

Grade 2 Lessons/Activities Offered at Circle J-Norris Ranch

Service Project: Collecting Seeds: Students will mimic animals in the dispersion of seeds from native trees. Students will collect seeds from trees near the picnic area and later plant them in an area further away. NGSS 2-LS2-2. Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

Aquatic Life in the Stream: Students observe the stream and pond environments and then collect tiny aquatic life- snails, insects and fish. They examine the creatures using magnifiers and microscopes, describing the external features that help them to survive. NGSS: 2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats.

Who Will Plant a Tree? We read the book Who Will Plant a Tree? by Jerry Pallotta and then go on a journey collecting seeds (using a sock over our hands) to see all the different ways seeds travel at Circle J-Norris Ranch. We will search for Scrub Jays burying acorns, ants collecting seeds and animal scats full of seeds to discover the animals planting trees and shrubs at Circle J! NGSS 2-LS2-2 Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

Acorn Hunt (Fall only): Students will understand the role of animals in seed dispersal. They will find acorns (oak tree seeds) to help mimic the activity of various animals to spread the seeds of oak trees. Like animals, students will evaluate the seeds to check for insect activity and rot. Non-viable seeds will be discarded. NGSS 2-LS2-2, 2-LS4-1

Exploring for Insects & Spiders (better in the spring/warmer weather): Students consider the grassland environment and answer the question: Will we find more insects or spiders in this environment? Using sweep nets, they gather organisms in different locations (short grass, tall grass, dirt path, shady area) and bring them back to place them in Lucite cubes for viewing. They sort organisms into spiders/ insects and determine the insect/spider fraction in each collecting area. NGSS 2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats. Planning and carrying out an investigation.

Nesting Birds at Circle J: Students quietly listen to & watch bird activity. They learn about bird about nest building & nesting habits of birds. They design a nest, find a safe location, and build the nest in a way that will maximize the success of offspring. NGSS: K-2-ETS1-2 Develop a physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

Exploring for Erosion: Students watch an erosion demonstration. They learn about how erosion shapes the surfaces of the earth. They are challenged to find evidence of erosion in the spillway of the pond and propose solutions to prevent soil erosion. NGSS: 2-ESS2-1 Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land

Wildflower Exploration (Late Winter/Spring Only): With the use of magnifiers, students will explore the abundance of wildflowers at Circle J. Students will discover that flowers are used to attract pollinators and disperse pollen. NGSS 2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats. Planning and carrying out an investigation.

Investigating Insect Galls (Fall Only): Students search for, collect, observe and then sketch galls (insect nurseries). They learn about the life cycle stages of the insects and how to identify each stage. They observe as adults dissect some galls and view the insects under magnifiers, keeping data on what they find inside! Afterwards, they draw and label a diagram model of the Gall-maker wasp life cycle. NGSS 2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats. Planning and carrying out an investigation.

Birds of Circle J: Students observe an oak tree and discuss what the role of an acorn is. Students learn to identify and find an acorn woodpecker. Students enact the feeding habits of acorn woodpeckers in response to seasonal changes with activities modeling birds feeding on insects and storing acorns. Students then discuss and brainstorm how other birds at Circle J find food throughout the year. NGSS 2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats. Planning and carrying out an investigation.

Nature Art in Chalk Pastels: Students observe the pond and choose 3 plants and animals to include in their art work . They learn to depict the illusion of space in their work of art using overlapping shapes, relative size and placement within the picture. NGSS 2-LS4-1, Visual Arts 2.VA:Re7.1:Perceive and describe aesthetic characteristics of one's natural world and constructed environments.

Custom Lessons can be created specifically for your class's needs and match your classroom curriculum.