

## Dr. Rosie and Science Frameworks Alignment

The *Dr. Rosie* integrated two-day lesson aligns with the K-2 NGSS (Next Generation Science Standards), and the MA Science and Technology Frameworks

### NGSS Alignment

**LS1.A. Structure and Function** *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...*

*In the book, Dr. Rosie helps the animals by healing body parts that they need to see, hear, grasp objects, protect themselves, move from place to place, and seek, find and take in food, water, and air...*

**LS1.C: Organization for Matter and Energy Flow in Organisms**

*All animals need food in order to live and grow. They obtain their food from plants or from other animals. (K-LS-1) The arts integration part of the two-day lesson asks children to show via words and pictures how they have helped an animal. One way that children typically help animals is by feeding them either directly or indirectly (planting flowers).*

**LS1.D. Information Processing** *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.*

*In the book, Dr. Rosie helps the animals by healing body parts that are needed to capture and convey different kinds of information needed for growth and survival.*

**ESS3.A. Natural Resources:** *Living things need water, air, and resources from the land and they live in places that have the things they need. In the book, Dr. Rosie visits a variety of animals that live in various habitats where they can get water, air, and resources to live.*

The *Dr. Rosie* integrated two-day lesson also aligns with MA State Frameworks for Science and Technology Engineering in Grades K-2 (which are derived from NGSS)

## MA State Frameworks For Science and Engineering Technology

**PreK-Grade 2** PreK-LS2-2(MA). Using evidence from the local environment, explain how familiar plants and animals meet their needs where they live. Clarification Statements: • **Basic needs include water, food, air, shelter**, and, for most plants, light. • Examples of evidence can include squirrels gathering nuts for the winter and plants growing in the presence of sun and water. • The local environment includes the area around the student's school, home, or adjacent community. **The arts integration part of the two-day lesson asks children to show via words and pictures how they have helped an animal meet at least one of their needs.**

**Kindergarten:** Life Science K-LS LS1. From Molecules to Organisms: Structures and Processes K-LS1-1. **Observe and communicate that animals (including humans) and plants need food, water, and air to survive.** Animals get food from plants or other animals. Plants make their own food and need light to live and grow. **The arts integration part of the two-day lesson asks children to show via words and pictures how they have helped an animal meet at least one of their needs.**

**Grade 1:** Life Science 1-LS LS1. From Molecules to Organisms: Structures and Processes 1-LS1-1. Use evidence to explain that (a) **different animals use their body parts and senses 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**, and (b) plants have roots, stems, leaves, flowers, and fruits that are used to take in water, air, and other nutrients, and produce food for the plant. **In the book, Dr. Rosie helps the animals by healing body parts that they need to see, hear, grasp objects, protect themselves, move from place to place, and seek, find and take in food, water, and air...**

**Grade 2** LS2. Ecosystems: Interactions, Energy, and Dynamics 2-LS2-3(MA). Develop and use models to compare how plants and animals depend on their surroundings and other living things to meet their needs in the places they live. Clarification Statement: • **Animals need food, water, air, shelter, and favorable temperatures.** **The arts integration part of the two-day lesson asks children to show via words and pictures how they have helped an animal meet at least one of their needs.**