



Click on the button for the level you need:

*Brownies*

*Juniors*

*Cadettes*

*Seniors and Ambassadors*



## Outdoor Skills Patch Leave No Trace – Brownies

Learn the skills needed to thrive in an outdoor environment. Do you have good outdoor ethics? Do you want to learn why it's important to leave no trace?

### PLEASE NOTE:

- Try to space out each step between different troop meetings, different times during an overnight campout, etc. Doing them one right after another might cause the girls to become disinterested and less engaged.
- The girls will remember less if you try to cram all of these into one troop meeting or lesson.

### Step 1:

## Learn about Leave No Trace and Outdoor Ethics

*Adapted from the Leave No Trace Center for Outdoor Ethics PEAK program.*

### Materials Needed:

- Large piece of Paper or White Board
- Markers
- Various pieces of outdoor gear (real items preferred, can substitute with pictures or homemade versions [ex: binoculars made from toilet paper rolls])
  - Hat, gloves, jacket, boots, plastic bag with trash items (wrappers, orange peels, etc.), backpack filled with the following: compass, map (of anything), sunscreen, camera, backpacking stove, binoculars, etc.
- 1 piece of paper per girl

### Lesson Plan:

1. Dress as if you've just returned from a day hike. Have a large piece of paper set up so you can write on it, and so all the girls can see.
2. Ask "Who knows how to Leave No Trace while outdoors?" Explain "Leave No Trace is information and skills that help people protect themselves and also the areas they visit (like state parks, campgrounds, etc.). Leave No Trace is about making good decisions to protect the world around you – the world we all enjoy."
3. Start by removing your outer garments (jackets, gloves, hat, etc.). Let them know that before you left, you checked the weather conditions and made sure you had proper clothing. You also brought a map of the trail, which you reviewed last night when you planned your routes.
  - a. Ask "Do you girls have any other suggestions on how to plan for an outdoor activity?" You can give them examples like: going for a bike ride, going for a hike, going fishing at a lake, and so forth.
  - b. "You're spot on! All these activities illustrate the first principle of Leave No Trace, Know Before You Go!"
  - c. Write Know Before You Go on the piece of paper.
4. Brush off any "mud" from your boots. Explain, that while you were out, you encountered some muddy parts of the trail. It's important to stick to the trail, even if it's muddy.
  - a. Ask "Why is it important that I stick to the trail?"
    - i. Otherwise you may make the trail wider and possibly damage plants.
  - b. "Correct! By doing this you Choose the Right Path!"

- c. Write Choose the Right Path on the piece of paper.
5. Empty your pockets and pull out the trash. Explain that this is your trash from the day and that you always carry a plastic bag with you to carry out your trash.
  - a. Ask “What types of trash have you carried out before?”
  - b. “Awesome! By taking your own trash with you, you Trash Your Trash instead of leaving it for other people to find.”
  - c. Write Trash Your Trash on the piece of paper.
6. Now begin to unpack your backpack. Remove your essentials (compass, maps, sunscreen, etc.).
  - a. Ask “What principle have we already talked about that you think these items go with?”
  - b. “That’s right! Know Before You Go! You girls are great problem solvers!”
7. Tell them how great the views were – perhaps the fall colors were really pretty or some new spring wildflowers were just popping up. However, you know you shouldn’t take the leaves or flowers, so you brought along a camera (pull a camera out). Even if you don’t bring a camera, it’s best to always Leave What You Find.
  - a. Ask “Why is it important that we leave things we find?”
    - i. Possible answers: animals might use sticks, leaves, or rocks for their homes; so the next person can also enjoy; if we all took pieces, there wouldn’t be anything left over time, etc.
  - b. Write Leave What You Find on the piece of paper.
8. Remove the stove – and explain that you would use it to cook a meal instead of making a campfire. An improper campfire can be dangerous, scar rocks, or kill plants and trees. So it’s important to Be Careful with Fire.
  - a. Ask “Do you think it’s a good idea to burn your trash or food while camping?” “No? Why not?”
    - i. Trash doesn’t always burn and may attract wildlife to human food.
    - ii. Paper trash can catch on fire and then blow away into the forest, possibly starting a forest fire.
  - b. Write Be Careful with Fire on the piece of paper.
9. Pull out the binoculars. Today you saw some really cool wildlife (i.e. a doe with her fawn) in a nearby meadow. You didn’t want to disturb or frighten them so you stayed back and used the binoculars to get a better look. And, although you encountered some hungry chipmunks along the way you didn’t feed them.
  - a. Ask “Why didn’t I feed the chipmunks?”
    - i. Human food is unhealthy for animals; it also changes the way they find food naturally.
  - b. “That’s right! And by watching the deer through the binoculars and not feeding the chipmunks, I Respect Wildlife.
  - c. Write Respect Wildlife on the piece of paper.
10. Now the backpack should be empty. Explain some of the different trail users: mountain bikers, people riding horses, other hikers. You always do your best to Be Kind to Other Visitors. This means that you or your actions shouldn’t disturb, hurt, or annoy anyone else. You didn’t yell to your buddy, or make loud noises. And, when sharing trails with horses, you stepped to one side of the trail and said hello to the rider in a quiet voice.
  - a. Ask “Why did I do this?”
    - i. It gave the horse and the rider room to pass. By speaking quietly, you didn’t spook the horse.

- b. "That's right!"
  - c. Write Be Kind to Other Visitors on the piece of paper.
11. Explain how these Leave No Trace principles teach people to care for natural and wild lands while enjoying outdoor activities. Recreation can sometimes cause damage to the land, but by following these principles, we can enjoy our favorite places every time we visit.
  - a. Read through the principles written on the piece of paper with the girls.
  - b. Explain to the girls that we are now going to write our own copy of the principles so we can keep them with us and be reminded of them whenever we do things outdoors.
    - i. Have each girl take a piece of paper and some markers and copy down the principles. Allow her to decorate the paper as well!
  - c. *You can have the girls do something with photos as well if writing out the principles doesn't engage them. Or you can do a beaded bracelet where there is a different color assigned to each LNT principle. Just be sure to review the 7 LNT principles while doing the activity.*
12. After everyone has decorated their papers, ask them once again "Why is it important that we follow these principles?"
  - a. To keep us and nature safe. We can also make sure that everyone gets to enjoy nature!

### Step 2:

#### Learn principle: Know Before You Go

##### Materials Needed:

- Large piece of Paper or White Board
- Markers
- Pictures of a location you would go on a day hike (pick 3 different locations)
- Miscellaneous items that you would need to take on a hike and items to not take on a hike. You may need multiples of some items (real items preferred, can substitute with pictures or homemade versions [ex: binoculars made from toilet paper rolls])
  - Ex: hiking boots, tennis shoes, flip-flops, cotton t-shirt and pants, synthetic t-shirt and pants, wool socks, cotton socks, map, compass, bandana, baseball hat, 2 water bottles, sunscreen, bug spray, backpacks (one good, one not), first aid kit, rain coat/poncho, jacket, winter clothes, winter hat, gloves, chapstick, flashlight, etc.

##### Lesson Plan:

1. Begin by reviewing all 7 principles. Ask girls if they can remember what they are, and write them down on a large piece of paper/white board.
  - a. Know before you go
  - b. Choose the right path
  - c. Trash your trash
  - d. Leave what you find
  - e. Be careful with fire
  - f. Respect wildlife
  - g. Be kind to other visitors
2. Say to the participants "Today we are going to learn about the first principle of Leave No Trace: Know Before You Go. What do you think know before you go means?"
  - a. Give the girls time to answer. They can talk in small groups or in a large group.
  - b. "That's right! It means that you should plan your trip before you go outdoors and make sure you have everything that you would need to be safe on your trip."

3. “Now we are going to figure out as a group what we should take with us if we are on a trip. Do you think that we need to take exactly the same stuff no matter where we go?” “No? That’s right! What you take depends on where you are going and for how long you are going for.”
4. Show them the picture(s) of the first location you could take a day hike to. Give the girls a backstory to go with it (ex: Our first trip we need to plan for is for going on a hike to the Living Room behind the University of Utah. It is supposed to be a clear and sunny day with the temperature being about 70 degrees. The trail is about 2 ½ miles long and will take about 2 hours to hike. It is an uphill trail where we will gain about 1,000 feet in elevation.)
5. Gather your miscellaneous hiking items and place them into a pile.
6. Next, have the girls collaborate to figure out what they need to have with them on their hike. “I want you girls to work together as a group [or in small groups] to figure out what we should wear and bring with us on this hike. Talk about it with your group and then pick out the items from the pile that you think we should have on our hike!”
  - a. Give girls some time to work together and as a team come up with what they should bring. They should pick out their items and move them to a different pile.
  - b. If girls ask you questions during this time, help them by giving them leading questions. Try to not give them the answers directly, but show it is okay to ask for help and give them guidance.
  - c. After they come up with a pile they are happy with, go through it with them and have them talk about each item and why they think they should have it and talk about why they shouldn’t have the other items.
7. Do this same layout for two other locations. Try to pick locations that will require different needs, examples include:
  - a. Snowshoeing/Cross-country skiing at Bear Lake in the winter
  - b. Hiking through Zion National Park in summer
  - c. Hiking Silver Lake Trail (by Brighton Ski Resort) on a rainy day
  - d. Hiking Big Springs Trail (South Fork Canyon) in the fall (windy weather)
  - e. Doing a sunset hike to Delicate Arch.
8. “Wow you girls sure know how to dress and what to bring when exploring the outdoors! I’m glad I have you on my team for when we go hiking!”
9. “Now that we know what to wear and bring, what else do you think we should do before we leave for an outdoor adventure?”
  - a. Check the weather, find directions to the trailhead, talk to people who have gone before and see if they have any tips, etc.
10. “Great job girls! You sure know what to do before you go on a trip!”

### **Step 3:** **Learn principle: Leave What You Find**

#### **Materials Needed:**

- Large piece of Paper or White Board
- Markers
- Paper

### Lesson Plan:

1. Begin by reviewing all 7 principles. Ask girls if they can remember what they are, and write them down on a large piece of paper/white board.
  - a. Know before you go
  - b. Choose the right path
  - c. Trash your trash
  - d. Leave what you find
  - e. Be careful with fire
  - f. Respect wildlife
  - g. Be kind to other visitors
2. Say to the participants “Today we are going to learn about the principle: Leave what you find. What do you think leave what you find means?”
  - a. Don’t pick things up or take flowers or other things from nature home with you. If you are visiting an archeological site (a place that shows the history of people who lived before us), don’t touch the historical items/drawings. Don’t alter campsites – good campsites are found, not made – there is no need to build structures, break trees, or dig trenches.
3. Have the girls each take 3 pieces of paper (these can be half-sheets or quarter sheets). Have the girls draw a different thing that they would want to see in nature on each sheet of paper (ex: flower, rock, tree, fossil, cave drawings, animal tracks, animals, etc.)
4. Once girls have drawn their 3 items, have the girls arrange the items in a selected area, putting their pictures around like they would find them in nature.
5. Have the girls all find a place to stand or sit in the selected area.
6. Have one girl move from her space and pick up 5 pictures. After she has her 5 pictures, have her change places with one other girl. Have that girl come in and take 5 more pictures.
7. After 2 girls have come and taken 5 pictures each, have the group return and look at what is left. Have them talk about how it is different from when all of the pictures were together.
8. Keep going through this process of having 2 girls take 5 pictures then re-examining the remaining items. Once all the items are gone, have the girls talk about how they felt as the different items disappeared.
9. Ask “How would you feel if you went on a hike to see really cool things and you found that there was nothing left to see?”
10. “What are things we should do when we go outside to make sure we are following the principle Leave What you Find?”
11. “Perfect! I know you guys will do a great job of leaving things as you’ve found them so everyone can experience the beauty of the outdoors!”



## Outdoor Skills Patch Leave No Trace– Juniors



Learn the skills needed to thrive in an outdoor environment. Do you have good outdoor ethics? Do you want to learn more about the LNT principles?

### PLEASE NOTE:

- Try to space out each step between different troop meetings, different times during an overnight campout, etc. Doing them one right after another might cause the girls to become disinterested and less engaged.
- The girls will remember less if you try to cram all of these into one troop meeting or lesson.

## Step 1: Review and Learn principle: Be Careful with Fire

### Materials Needed:

- Large piece of Paper or White Board
- Markers
- Know Before You Go/Leave What You Find Draw Deck (see resources)
- A backpacking stove & fuel
- 2 small pans (of the same size if possible) for heating water
- Pre-established fire pit
- Firewood
- Water bucket
- Matches
- Hot Chocolate mix & cups for drinking

### Lesson Plan:

1. Begin by reviewing all 7 principles. Ask girls if they can remember what they are, and write them down on a large piece of paper/white board. *See Brownies Leave No Trace for more information if needed.*
  - a. Know before you go
  - b. Choose the right path
  - c. Trash your trash
  - d. Leave what you find
  - e. Be careful with fire
  - f. Respect wildlife
  - g. Be kind to other visitors
2. Say to the participants “First we are going to review the first two principles we learned back when we were Brownies. Who remembers what principles we talked about?” *If you didn’t complete Leave No Trace for Brownies, please go over Know Before You Go and Leave What You Find using the materials in the Brownie curriculum guide; modifying it as needed.*
  - a. “That’s correct! We talked about Know Before You Go and Leave What You Find. Now, can I please have everyone line up in a straight line in the middle of the space.” Leave room for participants to step forwards and backwards.
3. “Now we are going to play a quick review game. I have a deck of cards here (see resource section). On each card there is a situation and 2 answers. Using what you know about the principles Know Before You Go and Leave What You Find, you should pick the answer that you believe you would actually do in the situation. After you pick your answer you will take steps either forward or backward. Answer what you believe is right and try to not base your answers off other’s choices around you.”
  - a. Once all the participants are in a line, have the girls decide on 2 hand signals. One hand signal to represent answer A and one hand signal to represent answer B. (Ex: thumbs up/thumbs down, touching nose/touching ear, pointing left/pointing right, etc.)

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- b. Have a girl draw a card (either from your hand or a bowl/hat) and hand the card back to you.
- c. Read the situation out loud or have them read it. Read answer A and B out loud without saying the number of steps related to each answer.
- d. Give the girls a few seconds to pick their answer, possibly reading through the question and answers a second time.
- e. Have the girls show which answer they picked by giving the designated hand signal.
- f. Once all the girls are showing their hand signal, read the number of steps and which direction they should take for their answer.
- g. Discuss the answer if needed.
- h. Have a new girl pick the next card and repeat until you have gone through all the cards!
4. At the end of the game, congratulate the winner, but stress that all made some great choices and they all really won.
5. “Great decision making once again girls! Now we are going to learn a new principle: Be Careful With Fire. What do you think this means?”
6. “That’s right! Fire can be dangerous and leaves a big impact on the environment. So we should be smart when using fires outdoors.”
7. “When camping, there are 3 basic types of meals you eat: pre-cooked cold meals, meals cooked over fires, and meals cooked on a camp stove. Today, we are going to do an experiment to demonstrate the pros and cons of fire use.”
8. If your girls are not familiar with how to use a backpacking stove, teach them how to use stoves before beginning this activity.
  - a. Explain to the girls, that as a group, they will compare how fast they can heat water on a camp stove and a traditional campfire. After heating the water to a boil, and making hot chocolate (or another item that uses boiling water), group members will attempt to remove all evidence of the cooking area (i.e. traces of ash, firewood, stove, etc.).
  - b. Divide the girls into two groups – a fun way to do this is have everyone close their eyes. Ask them to cross their arms. Have the girls open their eyes again. Have the girls look and see if their right arm or their left arm is on top. Have all the like-crossed arms group together. This method amazingly usually hits about 50/50. You may need to do some switching to make the groups even.
  - c. Assign one group to the backpacking stove and one group to the campfire.
  - d. Review Fire Safety (and talk about how it relates to backpacking stoves) before starting.
  - e. On your signal have the girls start preparing their method and attempt to boil water.
  - f. Have each group keep track of how long it takes to prepare hot chocolate and clean up the site.
  - g. Note: It will be necessary to supervise the groups as they light the stove and construct the campfires.
  - h. Once all the groups have finished their hot chocolate and cleaned up their site have the girls come back together.
9. Things to remember: Leave No Trace does not simply mean putting out the fire and cleaning up the trash. There should be no evidence that fire ever existed. Here are points to remember when supervising and discussing the activity:
  - a. Make it a special challenge to Leave No Trace.
  - b. Is the ground scarred or scorched?
  - c. Is there evidence of charred wood? All campfires require crushing coals to ash, soaking with water to eliminate fire danger, and disposing of the ash. (Even fires built in existing and properly located fire rings should be cleaned.)
  - d. Is soil noticeably disturbed in and around the cooking site?

10. Ask the girls the following questions:
  - a. “Which method of boiling water was faster?”
    - i. The stove will most likely be the fastest method of boiling water. Fires require more preparation time, especially if proper care is taken to Leave No Trace.
  - b. “Which method would group members prefer if they were very hungry or if it were raining?”
  - c. “What problems arose during cleanup?” “How successful were the fire builders at leaving no sign whatsoever of their fire?”
    - i. A true Leave No Trace fire should leave virtually no sign of its existence. Did the fire builders meet this standard?
  - d. “What are some of the no-trace fire building practices in pristine areas?”
    - i. Build a fire mound or use a fire pan
  - e. Discuss the impacts of gathering wood – social trails, loss of nutrients for plant life, etc.
11. Congratulate your girls on learning more about how to be careful with fire! Remember, fires can be great and useful sometimes, but we don’t want to use them all the time.

### Step 2:

### Learn principles: Choose the Right Path & Trash Your Trash

#### Materials Needed:

- Large piece of Paper or White Board
- Paper
- Markers
- Game show “buzzers” (squeaking toys, a piece of paper girls step on, raising hands, etc.)
- Choose the Right Path Gameshow cards (see resources)
- Trash Deck (see resources) or actual trash items

#### Lesson Plan:

1. Begin by reviewing all 7 principles. Ask girls if they can remember what they are, and write them down on a large piece of paper/white board.
  - a. Know before you go
  - b. Choose the right path
  - c. Trash your trash
  - d. Leave what you find
  - e. Be careful with fire
  - f. Respect wildlife
  - g. Be kind to other visitors
2. Say to the participants “Today we are going to learn about Choose the Right Path. What do you think choose the right path means?”
  - a. “That’s right! Choose the right path means that when you are outdoors you walk and camp on surfaces that will show the least amount of impact of you being there!”
3. “Now we are going to play a little game show to see if you can choose the right path!” *Adapted from the Leave No Trace PEAK program.*
  - a. Divide the girls into 2 teams (or more for bigger groups).
  - b. One member from each team will come to the “podium” to play against each other.
  - c. You (the host) will ask a question from the deck (see resource section; shuffle before starting) and the first participant to answer correctly wins a point for her team.
  - d. After questions are answered (correctly or not) discuss why one surface is preferred over the other before moving on to the next question.
  - e. Play for a pre-established number of rounds to determine the “winners”. (Ex: Allow each girl to come to the front 3 times).
  - f. Congratulate all! They all won because they learned about how to choose the right path!

- g. *You can present this same information in a different manner if the game show method doesn't work well for your group size.*
4. "Great job girls, you really know how to choose the right path when we're in the backcountry! Now we are going to learn about another Leave No Trace Principle – Trash Your Trash. What do you think trash your trash means?"
- a. "That's right! Trash your Trash means that whatever we take with us when we go hiking/camping we bring back with us when we're done and we don't leave our litter for the next people to find!"
5. "Now we are going to have a challenge to see how much you guys know about your trash."  
*Adapted from the Leave No Trace PEAK program.*
- a. Have the pieces of trash or the trash cards (see resource section) laid out in front of the girls.
- b. Have the girls work as a team to figure out what they think takes the least amount of time to decompose and what takes the most time to decompose.
- c. After they have their order, have the girls guess how long they think it takes for each item to decompose. Have the girls put a piece of paper with their guess next to the item/card.
- d. Once they have gone through all the items with their guesses on time, go through the items one by one with the girls and how long it really takes for things to decompose:
- |                                      |                                        |
|--------------------------------------|----------------------------------------|
| i. Paper: 2-4 weeks                  | x. Nylon Fabric: 30 years              |
| ii. Orange/banana peel: 3-5 weeks    | xi. Tin cans: 100 years                |
| iii. Wool Socks: Up to 5 years       | xii. Aluminum cans: 200-400 years      |
| iv. Leather: Up to 5 years           | xiii. Plastic 6-pack holder: 450 years |
| v. Cigarette butts: 2-5 years        | xiv. Plastic Soda Bottles: 450 years   |
| vi. Juice box: 5 years               | xv. Glass Bottles: 1,000,000 years     |
| vii. Plastic Bag: 10-20 years        | xvi. Styrofoam: Never                  |
| viii. Disposable Diaper: 10-20 years |                                        |
| ix. Chip Bags: 20 years              |                                        |
- e. Have a discussion with the girls "Were you way off with any of the items? Did any of these times surprise you with how long it takes for things to decompose? Have they seen any of these items outside, perhaps where people have littered? How would finding some of these items in nature affect your experience?"
- f. End the discussion by stressing the importance of the "Trash Your Trash" principle. Many people think it is okay to leave food items outside like apple cores or fruit skins because they are "natural." Even food takes a long time to break down and is harmful to the wildlife that might eat it!

### Step 3:

### Learn principles: Respect Wildlife & Be Kind to Other Visitors

#### Materials Needed:

- Large piece of Paper or White Board
- Paper
- Markers
- Wildlife and habitat cards (see resources)
- Post-it notes

### Lesson Plan:

1. Begin by reviewing all 7 principles. Ask girls if they can remember what they are, and write them down on a large piece of paper/white board.
  - a. Know before you go
  - b. Choose the right path
  - c. Trash your trash
  - d. Leave what you find
  - e. Be careful with fire
  - f. Respect wildlife
  - g. Be kind to other visitors
2. Say to the participants “Today we are going to learn about the principle: Respect Wildlife. What do you think respecting wildlife means?”
  - a. “That’s right! Respecting wildlife means realizing that the outdoors is their home and we are just visitors. We want to make sure that they stay safe and we stay safe as well!”
3. “To learn more about respecting wildlife, we’re going to do an activity that talks about how our actions in the backcountry affect animals.” *Adapted from Nevada Outdoor School*
  - a. Have girls think about going on an adventure in a desert setting. Ask them what kinds of wildlife they would see.
  - b. As they name various types of wildlife give them the corresponding wildlife card (see resource section; card with an animal on it), or one that is similar, until everyone has a card. You may need girls to work in groups or make multiple copies – there are 8 cards for each category.
  - c. Have girls read through their card and learn the facts about their animal.
  - d. Have each girl (or group) draw one habitat card for food, water, AND shelter.
  - e. Have girls read through their habitat cards and think about how people affected their wildlife.
  - f. Have all girls (or groups) share about their animal and how people have affected their wildlife.
  - g. Once all girls have shared, ask girls how they can respect wildlife. Some examples include:
    - i. Don’t feed them – damages their health, alters natural behaviors and exposes them to predators and other dangers
    - ii. Stay a respectful distance away – if an animal is changing its behavior you are too close
    - iii. Store food and trash securely
    - iv. Control all pets
    - v. Avoid wildlife during sensitive times including mating, nesting, raising young or winter
4. “Wow! You girls surely know how Respect Wildlife! I know you will all do your best to protect them while you are in the outdoors. Now we are going to talk about our final Leave No Trace principle: Be Kind to Other Visitors.”
5. “In order to learn about Being Kind to Other Visitors, we’re going to compare what motivates different people to participate in their favorite outdoor activity and find similarities between different groups.” *Adapted from Nevada Outdoor School.*
  - a. Give each participant 3 post-it notes.

- b. On the STICKY side have them write their favorite outdoor activity; the same activity should be written on all three – be sure to keep it a secret!
  - c. On the non-sticky side have them write three reasons they love doing this activity – one on each post-it.
    - i. A good way to get them thinking is have them finish the sentence: I enjoy this activity because... (could be alone time, adventure, pretty views, etc.)
  - d. Once all girls are finished have everyone post their notes on a board or flat surface.
  - e. Once all the post-its are up, without talking, have the group organize and group the similar reasons. Then look at each group and see what activities are in each group.
  - f. After looking at the post-its, ask the girls:
    - i. Are there similar likes even with different types of activities?
    - ii. Was anyone surprised that a certain activity was in one of the groups?
    - iii. What can we do when we see conflicts between people doing different outdoor activities after looking at these likes of outdoor activities?
  - g. Talk with the girls about ways they can be kind to other visitors:
    - i. Travel and camp in small groups
    - ii. Keep noise down and leave radios, tape players, and pets at home.
    - iii. Select campsites away from other groups to help preserve their solitude.
    - iv. Always travel and camp quietly to avoid disturbing other visitors.
    - v. Make sure the colors of their clothing and gear blend with the environment.
    - vi. Respect private property and leave gates (open or closed) as found.
    - vii. Are considerate of other campers and respect their privacy.
    - viii. Are friendly and smile as they encounter other visitors and avoid long conversations unless the other group exhibits an interest in talking.
  - h. Congratulate the girls on knowing how to be kind to others in the backcountry!
6. “Now we have explored all seven of the Leave No Trace principles! You girls are going to be great outdoor explorers!”
7. “In order to wrap up learning all seven principles, we’re going to put some skits together!”
- a. Divide the girls up into groups of 3-4.
  - b. Have the girls pick one principle (try to have each group pick a different principle) and create a skit teaching the principle.
  - c. Have the girls share their skits and celebrate all their new knowledge on how to be a good citizen in the outdoors!

### **Resources:**

**Know Before You Go/Leave What You Find Draw Deck**  
**Choose the Right Path Gameshow Cards**  
**Trash Your Trash Cards**  
**Wildlife and Habitat Cards**

## Outdoor Skills Patch | Leave No Trace – Juniors

### Know Before You Go/Leave What You Find Draw Deck

<p>You're out for a hike when wildflowers are blooming. Wouldn't your Mom love a bouquet? For 3 steps, you:</p> <p>A. Pull out your camera and take a photo to make a card for her later. (3 steps forward)</p> <p>B. Make sure you pick different colors for variety. (3 steps back)</p>	<p>You and your friend find a perfect arrowhead. Your friend decides to keep it for a souvenir. For 2 steps you:</p> <p>A. Look for one that you can take home too. (2 steps back)</p> <p>B. Bring out your camera and convince your friend to take a photo instead. (2 steps forward)</p>	<p>You're having so much fun on your hike, you suddenly realize you drank all your water. Luckily, there's a stream flowing with clear, cool water – for 3 steps, you:</p> <p>A. Fill your water bottle from the stream and drink it. (3 steps back)</p> <p>B. Find and use your water-purifying tablets or filter in your pack before drinking any stream water. (3 steps forward).</p>
<p>You come across a bunch of interesting feathers that you think will really add to a homework project. For 2 steps, you:</p> <p>A. Grab a handful, but not all. (2 steps back)</p> <p>B. Leave them behind and make a quick drawing that you can use on your display later. (2 steps forward)</p>	<p>When you left for a day hike it was clear and sunny – during the hike, a storm moves in and rains for twenty minutes. For 2 steps, you:</p> <p>A. Find a tree to stand under so you don't get soaked. (2 steps back)</p> <p>B. Pull out a rain shell and a hat you brought "just in case." (2 steps forward)</p>	<p>You come to a fork in the trail, the directional sign has been knocked down and dismantled by a recent storm and the fallen tree limbs and debris make it hard to see the trail. For 3 steps, you:</p> <p>A. You consult your map, check your compass bearing and get back on the right trail. (3 steps forward)</p> <p>B. Climb over and make your own trail. (3 steps back)</p>
<p>Your class is on a field trip at a local trail and as it grows closer to lunch time – for 1 step, you:</p> <p>A. Realize you forgot to bring a lunch or a snack and start feeling hungry. (1 step back)</p> <p>B. Have a great time know your lunch and a quick snack are in your pack. (1 step forward)</p>	<p>You find a nice flat spot to pitch your tent, however, there are rocks, branches and leaves in the area. For 2 steps, you:</p> <p>A. Clear the area but replace the items when you break camp. (2 steps forward)</p> <p>B. Clear the area so the next person can also use the site. (2 steps back)</p>	<p>You and your group are taking a break from hiking in a small meadow and you start to become bored. For 2 steps, you:</p> <p>A. Begin to pull the grass and flowers out from the ground around you and braid it into a cool bracelet. (2 steps back)</p> <p>B. Start to play a hand game with a nearby friend. (2 steps forward)</p>
<p>It's a beautiful Saturday and you and your neighbor decide that you should go on a quick day hike and take advantage of the weather. Your parents allow you to pick where to go. For 2 steps, you:</p> <p>A. Look up some nearby trails using a guide book from your house. (2 steps forward)</p> <p>B. Ask your parents to just drive to a nearby canyon and you'll figure it out once there. (2 steps back)</p>	<p>You are out fishing with your friend when you realize that her face is starting to look red and burnt. For 2 steps, you:</p> <p>A. Suggest that you move to the other side of the lake so the sun is hitting the back of your friend. (2 steps back)</p> <p>B. Grab the sunscreen you packed in your backpack and you both reapply then find a shadier spot. (2 steps forward)</p>	<p>While on the trail, you find pictographs on the rock wall that is next to you. For 2 steps, you:</p> <p>A. Take a picture and start to talk with your buddies about what each part means. (2 steps forward)</p> <p>B. Start tracing all the pictures with your fingers and comparing your hand size to the ones on the wall. (2 steps back)</p>

Choose the Right Path Gameshow Cards

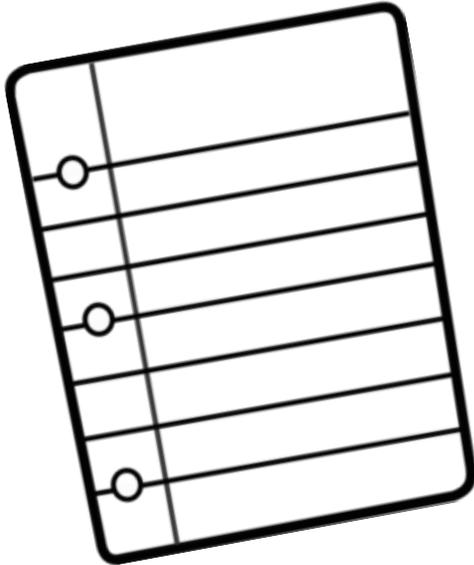
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<p>Which surface is more durable? <b>Deep Snow or Wet Meadow</b></p> <p>Snow, if deep enough can protect vegetation underneath</p>	<p>Which surface is more durable? <b>Puddle in the Middle of a Trail or Dry Grass</b></p> <p>Puddle. Going through puddles is preferred to avoid widening the trail.</p>	<p>Which surface is more durable? <b>Forest Herbs and Ferns or Grasses</b></p> <p>Grasses. Ferns and herbs can quickly show effects of trampling.</p>
<p>Which surface is more durable? <b>Marsh or Wet Sand</b></p> <p>Wet sand.</p>	<p>Which surface is more durable? <b>Dry Grass or Lichen-covered Granite</b></p> <p>Dry grass. Lichen, which is fungus and algae growing together, is vulnerable to scuffing.</p>	<p>Which surface is more durable? <b>Sandstone or a Wet meadow</b></p> <p>Sandstone</p>
<p>Which surface is more durable? <b>Very Little Vegetation or Granite</b></p> <p>Granite. Areas with very little vegetation are fragile.</p>	<p>Which surface is more durable? <b>Gravel or Grass</b></p> <p>Gravel.</p>	<p>Which surface is more durable? <b>Vegetation or Deep Layer of Snow</b></p> <p>Snow, if it's deep and firm enough it will help to protect underlying vegetation.</p>
<p>Which surface is more durable? <b>Mud or Vegetation (i.e. plant, flowers, grasses)</b></p> <p>Mud. Going through mud is preferred to avoid widening the trail.</p>	<p>Which surface is more durable? <b>Poison Ivy or Moss</b></p> <p>Moss.</p>	<p>Which surface is more durable? <b>Moss covered Rotten Log or Molten Volcanic Rock</b></p> <p>Volcanic Rock.</p>
<p>Which surface is more durable? <b>Forest Duff or Granite</b></p> <p>Granite. Granite is better because it can tolerate repeated trampling and use; forest duff is the decaying layer of leaves and branches which provides nutrients for living things.</p>	<p>Which surface is more durable? <b>Rocky Shore or Beach Grass</b></p> <p>Rocky Shore.</p>	<p>True or False? <b>It is OK to walk through puddles or mud in a desert environment.</b></p> <p>False – water is a very scarce resource for all living things in the desert.</p>

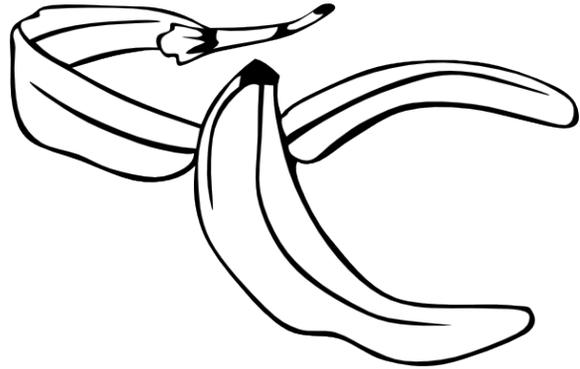
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<p style="text-align: center;">True or False? <b>Durable surfaces are those with the hardest surface.</b></p> <p>False – a durable surface is one that is least affected by camping or hiking. They include rocks, sand, gravel, trails, dry grasses, snow, or water.</p>	<p style="text-align: center;">True or False? <b>When meeting horses on the trail, hikers should step off the trail to the downhill side and let them pass.</b></p> <p>True – your impact from stepping off trail would be less than that of the horses, stepping to the uphill side can spook the horse.</p>	<p style="text-align: center;">True or False? <b>It is better to have one well-designed and well-used trail than many paths.</b></p> <p>True – concentrating use reduces the likelihood that multiple routes will develop and damage the landscape.</p>
<p style="text-align: center;">True or False? <b>While on a trail, walking or hiking through mud or puddles is preferred.</b></p> <p>True – by going around a puddle, you may widen the path and trample vegetation.</p>	<p style="text-align: center;">True or False? <b>Taking short cuts on trails can: encourage others to follow, disturb wildlife, damage vegetation, and cause erosion.</b></p> <p>True – staying on trail is important for all these reasons.</p>	<p style="text-align: center;">True or False? <b>The best place to take a rest is in the middle of the trail.</b></p> <p>False – moving off the trail to a durable surface will allow others to remain on trail while passing.</p>
<p style="text-align: center;">True or False? <b>The same activity can have different impacts if done in different places.</b></p> <p>True! A durable or safe surface can change depending on your activity (camping/hiking) and/or the environment (coastal, desert, etc.)</p>	<p style="text-align: center;"><b>When hiking off-trail (i.e. no established trail) is it better to travel single file or spread out side-by-side?</b></p> <p>Generally, side-by-side is better to disperse impact.</p>	<p style="text-align: center;"><b>In what conditions are plants most fragile: wet or dry?</b></p> <p>Wet – these plants show the effects of trampling much more quickly.</p>
<p style="text-align: center;"><b>What is the best choice for a campsite in popular, well-used areas: an established site or a never-used site?</b></p> <p>An established site.</p>	<p style="text-align: center;"><b>Which area of your camp set up receives the most use: sleeping area or kitchen?</b></p> <p>The kitchen area gets the most use, the sleeping area receives the least amount of use.</p>	<p style="text-align: center;"><b>Which of the following is NOT a durable surface: dry grass, tree roots, sand, or snow?</b></p> <p>Tree roots – a tree can be harmed by having its roots trampled.</p>
<p style="text-align: center;"><b>What is the recommended distance to camp from trails or water: 20 feet or 200 feet?</b></p> <p>200 feet, or 100 big steps</p>	<p style="text-align: center;"><b>When canoeing or kayaking, which of the following is the best surface to land your boat on when taking a break from paddling: fragile vegetation, marshy areas, moss-covered rocks, sand or gravel beaches?</b></p> <p>Sand or Gravel beaches</p>	<p style="text-align: center;"><b>When canoeing or kayaking and camping overnight, where should you pull your boat ashore: coral reef, tide pool, or a sandy beach?</b></p> <p>Sandy, rocky, or gravel beaches are best choices.</p>

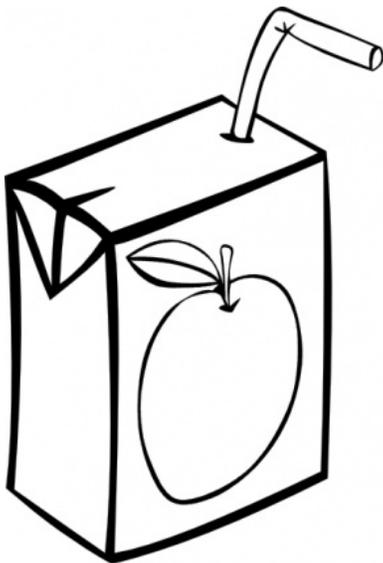
PAPER



BANANA/ORANGE  
PEEL



JUICE BOX



WOOL SOCKS



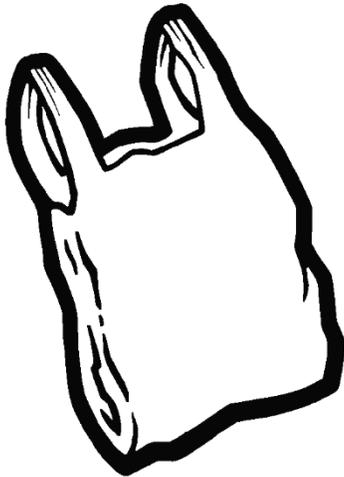
LEATHER



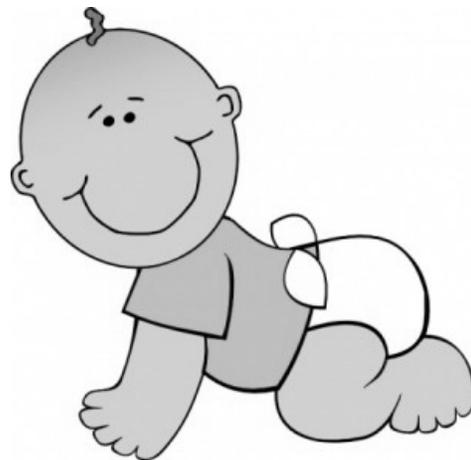
CIGARETTE BUTTS



PLASTIC BAGS



DISPOSABLE  
DIAPERS



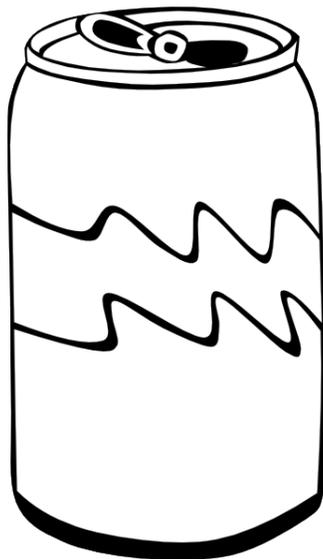
CHIP BAGS



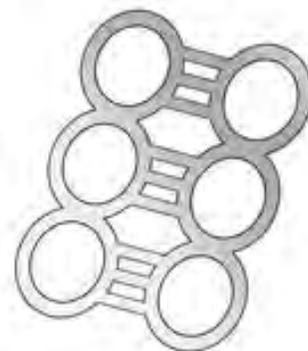
NYLON FABRIC



ALUMINUM CANS



PLASTIC 6-PACK  
HOLDER



TIN CANS



PLASTIC SODA BOTTLE



GLASS BOTTLES



STYROFOAM



## Wildlife and Habitat Cards

**Pronghorn Antelope**



- Lifespan: 5 to 10 years
- Like gentle grassy areas with low sagebrush and northern desert plants
- Eat 150 different species of grasses, forbs and browse plants
- Mate in early fall; birth period of 250 days
- The fastest running hoofed animal in North America

**Kangaroo Rat**



- Eat seeds, leaves, stems, buds, some fruit and insects
- Live in grasslands or sandy to rocky soils in desert locations with little vegetation
- Their burrows enter the ground at an angle
- May go a whole lifetime without a drink of water, getting water from their food

**Northern Goshawk**



- Maximum lifespan in the wild is 11 years
- Habitat is mixed forests
- Prey consists of small mammals, birds, other vertebrates and sometimes insects
- In Nevada, over 85% of nests are found in aspen and nearly all are located near water

**Desert Tortoise**



- Average lifespan is 30 to 45 years, but can live 80 years or more
- Found in desert shrub-land habitat in the Mojave Desert
- Dig burrows in the ground, where they spend the major part of their lives
- Most of the water they obtain is from the vegetation they eat since water is rarely available to drink

**Mountain Lion**



- Lifespan: 12 to 15 years
- Like dense cover or rocky, rugged terrain
- Eat small mammals, mule deer, elk.
- Like to hunt in early morning and evenings
- Can breed at any time but birth months are April through June

**Great Basin Rattlesnake**



- Has thin neck and large triangular head
- Lives in dry and open areas
- Eats small mammals; also birds, lizards, snakes, frogs and insects
- Born alive from mid-summer to fall
- The Great Basin Rattlesnake will not attack, but if disturbed will defend itself! Does not always rattle in warning!

**Mule Deer**



- Lifespan: 10 to 12 years
- Live in almost all types of habitat; bucks like rocky ridges for bedding, while the doe bed down in the open.
- Most active in mornings, evenings and moonlit nights.
- Herbivores (grass eaters)
- Give birth May to August
- Mule deer are good swimmers!

**Little Brown Myotis Bat**



- Weigh 1/4 pound to 1/3 ounce
- Can live more than 20 years
- Found in coniferous forests at higher elevations near water
- Range covers most of the United States and Canada
- Feed on a many different insects – mainly water insects, likes mosquitoes

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<p>Shelter</p> <p>Campers set up their tent too close to your home.</p>	<p>Shelter</p> <p>Citizens protect wildlife habitat and are respectful to wildlife during sensitive times (i.e. mating and birthing seasons, etc.)</p>
<p>Shelter</p> <p>Campers used an existing campsite instead of making a new site.</p>	<p>Shelter</p> <p>Hikers collected natural items that you use to build your home.</p>
<p>Shelter</p> <p>Campers broke branches off the tree you live in for firewood.</p>	<p>Shelter</p> <p>Hikers stayed on established trails.</p>
<p>Shelter</p> <p>Hikers watched from a distance and then kept on walking.</p>	<p>Shelter</p> <p>Campers were careless with matches and started a forest fire.</p>
<p>Food</p> <p>While on a hike, a Girl Scout leader taught her scouts why it's bad to feed wildlife.</p>	<p>Food</p> <p>Citizens decreased the use of herbicides and pesticides.</p>
<p>Food</p> <p>Campers packed out all their garbage and left you with no food.</p>	<p>Food</p> <p>You ate an apple core that hikers left behind because they thought it would decompose.</p>
<p>Food</p> <p>Hikers disturbed natural vegetation.</p>	<p>Food</p> <p>Hikers were having a snack near the trail and dropped some food, but they picked it up and packed it out.</p>
<p>Food</p> <p>Campers buried their garbage in a pit; you dig it up and had a snack.</p>	<p>Food</p> <p>Campers left their food sitting out while they went for a hike and you had a wonderful dinner.</p>
<p>Water</p> <p>Hikers put a fresh layer of sunscreen on and then jumped in the river.</p>	<p>Water</p> <p>Visitors set up camp 200 feet away from the river and you were able to get a drink.</p>
<p>Water</p> <p>Hikers followed proper waste burial techniques.</p>	<p>Water</p> <p>Hikers swim in the lakes and rivers in the mountains, but avoid scarce water holes in the desert.</p>
<p>Water</p> <p>Curious campers visit water holes at night.</p>	<p>Water</p> <p>Campers did their dishes in the river, but used biodegradable soap.</p>
<p>Water</p> <p>Citizens prevent the construction of water projects that will degrade, destroy or alter waters natural and beneficial functions.</p>	<p>Water</p> <p>Hikers and/or boaters tossed empty wrappers and cans into the river.</p>



## Outdoor Skills Patch Leave No Trace – Cadettes



Learn the skills needed to thrive in an outdoor environment. Do you have good outdoor ethics? Do you want to put your LNT knowledge to use?

### Step 1: Review and tie the 7 LNT principles together

**Materials Needed:** *(If you don't have some of the real items, you can substitute with pictures or homemade versions)*

- Large piece of Paper or White Board
- Paper
- Markers
- Tent
- Litter
- Fake rocks and fire
- Washing tub
- Dishes and fake dish soap
- Blue towel to represent water – if not by actual water
- Fake flowers
- Fake axe
- Boom box
- Food scraps

#### Preparation Needed:

1. Before you begin this lesson, there is some set-up needed.
2. Set up Camp Oh No in a separate location from where you begin this activity.
  - a. Pitch the tent without a rain fly near a blue towel (or water source if there is one nearby).
  - b. Place a washing tub on the blue towel and have the “dirty” dishes and fake soap nearby.
  - c. If there is a fire ring already, set up your fake fire elsewhere. Place litter within the fire.
  - d. Put a fake axe into a tree.
  - e. Place food scraps, litter, and the “picked” flowers scattered throughout the campsite.
  - f. Have a device (iPod, car stereo, phone with speakers, etc.) playing loud music.
  - g.

#### Lesson Plan:

1. Begin by reviewing all 7 principles. Ask girls if they can remember what they are, and write them down on a large piece of paper/white board. *If girls did not complete the Brownie and/or Junior Leave No Trace curriculum, you should go back and go over the principles with them. You don't need to complete the activities, just be sure they understand the concepts.*
  - a. Know before you go
  - b. Choose the right path
  - c. Trash your trash
  - d. Leave what you find
  - e. Be careful with fire
  - f. Respect wildlife
  - g. Be kind to other visitors
2. Say to the participants “Great! Now those are just the shorter phrases used for the LNT principles. These are the easiest to memorize when you are first learning them, but most commonly you will see them written like this:” Write the new phrases next to the old phrases.
  - a. Plan Ahead and Prepare
  - b. Travel and Camp on Durable Surfaces
  - c. Dispose of Waste Properly
  - d. Leave What You Find
  - e. Minimize Campfire Impacts
  - f. Respect Wildlife
  - g. Be Considerate of Other Visitors
3. “Awesome! Now that we've reviewed the principles, I think it's time to head to our campsite for the night!” *Adapted from Leave No Trace 101: 101 Ways to Teach Leave No Trace.*
  - a. Have the girls all follow you to the pre-setup camp site
  - b. “Welcome to Camp Oh No! Don't you think this is a great place to camp? No worries I've got it all set up for us!”

- c. There should be some hesitation with how the campsite looks. “Oh No! Camp Oh No isn’t set up properly to follow the Leave No Trace Principles? You girls are right. I want you to work with a buddy who is wearing a similar shirt to yours. Look around for a few minutes and try to spot what is wrong. Write your answers on a piece of paper and write what principle that is not being followed. Then try to write what the right thing to do is while following the LNT principles.”
- d. Walk around to the different groups of girls and see how they’re doing. As most of the groups begin to finish up, give the groups a 2 minutes to finish.
- e. Come back together as a group and have the girls share what they found. Discuss both what was wrong and what the right thing to do would be.
- f. The list below should be what they found. The information in parenthesis is what should be done.
  - i. Plan Ahead and Prepare – no rainfly on the tent (it could rain, bring just in case)
  - ii. Travel and Camp on Durable Surfaces – the tent is set up too close to water (it should be 200 feet away)
  - iii. Dispose of Waste Properly – litter (it should be put in a trash can/trash bag to be carried out and thrown away at home). The washing tub in the creek/lake (it should be 200 feet away).
  - iv. Leave What You Find – the picked flowers (can’t pollinate and make more if it is not there)
  - v. Minimize Campfire Impacts – the new fire ring made (you should use an existing fire ring). The litter in the fire (can be hazardous, paper products float away and start forest fires). Axe in tree (you should use dead and down wood instead).
  - vi. Respect Wildlife – Food scraps on the ground (don’t feed wildlife, it damages their health, alters natural behaviors, exposes them to predators and other dangers).
  - vii. Be Considerate of Other Visitors – Playing music loud (you should have the music on low volume, headphones, or leave it at home).
4. “Great job girls! You sure know how to have a great LNT campsite.”
5. “Now as a team, I want you to work together and create a LNT logo. This logo can represent our group, troop, our community or Girl Scouts of Utah as a whole.”
6. Once you have your logo created, think of a place where you can hang posters about Leave No Trace. What do you think should be the top 5-10 things that people know about Leave No Trace in this area? Make a poster(s) using your logo and include the things that you think others should know! Talk to whoever is in charge of the location and see if you can hang your posters up.
  - a. Visit [www.lnt.org](http://www.lnt.org) if you need an additional resource to learn about the principles.
7. “Wow those posters look great! So many more people are going to know how to leave a smaller impact on the environment thanks to you girls.”

### **Step 2:**

#### **LNT in the frontcountry and at home**

##### **Materials Needed:**

- Paper
- Markers
- Post-it notes
- Additional materials may be needed depending on the project the girls pick for the final step.

### Lesson Plan:

1. Begin by reviewing all 7 principles. Ask girls if they can remember what all the principles are. Have the girls each try to write down the principles individually on a piece of paper.
  - a. Plan Ahead and Prepare
  - b. Travel and Camp on Durable Surfaces
  - c. Dispose of Waste Properly
  - d. Leave What You Find
  - e. Minimize Campfire Impacts
  - f. Respect Wildlife
  - g. Be Considerate of Other Visitors
2. If girls are struggling, slowly have them group up with a partner or in a trio, then all together until they have the 7 principles written down.
3. “Great teamwork girls! It’s amazing what we can all do when we work together!”
4. “So far, we’ve learned a lot about Leave No Trace and the 7 principles. When the principles were developed, they were developed thinking about people’s impact in the backcountry. Today, the vast majority (over 85%) of recreation in the U.S. occurs in the frontcountry though. What do you think the difference between Frontcountry and Backcountry is?”
  - a. Frontcountry as defined by Leave No Trace Center for Outdoor Ethics: Frontcountry is composed of outdoor areas that are easily accessible by vehicle and mostly visited by day users. Developed campgrounds are also included in the frontcountry arena. Frontcountry locations tend to be more crowded and attract a wider range of visitors than the backcountry.
  - b. Backcountry: a geographical region that is remote, undeveloped, isolated, or difficult to access.
5. “Great job coming up with the different definitions! Now I want you girls to think about different outdoor activities you’ve done. Write one activity per post-it, then place your post-it in either the frontcountry or backcountry category.”
  - a. Create two different sections for post it notes to be placed within your space. One for frontcountry and one for backcountry.
  - b. For example: I could write “rock climbing in Big Cottonwood Canyon” and place that on the frontcountry side. For the backcountry side I could write “1 week backpacking trip in Escalante National Monument.”
  - c. Give the girls time to come up with different activities they’ve done.
  - d. If they are struggling to come up with different activities, you can have them write down things that they want to do outdoors someday or that they know other people have done.
6. “Wow, you girls sure participate in lots of outdoor activities! Now, looking at the activities that we as a group do in the front country, compared to those we do in the backcountry, how do you think LNT changes?”
  - a. Have a discussion with the girls. Use the following LNT Frontcountry principles to help with your conversations:
    - i. Be prepared! Remember food and water, and clothes to protect you from cold, heat and rain.
    - ii. Use maps to plan where you’re going. Check them along the way so you’ll stay on course and won’t get lost.
    - iii. Remember to bring a leash for your pet and plastic bags to pick up your pet’s waste.
    - iv. Learn about the areas you plan to visit. Read books, check online and talk to people before you go. The more you know, the more fun you’ll have.
  - b. KNOW BEFORE YOU GO**
  - c. STICK TO TRAILS AND CAMP OVERNIGHT RIGHT**

- i. Walk and ride on designated trails to protect trailside plants.
- ii. Do not step on flowers or small trees. Once damaged, they may not grow back.
- iii. Respect private property by staying on designated trails.
- iv. Camp only on existing or designated campsites to avoid damaging vegetation.
- v. Good campsites are found, not made. Don't dig trenches or build structures in your campsite.

### **d. TRASH YOUR TRASH AND PICK UP POOP**

- i. Pack it in, Pack it out. Put litter—even crumbs, peels and cores—in garbage bags and carry it home.
- ii. Use bathrooms or outhouses when available. If not available, bury human waste in a small hole 6-8 inches deep and 200 feet or 70 big steps from water.
- iii. Use a plastic bag to pack out your pet's poop to a garbage can.
- iv. Keep water clean. Do not put soap, food, or human or pet waste in lakes or streams.

### **e. LEAVE IT AS YOU FIND IT**

- i. Leave plants, rocks and historical items as you find them so others can enjoy them.
- ii. Treat living plants with respect. Carving, hacking or peeling plants may kill them.

### **f. BE CAREFUL WITH FIRE**

- i. Use a camp stove for cooking. Stoves are easier to cook on and create less impact than a fire.
- ii. If you want to have a campfire, be sure it's permitted and safe to build a fire in the area you're visiting. Use only existing fire rings to protect the ground from heat. Keep your fire small.
- iii. Remember, a campfire isn't a garbage can. Pack out all trash and food.
- iv. Firewood should be either bought from a local vendor or gathered on site if allowed. Don't bring firewood from home - it can harbor tree killing insects and diseases. Many states regulate the movement of untreated firewood.
- v. Before gathering any firewood, check local regulations.
- vi. Burn all wood to ash and be sure the fire is completely out and cold before you leave.

### **g. KEEP WILDLIFE WILD**

- i. Observe wildlife from a distance and never approach, feed or follow them.
- ii. Human food is unhealthy for all wildlife and feeding them starts bad habits.
- iii. Protect wildlife and your food by securely storing your meals and trash.

### **h. SHARE OUR TRAILS AND MANAGE YOUR PET**

- i. Be considerate when passing others on the trail.
- ii. Keep your pet under control to protect it, other visitors and wildlife.
- iii. Listen to nature. Avoid making loud noises or yelling. You will see more wildlife if you are quiet.
- iv. Be sure the fun you have outdoors does not bother anyone else. Remember, other visitors are there to enjoy the outdoors too.

7. "You girls sure know how to Leave No Trace! Now one last location to talk about today, how can we Leave No Trace in our community? At home? At school? Walking down the street? I want you girls to work together in groups of 5 (approximately depending on your size of group) and come up

with your own 7 principles of how people can Leave No Trace in their everyday community. Pick a certain location (ex. House, school, community, city) to write your principles for. Be sure to include at least 3 bullet points of specific actions people should do to follow your principles.”

8. Once the girls have their principles and action steps determined, have them come up with a creative way to share your Leave No Trace principles with people in your community. You could make a video to post on Facebook. You could do a skit for your families or for other groups. You could make a radio announcement to be played over your schools intercom. The possibilities are endless!

### **Step 3:**

### **Take a day hike and focus on Leave No Trace principles**

#### **Materials Needed:**

- Paper
- Markers
- Small trash bags
- Camera

#### **Lesson Plan:**

1. Work together to find a place to go on a day hike with your troop or a group of friends and/or family. Use guidebooks, the internet, or talk to others about where you should go. Make sure to look at mileage, average time to hike the trail, and the difficulty to make sure it is a good fit for your group. Try to find a place that no one in your group has hiked to before!
2. Before you head out, make sure you Plan Ahead and Prepare for every aspect of your trip!
3. When you arrive at the trailhead, begin by reviewing all 7 principles. See if the girls can work together as a team to name all 7 principles.
  - a. Plan Ahead and Prepare
  - b. Travel and Camp on Durable Surfaces
  - c. Dispose of Waste Properly
  - d. Leave What You Find
  - e. Minimize Campfire Impacts
  - f. Respect Wildlife
  - g. Be Considerate of Other Visitors
4. While hiking, have the girls be on the lookout for evidence of people showing good Leave No Trace principles and traces of people who did not follow Leave No Trace principles. Girls can take pictures, take videos, write what they see, draw pictures, a combination of these methods, or something different as well!
5. When girls return from their hike, have girls either work in small groups to create a Public Service Announcement (PSA) about what they saw and how others can start Leaving No Trace.
6. Once you have created you PSA find a group and share it with them about how they too can make a difference while outdoors!



## Outdoor Skills Patch Leave No Trace – Seniors & Ambassadors



Learn the skills needed to thrive in an outdoor environment. Do you have good outdoor ethics? Do you want to help others learn about LNT?

### PLEASE NOTE:

- This guide is written in a way that a girl can pick it up and go through the steps without having a Troop Leader lead the session for her.

## Step 1: LNT on extended trips

### Materials Needed:

- Paper
- Pens/Pencils

### Lesson Plan:

1. Begin by reviewing all 7 Leave No Trace principles. *If you did not complete the Brownie, Junior, and Cadette Leave No Trace curriculum, you can go back and go over the principles. You can also research Leave No Trace on the internet.*
2. Most of the time when you are going on a backcountry experience, you spend more than one day on your trip. The amount of time you spend outdoors can correlate to how prevalent some of the principles are. For example, if you're only hiking for an hour, you probably won't have to dig a cat hole to go to the bathroom. But, if you're hiking for a week, cat holes will become an everyday thing.
3. First we are going to look at the LNT principles and see how they really play a role on an extended trip.
  - a. Come up with a trip that would be at least 3 days in length.
    - i. The three days should be time spent in the backcountry, not including car travel time.
  - b. Plan an activity that requires some modified LNT techniques compared to what they are used to. For example: If you are used to hiking/backpacking in a forest setting, try changing the location to a desert, or alpine winter, or river corridor, etc.
  - c. Look up what the specific Leave No Trace principles are for the setting you choose – because they're all different! Visit [www.lnt.org](http://www.lnt.org) or google search (ex: "Leave No Trace Canyoneering") to find the specific principles through the LNT blog.
  - d. Come up with a plan of how you will follow Leave No Trace throughout the entire trip.
    - i. What will you need while you're planning ahead and preparing? What type of water purification will you use? What do you need to know to watch for with weather conditions? Etc.
    - ii. When you arrive at the trail head, what type of surfaces will you be hiking/camping on? Are there any surfaces you will need to avoid?
    - iii. What are you going to do when you have to poop? How deep do you have to dig?
    - iv. What other visitors might be on the trail? Will you share the trail with mountain bikers? If so, who has the right of way?

- v. Are there any special animal considerations to keep in mind? Bear bagging food? Keeping your shoes in tents to avoid scorpions? Mice chewing through your packs?
      - vi. What food will you pack? How will you pack it? How will you cook it?
    - e. Go through every aspect and every part of the trip to make note of how to make your trip as Leave No Trace as possible. Use the questions above only to get you started thinking, there are many more aspects to keep in mind while going on extended trips!
  4. When done, go through your list with someone who has experience on backcountry extended trips. Ask them how they think you all have done in thinking about Leave No Trace. Is there anything you missed? Any suggestions on how to do something different?
  5. Optional: Go on your trip you just planned!

### **Step 2:** Create a LNT activity box

#### Materials Needed:

- Paper
- Pens/Pencils
- Other materials as planned through activity

#### Lesson Plan:

1. This step will focus on teaching Leave No Trace to other Girl Scouts.
2. Create a Leave No Trace teaching box to be shared with other Girl Scouts working towards their Leave No Trace patch. This teaching box should help **expand** on the steps already listed in their curriculum.
  - a. Decide what age level they want the box to focus on (Daisy, Brownie, Junior, or Cadette).
  - b. Decide what they want the box to focus on: Do they want it to focus on all 7 principles or only a few of them?
  - c. Come up with games and activities that can be written out and put together in a box for troops to do.
    - i. Use the internet/books to help you spark ideas for different activities you can do.
  - d. Buy any materials that are needed for your activities.
  - e. Put the box together and donate it to your local Community Leadership Team (or a troop or the Girl Scout Shop) as a resource for other girls to check out and learn more about Leaving No Trace!

### **Step 3:** Plan and host a LNT fair

#### Materials Needed:

- Paper
- Pens/Pencils
- Other materials as planned through activity

#### Lesson Plan:

1. For this step, you will plan and host a Leave No Trace fair.
2. The fair should last at least an hour, but is welcome to last as long as you'd like it to.
3. Pick a target audience (school, other Girl Scouts within your Community, a council sponsored program, etc.)
4. Pick what they want the fair to focus on (all 7 principles, 3 or 4 different principles, LNT in different environments, etc.)
5. Come up with the program, advertise and communicate the program to others, and run the fair!