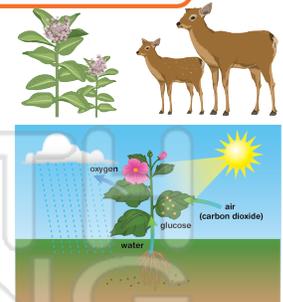
5. during frogs a

6.

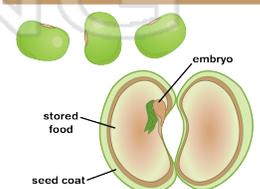
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7. use sunlight, carbon dioxide and water to produce their own food (a form of sugar called glucose) and release oxygen into the air



8. contains the embryo of a plant with a protective coat and stored food





Name _____ Class _____ Date _____

Match each of the following terms to its definition:

Mature plant

Seed

Offspring

Incomplete Metamorphosis

Photosynthesis

Metamorphosis

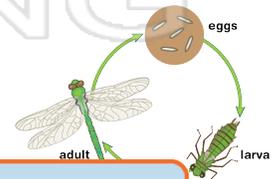
Inheritance

Gills

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2. Incomplete Metamorphosis - insect development life cycle with three stages: Egg, Larva, and Adult



3. Inheritance



4. Mature plant

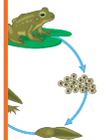


5. Metamorphosis; butterfly

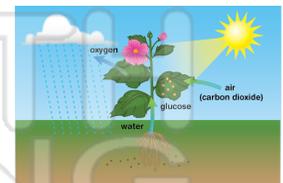


6. Offspring

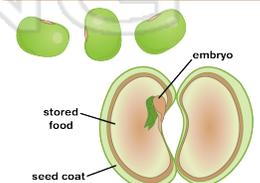
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7. Photosynthesis - a process through which green plants use sunlight, carbon dioxide and water to produce their own food (a form of sugar called glucose) and release oxygen into the air



8. Seed - the first stage of a plant's life cycle; contains the embryo of a plant with a protective coat and stored food





Name _____ Class _____ Date _____

Match each of the following terms to its definition:

Trait

Adaptation

Tadpole

Variation

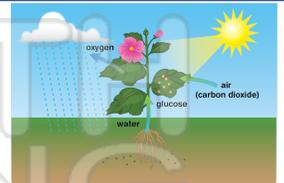
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Seed

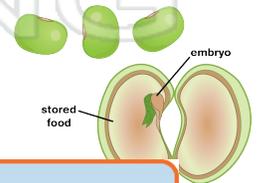
Seedling

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3. plant's



4. water,

5. parent

6. the pa

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7. - a trait or characteristic that helps a living thing survive in its environment ; an example is a turtle's hard shell which serves as a defense against hungry predators



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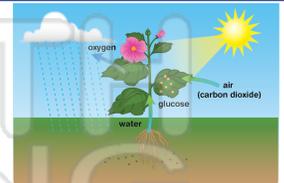
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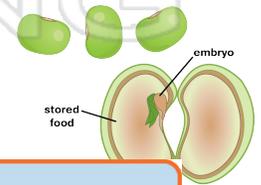
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3. Seed life cycle

4. Tail but

5. Tra offspring

6. Var parent

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