Adapted from the Jane Goodall Institute’s Roots & Shoots Program.

“Roots creep underground everywhere and make a firm foundation. Shoots seem very weak, but to reach the light they can break open brick walls. Imagine that the brick walls are all the problems we have inflicted on our planet. Hundreds and thousands of roots and shoots, hundreds and thousands of young people around the world, can break through these walls. You can change the world.”

Jane Goodall

The Roots & Shoots mission is to foster respect and compassion for all living things, to promote understanding of all cultures and beliefs and to inspire each individual to take action to make the world a better place for the environment, animals and the human community. All Roots & Shoots members, from pre-K to university, demonstrate their care and concern for all living things through service projects in their community.

The Roots & Shoots program began in 1991 in Dar es Salaam, Tanzania, with a gathering of 12 students on Dr. Jane Goodall’s back porch. The groups met with Dr. Jane to discuss a range of problems they knew about from first-hand experience that caused them deep concern. Their discussion covered topics such as pollution in the city, deforestation in the mountains, the welfare of domestic animals and the future of wild animals, including Dr. Jane’s threatened chimpanzees.

These motivated young people wanted to learn more, they were willing to take action and they hoped that their peers would join with them to help make a difference, and Roots & Shoots was born.

The Roots & Shoots is based on the philosophy that:

- Every individual matters, whether human or animal.
- Every individual has a role to play.
- Every individual can make a difference.

Through the completion of a series of activities, Girl Scouts will become involved in projects to help save animals and the environment as well as each other, their communities and their world.

Membership in the Jane Goodall Institute is not required to participate in the Girl Scout Roots & Shoots program, but you may find many of the programs and resources helpful in planning and implementing your own community service activities. For more information, visit www.janegoodall.org.

Complete a total of four activities including one Discover, one Connect, one Take Action and one other activity chosen from any category.

**Discover:**

1. Find out ways to help birds through the cold winter or dry summer months. Learn where birds go when they migrate. Research and adopt one kind of bird that comes from further north to spend the winter in our area. Find out how long they are here and provide your birds with the habitat they need while they are in our area.

2. Visit a local zoo. Find out why the animals thee were chosen to be there. Are there any endangered species? Where are the natural habitats for these animals? Do other zoos have some of the same species of animals?

3. Learn about Monarch butterflies. They travel great distances to their winter habitat stopping along the way for food. Plant or visit a butterfly garden and observe how many butterflies visit the garden. Discuss what would happen if their winter or summer habitats were destroyed.

4. Learn where seeds come from and how they grow. Go on a hike in the woods to find seeds and plants in various stages of growth. Start a window garden. Find out which part of the new seedling is the root and which part is the shoot. What is each component’s function?
Connect:
1. Go on a hike to observe animals, birds and insects in their natural habitat. Make a list of the different species and how many of each you have seen. Mark down what they were doing and how they reacted to your presence in their habitat.
2. Visit an animal shelter. Do the animals there have enough food, water and bedding? Where do the animals come from? Find out how your troop can help support the shelter or enrich the animals’ lives.
3. Imagine what it would be like to return home only to find that your home has been destroyed, your water supply was low or your major source of food was gone. Make up a play or puppet show on how wild animals might respond in a similar situation when part of their habitat has been destroyed.
4. Organize a “zero” energy day for your troop. Brainstorm ways that you can use less electricity and less gasoline. Use your own energy as much as possible. Walk when you can and get up with the sun and go to bed with the sun.

Take Action:
1. Take part in a community clean up, a watershed clean up or help plant trees in your community.
2. Make bird feeders for the residents of a local nursing home or for patients at a children’s hospital.
3. Visit a senior center. Pair up with a resident for the “Story Telling” activity.

The Window Seed
Purpose of this project is to discover what a developing seed looks like.

Materials:
- A clear plastic sandwich bag
- A paper towel
- A radish, bean or sunflower seed
- A spray bottle with water
- Cellophane tape
1. Fold the paper towel into a square.
2. Place the seed in between the layers of the paper towel.
3. Spray the paper towel with water until it is very moist but not soaking wet.
4. Place the paper towel in the plastic bag and tape the bag to a window that gets a fair amount of sun.
5. After about a week the seed will sprout a root and a shoot. Discuss the difference between the root and the shoot. What is the function of each part of the plant?
6. Finally, transport the seedling to a flowerpot or outdoors.

From the Roots & Shoots for Young Children curriculum
Story Telling

Materials:
- Sheets of paper
- Pens
- Scissors

Group Activity: This old-fashioned paper game is a great way to break the ice. The girls pair up with senior citizens and they take turns telling stories about their lives. Rather than have fortunes hidden under the folded paper, it contains topics for story telling. Detailed directions for folding this toy are below. However, there may also be a student in the group who knows how to make these toys.

Directions for folding a storyteller:
- Take a piece of letter size paper and fold the upper right hand corner down to the left side to form a square and cut off the bottom.
- Take the square and fold it in four quarters. Fold four corners into the center and then fold that square in half.
- Tuck your fingers in the four little pockets.
- Write the name of four colors on four outside sections.
- Write the numbers 1–8 on the inside sections.
- Write these sentences in the tucked under triangle of paper:
  - What was your biggest adventure?
  - What was the scariest thing that ever happened to you?
  - Did you care for a special pet?
  - Do you have any brothers and/or sisters?
  - Where were you born?
  - What was the first kind of car you drove?
  - What is the farthest place you have ever visited?
  - What was the one thing you wish you had known when you were my age?
  - What did you do for fun before you had a TV?

Take turns telling each other stories. Practice being a good listener.