

Daisy Shapes in Nature

Nature is full of beautiful things. This badge is all about looking carefully at nature. Daisies identify shapes and patterns in natural objects, like rainbows, flowers, and leaves.

Steps

- 1. Search for shapes in nature
- 2. Find and make patterns
- 3. Create art inspired by nature

Purpose: When Daisies earn this badge, they'll know how to identify shapes and patterns in nature. They'll also know how to create their own.



Daisy Numbers in Nature

Daisies explore how to measure the size and amount of objects in nature. They create their own unit of measure for nature, too!

Steps

- 1. Search for shadows
- 2. Sort natural objects
- 3. Make your own unit of measure

Purpose: When Daisies earn this badge, they'll know about shadows, measurement, sorting, and estimating.



Daisy Design with Nature

Daisies explore birds and natural objects. They think about what they see and use what they know to make and do things in nature.

Steps

- 1. Count with birds
- 2. Identify parts of nature
- 3. Make a map

Purpose: When Daisies earn this badge, they'll know how to use math to identify and sort things in nature. They'll also know how to create a map.

Daisy Shapes in Nature 1

Activity 1—Arrival and Opening Ceremony: Daisies draw their favorite animal, flower, or other part of nature.

Activity 2—Step 1: Search for shapes in nature (choose one)

Choice 1: Go On an Outdoor Scavenger Hunt

Daisies look at nature and go on a scavenger hunt to search for shapes in nature. They use the **Shapes Tally Chart** to track what they find, then add up their tally marks to add to the troop's chart.

Choice 2: Discover Nature Indoors

Daisies look at nature and search for shapes in natural objects indoors. They use the **Shapes Tally Chart** to track what they find, then add up their tally marks to add to the troop's chart.

Choice 3: Watch a Nature Video

Daisies look at nature and search for shapes in natural objects in a video. They use the **Shapes Tally Chart** to track what they find, then add up their tally marks to add to the troop's chart.

Activity 3—Step 2: Find and make patterns (choose one)

Choice 1: Find and Make Patterns with Sticks

Daisies learn about different patterns and how they can be found in nature. They use sticks to create different patterns such as by length and thickness. Daisies also use the sticks to make various shapes.

Choice 2: Find and Make Patterns with Objects

Daisies learn about different patterns and how they can be found in nature. They search for patterns indoors and outdoors and draw what they see. Then, they use their notes to inspire a drawing of a pattern with colored shapes.

Choice 3: Find and Make Patterns with Sound

Daisies learn about different patterns and how they can be found in nature. They explore sound patterns in different songs and create sound patterns by clapping and stomping. Then, Daisies go outdoors or near a window to explore sound patterns in nature that repeat.

Activity 4—Closing Ceremony: Daisies review their favorite part of the meeting and what they learned.

Daisy Shapes in Nature 2

Activity 1—Arrival and Opening Ceremony: Daisies make a bracelet by putting beads into a pattern and thread them onto a string.

Activity 2—Step 3: Create art inspired by nature (choose one)

Choice 1: Make a Mobile

Daisies make a mobile inspired by all the nature they've observed. They learn about moving sculptures, or mobiles, that use the wind to move. They draw natural objects or shapes and make a pattern with their drawings. Each shape gets attached to strings and a coat hanger in the correct pattern order to create a mobile.

Choice 2: Make a Pattern You Can Touch

Daisies make a pattern inspired by nature that they can touch. They explore patterns that they can touch



like bumps on a strawberry or keys on a piano. Then, Daisies make their own nature-inspired artwork with patterns make by raised parts using glue and textured layers of tissue paper, streamers, or other items on cardstock or cardboard.

Choice 3: Make a Song or Dance

Daisies make a song or dance to celebrate nature. They create sound patterns by snapping, jumping, and clapping and repeat the sound pattern. Then, they can add natural sounds like bird calls or whale songs that repeat. After working in small groups, they can share their song, dance, or both!

Activity 3—Closing Ceremony: Daisies earn their Shapes in Nature badge.

Daisy Numbers in Nature 1

Activity 1—Arrival and Opening Ceremony: Daisies use flashlights and their hands or bodies to make animal shaped shadows.

Activity 2—Step 1: Search for shadows (choose one)

Choice 1: Trace Your Shadow

Daisies explore the size and shape of shadows by tracing their own. First, they explore how a shadow changes when a flashlight is closer or farther away from an object, and then, Daisies go outside or use a lamp to create and trace their own shadows. In the end, Daisies lie down and help each other trace their outlines to compare them to their shadows.

Choice 2: Create a Shadow

Daisies explore the size and shape of shadows by casting shadows with a miniature tree or other small figurines. They use pipe cleaners to make a tree that can stand on its own and then explore how a shadow changes when a flashlight is closer or farther away. In the end, Daisies lay their tree down and trace its outline to compare them to their shadows.

Choice 3: See How Shadows Change

Daisies explore how the size, shape, and direction of shadows changes throughout the day. First, they explore how a shadow changes when a flashlight is closer or farther away from an object, and then, Daisies go outside to create and trace their own shadows. Later in the meeting, Daisies go outside again to repeat the shadow tracing process and compare the two silhouettes.

Activity 3—Closing Ceremony: Daisies review their favorite part of the meeting and what they learned.

Daisy Numbers in Nature 2

Activity 1—Arrival and Opening Ceremony: Daisies work together to unpack materials for the meeting, putting them into categories, like kitchen tools, handouts, and drawing utensils.

Activity 2—Sort natural objects (choose one)

Choice 1: Measure and Sort Leaves

Daisies learn about measurements like length and weight. They examine a ruler and its markings for inches. Daisies learn to estimate and then use the ruler to get an accurate measurement. From there, they measure and sort leaves of different sizes.



Choice 2: Weigh and Sort Rocks

Daisies learn about measurements like length and weight. They examine a ruler and its markings for inches. They explore relative weights by holding a pencil in one hand and pennies in the other to see which weighs more, then they use a scale to compare their weights. Daisies learn to estimate weight and then get an accurate measurement. From there, they weigh and sort rocks of different sizes.

Choice 3: Sort any Natural Objects

Daisies learn about measurements like length and weight. They examine a ruler and its markings for inches. They explore relative weights by holding a pencil in one hand and pennies in the other to see which weighs more, then they use a scale to compare their weights. Daisies learn to estimate weight and then get an accurate measurement of natural objects.

Activity 3—Step 3: Make your own unit of measure (choose one)

Choice 1: Measure with a Natural Object

Daisies create their own unit of measure using a nature object. First, they practice estimating length in inches and getting accurate measurements using a ruler, and then they choose a natural object as their unit of measure. They take estimates of objects using their natural object and compare their results with others in the troop.

Choice 2: Measure with Your Body

Daisies create their own unit of measure using their hand or foot. First, they practice estimating length in inches and getting accurate measurements using a ruler, and then they use their hand or foot as their unit of measure. They take estimates of objects using their hand or foot and compare their results with others in the troop.

Choice 3: Measure with a Group of People

Daisies create their own unit of measure using a special item as their unit of measure that connects you with other Daisies and Girl Scouts. First, they practice estimating length in inches and getting accurate measurements using a ruler, and then they use their special item as their unit of measure. They take estimates of objects using their special item and compare their results with others in the troop.

Activity 4—Closing Ceremony: Daisies earn their Numbers in Nature badge.

Daisy Design with Nature 1

Activity 1—Arrival and Opening Ceremony: Daisies review field guides or other bird identification materials and discuss their observations.

Activity 2—Step 1: Count with birds (choose one)

Choice 1: Go Bird-watching

Daisies use math to learn more about birds. First, they review **My Measurement Chart** and take a quick poll to review tracking data with tally marks. From there, Daisies learn to identify and track the birds they see. They share and compare their results with the troop.

Choice 2: Mix Bird Food

Daisies use math to make bird food and learn more about birds. First, they review **My Measurement Chart** and take a quick poll to review tracking data with tally marks. Then, they draw and label each kind of seed and use tally marks to keep track of the spoonfuls of each.



Choice 3: Measure Birdcalls

Daisies use math to learn more about birds by listening and counting bird calls. First, they review **My Measurement Chart** and take a quick poll to review tracking data with tally marks. From there, Daisies learn to measure how long a bird calls and how to count the number of times the call is repeated in a pattern.

Activity 3—Closing Ceremony: Daisies review their favorite part of the meeting and what they learned.

Daisy Design with Nature 2

Activity 1—Arrival and Opening Ceremony: Daisies review **Categories in Nature** and talk about the photos of natural objects, animal tracks, and clouds.

Activity 2—Identify parts of nature (choose one)

Choice 1: Sort and Identify Natural Objects

Daisies search for, identify, and sort natural objects into categories. They draw 5-10 natural objects they see on separate sheets of paper, sort the papers into categories such as plants, animals, rocks, etc. Daisies draw each category on **My Nature Tally Chart** and add a tally for each object in a category.

Choice 2: Explore and Identify Animal Tracks

Daisies search for, identify, and sort footprints left by animals into categories. They go outside (or look at tracks in photos or a video) and draw each category of animal tracks on **My Nature Tally Chart** and add a tally for each track they see. They use **Categories in Nature** to help them narrow down an animal category and guess what kind of animal made those tracks.

Choice 3: Watch and Identify Clouds

Daisies search for, identify, and sort clouds into categories. They learn about clouds and use **Categories in Nature** to help them learn the different clouds and their characteristics. Then, Daisies go outside (or look at photos or videos) and draw each category of cloud on **My Nature Tally Chart** and add a tally for each type they see.

Activity 3—Step 3: Make a map (choose one)

Choice 1: Make an Adventure Map

Daisies learn about the features of a map including symbols, the key or legend, and landmarks. Then, they choose a location such as their home, school, or neighborhood and make a map to go on an adventure. Daisies decide on a starting point and ending point and mark a route on their map with landmarks in between.

Choice 2: Make a Neighborhood Map

Daisies learn about the features of a map including symbols, the key or legend, and landmarks. Then, they talk about their neighborhood, the kinds of landmarks there are, and make a map that also includes details like streets, buildings, or lakes. Daisies decide on a starting point and ending point and mark a route on their map with landmarks in between.

Choice 3: Make a Sound Map

Daisies learn about the features of a map including symbols, the key or legend, and landmarks. Then, they choose a location with different types of sounds and make a sound map. Daisies decide on a starting point and ending point and mark a route on their map with landmarks in between.

Activity 4—Closing Ceremony: Daisies earn their Design with Nature badge.