



## Grade 1 Science - Unit 2 - Animals & Plants: Traits & Survival

### Unit Focus

This unit engages students in understanding how living organisms survive through their physical traits, behaviors, and inherited characteristics. Through hands-on activities, read-alouds, discussions, and investigations, students will explore how animals and plants use their external parts for protection, communication, and survival. Additionally, students will examine patterns in how parents care for their offspring and how traits are inherited, leading to similarities and differences between parents and their young. To support this learning, select activities and video content from Mystery Science are used to help students observe and identify inherited characteristics in plants, reinforcing the concept that young organisms often resemble their parents.

### Stage 1: Desired Results - Key Understandings

| Standard(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Transfer                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                               |  |
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| <b>Next Generation Science Standards</b><br>Cross Cutting Concepts: 1 <ul style="list-style-type: none"><li>Patterns in the natural world can be observed, used to describe phenomena, and used as evidence. (1-LS1-2),(1-LS3- 1) (1.SFIP.CC.1.1)</li><li>The shape and stability of structures of natural and designed objects are related to their function(s). (1-LS1-1) (1.SFIP.CC.2.1)</li><li>Every human-made product is designed by applying some knowledge of the natural world and is built by using materials derived from the natural world. (1-LS1-1) (1.SFIP.CC.3.1)</li></ul> Disciplinary Core Ideas: 1 <ul style="list-style-type: none"><li>All organisms have external parts. 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. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. (1-LS1-1) (1.LS1.A.1)</li><li>Adult plants and animals can have young. In many kinds of animals, parents and the offspring themselves engage in behaviors that help the offspring to survive. (1-LS1-2) (1.LS1.B.1)</li><li>Animals have body parts that capture and convey different kinds of information needed for growth and survival. Animals respond to these inputs with behaviors that help them survive. Plants also respond to some external inputs. (1-LS1-1) (1.LS1.D.1)</li><li>Young animals are very much, but not exactly, like their parents. Plants also are very much, but not exactly, like their parents. (1- LS3-1) (1.LS3.A.1)</li><li>Individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways. (1-LS3-1) (1.LS3.B.1)</li></ul> Performance Expectations: 1 <ul style="list-style-type: none"><li>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. (1-LS1-1)</li></ul> | <i>Students will be able to independently use their learning to...</i><br><b>T1</b> Communicate effectively based on purpose, task, and audience to promote collective understanding and/or recommend actions.                                                                                                                  |                                                                                                                                                                                                                                                                                               |  |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <i>Students will understand that...</i><br><b>U1</b> Animals and plants have specific traits that help them survive, grow, and meet their needs.<br><b>U2</b> Parents and offspring share similarities but are not exactly the same.<br><b>U3</b> Animal parents use behaviors and signals to care for and protect their young. | <i>Students will keep considering...</i><br><b>Q1</b> How do animals and plants use their body parts to survive and meet their needs?<br><b>Q2</b> How do animal parents help their babies survive?<br><b>Q3</b> How are young plants and animals like their parents? How are they different? |  |
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| Knowledge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Skill(s)                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                               |  |
| <i>Students will know...</i><br><b>K1</b> Living organisms have traits and behaviors that help them survive in their environment.<br><b>K2</b> Animal parents and their babies use signals and behaviors to communicate needs and ensure survival.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <i>Students will be skilled at...</i><br><b>S1</b> Identify and describe how external parts of animals and plants help them survive.<br><b>S2</b> Observe and compare traits of young plants and animals with their parents.                                                                                                    |                                                                                                                                                                                                                                                                                               |  |

## Stage 1: Desired Results - Key Understandings

- Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive. (1- LS1-2)
- Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents. (1-LS3-1)

### Science and Engineering Practices: 1

- Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena. (1-LS3-1) (1.SFIP.SEP.1.2)
- Use materials to design a device that solves a specific problem or a solution to a specific problem. (1-LS1-1) (1.SFIP.SEP.1.3)
- Read grade-appropriate texts and use media to obtain scientific information to determine patterns in the natural world. (1- LS1-2) (1.SFIP.SEP.2.2)
- Scientists look for patterns and order when making observations about the world. (1- LS1-2) (1.SFIP.SEP.3.1)

### Madison Public Schools Profile of a Graduate

- Inquiry: Posing, pursuing, and refining significant questions to deepen understanding about a topic or issue. (POG. 1.1)
- Product Creation: Effectively use a medium to communicate important information. (POG.3.2)

**K3** Young plants and animals inherit traits from their parents but are not exactly the same.

**K4** Vocabulary: Survive, Adaption, Environment, Feature, External Parts, Camouflage, Protection, Predator, Senses, Communicate, Roots, Stem, Leaves, Thorns, Offspring, Teach, Feed, Comfort, Clean, Behaviors, Respond, Trait, Parent, Identical, Similar/Alike, Different, Behavior Trait, Physical Trait, Seedling, Adult Plant.

**S3** Recognize and describe patterns in animal parent behaviors that help their young.