

## NATURE GAMES

### Oh Deer!

**Materials:** 2 ropes, each about 10 feet long and a flat space with grass

**Ideal age group:** Kindergarten-2<sup>nd</sup> grade

1. Before learners arrive, spread the 2 ropes parallel to each other in the grass. Leave about 10 feet between the ropes.
  - a. Before beginning the activity, review the 4 resources and hand symbols. Tell learners they will need to use these symbols throughout the activity.
2. Divide the group into 2 fairly equal groups, place one group with toes on one rope and the other with toes on the other rope, facing each other.
3. One group will be resources. They represent food, water, and shelter. Space is represented by the space in between the ropes.
4. The other group will be a deer family.
5. Explain that the “resources” are going to choose which resource they want to be, food water or shelter.
6. The deer are going to choose one resource they are looking for.
7. Have learners turn around so their backs are to each other.
8. Each of the “resources” will pick, food, water or shelter, and make that symbol while their back is turned.
9. Each of the deer will pick, food, water or shelter, and make that symbol.
10. Count to three and have all of the resources and deer turn around and hold their symbol.
11. Go through the deer one at a time and ask them if they see the resource they need. If they do, have them go link arms with the resource and bring them over to the deer line. “You found the resource you were looking for, so you were able to grow your deer family.” That resource will now become a deer for the next round. If the deer does not see the resource they were looking for, they will come into the middle of the 2 ropes and die a dramatic deer death. (Make this very dramatic and silly, so it keeps the mood light and doesn’t upset learners that they “die”.)
12. Debrief the activity by going through different scenarios and what that means for the deer. What if there was a long winter and there was hardly any shelter? What if there was a lot of rain, but not enough food? (Animals need all 4 things in their habitat to survive.) Try to use natural phenomenon rather than human impacts. 1<sup>st</sup> graders may not be able to handle the idea that building homes sometimes means habitat destruction.

### Squirrel Game

**Materials:** Any outdoor space

**Ideal age group:** Kindergarten-3<sup>rd</sup> grade

1. This game teaches learners a squirrel’s defense mechanism. When a squirrel is scared or sees a predator, it freezes and tries to blend in with its surroundings.
2. Tell learners that for this game they will transform into squirrels. Have learners show you their best squirrel pose.
3. You, the instructor, will become a predator of a squirrel (fox, hawk).
4. The object of the game is for the squirrels to get from the start point to the end point without getting gobbled up by the predator.
5. All squirrels will line up along the starting line and the predator will stand with their back turned to the squirrels. When the predator’s back is turned, the squirrels may move towards the end point (away from you). When the predator turns around, the squirrels must freeze in their best “squirrel pose” so the predator cannot see them. If a squirrel is moving or making noise, the predator will pretend to gobble it up and send it back to the start point. (The game is similar to red light green light.)
6. Once the squirrels make it to the end point, they are safe in a tree and cannot get eaten by the predator.

## Build a Shelter

**Materials:** An outdoor space with small sticks, grass, rocks, and other natural building materials

**Ideal age group:** All ages

1. Ask the learners a few questions to introduce them to the concept of shelter: Why do we need a shelter? Why do we build shelter? Do people build shelter? Do all animals build shelter? We do, but does a deer build a shelter? Ants build shelter.
2. Ask learners to give a few examples of shelters, i.e. nests, holes, dens, dams, etc. Explain that at this station the learners will pretend they are a tiny animal and need to build an entire shelter for themselves using materials found in nature.
3. Have the learners choose the animal they would like to transform into, stand up, and pretend to shrink. Explain that being so small they cannot pick up huge trees, but have to make use of smaller pieces of grass and sticks.
4. Give the learners boundaries for finding supplies and building their shelters. Emphasize that they have to use things that are dead, down and brown. They cannot tear branches or leaves off of trees, or pull grass out of the ground.
5. Give them a while to build their shelters and help them consider the elements that their shelter has to withstand. Once everyone is done go around and have each learner explain why they built their shelter the way that they did and why they chose the location that they did.

## Every Animal Needs a Home

**Materials:** A bag full of stuffed animals that live along the South Platte River, an outdoor space with trees and bushes to hide in

**Ideal age group:** Kindergarten-3<sup>rd</sup> grade

1. Explain that learners will be transformed into many different animals and they will have to find a good habitat for themselves as that animal.
2. One at a time pull stuffed animals out of the bag and have the learners become that animal. Quickly discuss things that the animal might need in their habitat.
3. Within set boundaries have each learner find a spot that they would like to live as that animal.
4. After they have found their habitat, call them all back and have them share why they picked the location that they did.
5. Repeat for as many animals as you have time for.

## Signs of Animals Exploration

**Materials:** Magnifying glasses, binoculars, rulers, any sort of tool to help engage learners (optional), any outdoor space

**Ideal age group:** All ages

This is meant to be an unstructured exploration time. Explain that even if we don't see animals, they leave signs behind that let us know that they live here. These can be nests, tracks, scat, sounds, holes, etc. Hand out magnifying glasses and within set boundaries have learners explore for the signs of animals. Use inquiry as students make discoveries. Encourage students to think critically about what they find and make predictions about the animals who could have made these signs.

## Sink or Float

**Materials:** A space near the river

**Ideal age group:** Kindergarten-1<sup>st</sup> grade

1. Take your learners down to a safe spot by the South Platte River and line them up. Tell learners we are going to do a few experiments with the water.
2. Learners will get to collect three different natural items and make a guess if they will float or sink. (specify that learners are not to use trash for this activity.)
3. First, ask learners to find something that they think will sink. Line learners up at the edge of the water and count to three to have them all toss their items in at once. Ask learners if their item sank or floated. Was their guess correct or did their item surprise them?
4. Second, have them find something they think will float. (Line learners up at the edge of the water and toss items in.)
5. Last have them get something they are not sure about. (Line learners up at the edge of the water and toss items in.)
6. Ask learners after each item is tossed into the water if their guess was correct or if their item surprised them. Ask learners to make conclusions about different items. For example, my stick floats, so does all wood float?

## The Great Rock Hunt

**Materials:** Any outdoor space where rocks can be found, optional containers for carrying rocks in (Tupperware container, shoebox, coffee can)

**Ideal age group:** All ages

1. Rocks are very important non-living things.
2. Ask learners why they think rocks are important for people? Why are they important for animals? (Rocks help make soil, they can provide shelter for animals, are used to make sidewalks, streets, buildings, and much more.)
3. There are many different kinds of rocks, let's see how many we can find!
4. Tell learners they are going on a rock hunt to try and see what different types of rocks are in Colorado. Here is an example list of different rocks to look for.

- A round rock
- A flat rock
- A tiny rock
- A shiny rock
- A black rock
- A sharp rock
- A rock that could be used as an arrowhead
- A pink rock
- A crystal rock
- A rock with gold in it
- A rock made of more than one rock
- A shiny rock
- A dull rock
- A broken rock
- A dry rock
- A dirty rock

## That's My Rock!

**Materials:** The book, *Everybody Needs a Rock*, an outdoor space with rocks

**Ideal age group:** 1<sup>st</sup>-3<sup>rd</sup> grade

1. First, learners will explore within set boundaries to find a special rock. Designate boundaries and tell learners that they can look for a special rock. Don't just pick any rock! Find the perfect rock for you. What do you like about your rock? Look at the shape, size, colors, texture, and smell.
2. Once all learners have their special rock, have them all sit in a circle.
3. Tell them that rocks may all look similar at first, but each rock is very different if you look closer.
4. Next, lead them through a series of characteristics to notice about their special rock. Is it smooth, rough or broken? What color is it? Does it have crystals poking out, a band of color or an interesting texture? Is it big or little? Is it heavy or light? Tell learners to close their eyes and feel their rock. Get to know their rock really well so that even if they couldn't see it, they would know it was their rock.
5. Tell learners to give their rock a name.
6. Have learners each introduce their special rock to the group saying their rock's name and one thing they like about it.
7. Now tell learners to put all of their rocks in a pile in the center of the circle. Ask learners to come up (one at a time) and find their rock.
8. Ask learners who was able to find their special rock again. How did you know it was your rock? If there was anyone who wasn't able to find their rock, ask them what they could have done to get to know their rock better?

### Map Making

**Materials:** Paper, a writing surface, and a marker for each learner

For a mapping template of Bear Creek Park, [click here](#).

**Ideal age group:** 2<sup>nd</sup> grade and up

1. Lead learners to any outdoor space.
2. Give them each a piece of paper, a writing surface, and markers.
3. Tell learners they will be making a map of the park.
4. As a group, establish the key for their maps and what symbols will be used to mark certain living and non-living things.
5. Draw in some of the features of the park such as the South Platte River and trails.
6. Help learners orient themselves before drawing what they see but having them line up the South Platte River on their map with the real South Platte River.
7. Give learners time to explore the park and draw what they see. Also, ask learners to find their favorite place in the park and mark this on their map with a happy face.
8. Gather learners back as a group and share what they found. Did anyone find their favorite place in the park? What did you like about it?

### Get to Know a Tree

**Materials:** A blindfold for every 2 people

**Ideal age group:** 2<sup>nd</sup> grade and up

1. Tell learners that they are going to learn how to look a little closer at living things. We are going to meet a tree and get to know it really well.
2. Group learners into partners.
3. Explain that you are each going to take turns leading your partner while they are wearing a blindfold. It is your job to keep your partner safe while they are blindfolded. (Demonstrate good ways to lead your partner safely.)
4. You will be leading your partner to a tree. Take them on a silly, indirect path to the tree to make it more challenging.

5. Once you have led your partner to their tree, they must get to know their tree really well.
  - a. How does your tree feel? Rough, smooth, bumpy
  - b. How big is your tree? Taller than you? Smaller than you? Is the trunk thick or skinny? Are the branches spread out or close together?
  - c. Does your tree have leaves? A lot or a little? Are they close to the ground or higher up?
  - d. Does your tree have berries or flowers?
  - e. What does your tree smell like?
  - f. What do you hear near your tree?
6. After about 5 minutes, call back the learners.
7. Ask learners to take off their blindfolds and try to lead their partner back to the tree. “You only get 2 guesses to try and find your tree, so remember all of the different characteristics you observed about your tree and look carefully.”
8. Talk to their partner about why they knew this was their tree or maybe why they weren’t able to find their tree.
9. Now tell learners to switch roles and repeat the activity.
10. After both partners have a chance to complete the activity, call learners back as a group.
11. Ask learners who was able to find their tree. How did they know it was their tree? Ask learners who didn’t find their tree. How they could have gotten to know their tree better to help them find it again? Talk about how sometimes we forget to look closely at things and use all of our senses. When we do use all our senses, are we able to observe more? Learn more?

### Plant Scavenger Hunt

**Materials:** Plant ID cards, an outdoor space with a variety of plants

**Ideal age group:** 2<sup>nd</sup> grade and up

1. SPREE’s plant ID cards can help you lead a plant scavenger hunt where you and your learners search for as many different plants as they find.
2. **Plants**
  - a. Rabbit Brush - *Seeds look like the fuzzy tail of a rabbit as well as the plant makes a fantastic hiding place for rabbits*
  - b. Common Mullein - *Sticks up like a stalk, and can be identified by the soft leaves at the bottom of the plant.*
  - c. Cat tail - *Grows in big groves in marshy wet areas, sometimes in a stream.*
  - d. Box Elder - *This is a big tree that grows with many trunks at the bottom.*
  - e. Cottonwood tree - *Big tree grows with one trunk really tall*
  - f. Coyote Willow - *Brushy looking plant that grows on the banks of the Bear Creek and South Platte. Great hiding place for coyotes and the willow branches were often used to weave baskets and rope.*
3. **Grasses**
  - a. Blue Grama – Eyebrow Grass
  - b. Little Bluestem – Actually reddish in color
  - c. Wheatgrass – Seeds look like little boats
  - d. Ryegrass – Looks like a caterpillar
  - e. Switchgrass – Grows tall and looks like a firework

### Arapahoe and Cheyenne

**Materials:** A space with coyote willows(bushes that grow right next to the river) and 2 rocks for each learner

**Ideal age group:** All ages

1. Time travel to 200 years ago, before people had settled this area.
2. Before Denver was established the Cheyenne and the Arapahoe often came to this area, however, they were nomadic groups like other Plains Indians. What does the word nomadic mean? (Nomadic peoples did not have permanent homes. They moved from place to place in search of food other things they needed to survive.)

3. Why might the Cheyenne and Arapahoe continue to visit the Platte River? (The river was a source of trees/wood for tools, water, and shelter. You can also find many animals near sources of water for hunting. The Cheyenne and Arapahoe were also a very clean people and bathed regularly.)
4. Briefly explain that the river offers trees and other cover for animals that they can't find in the open prairie. Plains Indians had to be very skilled observers in order to find animals when hunting. Explain that when Arapahoe or Cheyenne children were very young, they would have to learn and practice the skills that would make them good hunters. Today we are going to test our skills along the South Platte River.
5. Lead students through a battery of skills activities:
  - a. First, have learners pick 2 small rocks and hold them until I tell you what to do with them.
  - b. Sneakiness – Sneak through an area as quietly as possible
  - c. Accuracy – Throwing their first rock into the river trying to hit a specific target
  - d. Distance- Throwing their second rock as far across the river.
  - e. Speed – Take learners to the “speed track” and practice running fast. Explain this is not a race between you and your classmates. Have each learner visualize an animal they are chasing for dinner as they run around the track.
  - f. Hiding – Play a game of hide and go seek in the Coyote Willows. Tell learners that sometimes we can learn certain skills from animals. We are going to transform into Coyotes for this game and practice hiding. (Play this away from the river bank because this area is too steep.) Learners are allowed to take 2 steps into the Coyote Willows and freeze in their best Coyote pose, staying as still and quiet as possible. You will act as a bear and gobble learners up if they move or make noise.

### Tree Identification

**Materials:** A Spruce, Fir, and Pine tree

**Ideal age group:** 3<sup>rd</sup> grade and up

#### 1. **Spruce Tree**

Steps:

1. Poke your hand with needle and determine sharp or dull.
2. Count the sides and determine shape of needle.

Adjectives:

Type of Needle: Sharp

Shape of Needle: Square

Chant: SSS Spruce are square and sharp!

#### 2. **Fir Tree**

Steps:

1. Poke your hand with needle and determine sharp or dull.
2. Count the sides and determine shape of needle.

Adjectives:

Type of Needle: Friendly

Shape of Needle: Flat

Chant: FFF Firs are flat and friendly!

#### 3. **Pine Tree**

Steps: Right away these needles are different than the Spruce or Fir tree needles. These needles come in packets. Depending on the type of pine, they can come in packets of 2, 3, 4, or 5.

Adjective:

These needles come in packets.

Chant: Pines come in packets of 2, 3, 4 or 5