

## Photo Description

A deer is lying on the ground. The deer is not moving and appears to be dead. Its body is on dirt and grass.



## Scientific Phenomena

This image represents the Anchoring Phenomenon of death as a natural part of life cycles. The deer has died, which is a normal occurrence in nature. When animals die, their bodies begin to decompose through the action of bacteria and other organisms. This process returns nutrients to the soil, which helps plants grow and supports the entire ecosystem. Death is not an ending, but rather a transformation that continues the cycle of life in nature.

## Core Science Concepts

1. Life Cycles: All living things are born, grow, and eventually die as part of their natural life cycle
2. Decomposition: When animals die, their bodies break down and become part of the soil
3. Nutrient Cycling: Dead animals provide nutrients that help plants and other living things grow
4. Ecosystem Connections: Every living thing in nature depends on other living things for survival

### Pedagogical Tip:

When discussing death with kindergarteners, focus on it as a natural part of life cycles rather than dwelling on sad emotions. Use gentle, matter-of-fact language and connect it to familiar examples like leaves falling from trees or flowers wilting.

### UDL Suggestions:

Provide multiple ways for students to express their understanding, such as drawing pictures of life cycles, acting out decomposition with movement, or using manipulatives to show how nutrients move through ecosystems. This supports different learning styles and comfort levels with the topic.

## Zoom In / Zoom Out

1. Zoom In: Inside the deer's body, tiny bacteria and other microorganisms are breaking down the tissues into smaller pieces that will become nutrients in the soil. These microscopic decomposers are essential workers in nature's recycling system.
2. Zoom Out: This deer's death contributes to the larger forest ecosystem by providing food for scavengers like vultures and insects, and eventually enriching the soil for plants. This connects to global nutrient cycles that keep all life on Earth functioning.

## Discussion Questions

1. What do you think will happen to this deer's body over time? (Bloom's: Predict | DOK: 2)
2. How might this deer help other living things in the forest? (Bloom's: Analyze | DOK: 2)
3. What are some other examples of things that die and help new life grow? (Bloom's: Apply | DOK: 2)
4. Why do you think death is important in nature? (Bloom's: Evaluate | DOK: 3)

## Potential Student Misconceptions

1. Misconception: "Dead animals are scary or bad"

Clarification: Death is a natural and important part of life cycles that helps other living things survive and grow.

2. Misconception: "The deer is just sleeping"

Clarification: When animals die, their bodies stop working completely - they don't breathe, move, or wake up like when sleeping.

3. Misconception: "Dead things just disappear"

Clarification: Dead animals and plants break down slowly and become nutrients that help new life grow.

## Cross-Curricular Ideas

1. ELA - Storytelling: Have students create a simple story about the deer's life cycle using a beginning, middle, and end. They can dictate their stories while you write them down, then illustrate each part. This connects narrative skills to scientific understanding of life cycles.
2. Math - Counting and Graphing: Create a class graph showing "Things That Help Plants Grow" (sun, water, nutrients from dead leaves, soil). Students can place counters or draw pictures to show which things they think are most important. This builds data collection skills while reinforcing nutrient cycling concepts.
3. Art - Life Cycle Wheel: Students create a circular art project showing the four seasons or stages of a deer's life (birth, growth, adulthood, death). They can use paint, collage, or natural materials like leaves and twigs to represent each stage, creating a visual representation of cycles in nature.
4. Social Studies - Caring for Our Community: Connect the idea of decomposition and nutrient cycling to caring for the environment. Discuss how we can help nature by composting food scraps, raking leaves back into gardens, or planting flowers that feed bees. This builds environmental stewardship and community care concepts.

## STEM Career Connection

1. Wildlife Biologist: A wildlife biologist studies animals in nature, including how they are born, grow, and die. They observe animals like deer to understand how they live and help protect them. Wildlife biologists work outside in forests and fields, taking notes and pictures of what they see. Average Salary: \$63,270 USD
2. Soil Scientist: A soil scientist studies dirt and learns what makes it healthy for plants to grow. They discover how dead plants and animals break down and turn into nutrients that help gardens and forests grow strong. Soil scientists use special tools to test soil and do experiments. Average Salary: \$68,500 USD
3. Veterinarian or Animal Doctor: A veterinarian takes care of sick and injured animals. They learn about animal bodies and how to keep animals healthy. Some veterinarians work with wild animals like deer to help them stay safe and well in nature. Average Salary: \$99,250 USD

## NGSS Connections

- Performance Expectation: K-LS1-1 Use observations to describe patterns of what plants and animals need to survive
- Disciplinary Core Ideas: K-LS1.C Organization for Matter and Energy Flow in Organisms
- Crosscutting Concepts: Patterns and Systems and System Models

## Science Vocabulary

- \* Life cycle: The stages a living thing goes through from birth to death
- \* Decompose: When dead plants or animals break down into smaller pieces
- \* Nutrients: Food that helps living things grow and stay healthy
- \* Ecosystem: All the living and non-living things in an area that work together
- \* Scavenger: An animal that eats dead animals

## External Resources

Children's Books:

- The Fall of Freddie the Leaf by Leo Buscaglia
- The Dead Bird by Margaret Wise Brown
- Lifetimes: The Beautiful Way to Explain Death to Children by Bryan Mellonie