



Making the Character Connection with...

Environmental Sciences

Conservation
Environmental Sciences
Forestry
Geology
Wildlife

Being a person of good character means you follow the Six Pillars of CharacterSM every day. Taking care of the environment requires you to be responsible; perhaps you will coordinate a earth clean up day (Caring and Respect) or you may decide to build environmentally friendly trails in your community (Citizenship). You may even decide to give a presentation on what people can do to help keep the earth clean for both animals and people. Each of these are ways you can show others you are proud of learning about the environment and that you are proud to be a person of good character.

Projects in this Connection have been grouped because they have related information. There may not be an activity for every project listed however at least one of the activities can be adapted for each project. Be creative; let this be a stepping stone for many ways of teaching character.

This Character Connection contains:

- **Explanation of how the Six Pillars of Character relate to Environmental Sciences**
- **Activities suggesting how to demonstrate good character while enhancing your understanding of Environmental Sciences**
- **Questions to help you think of other ways to demonstrate good character everyday.**

Character Connection: Environmental Sciences

Trustworthiness	Responsibility	Caring
<ul style="list-style-type: none"> ✓ Do what you say you will do ✓ Only report on animals and plants you have observed ✓ Stand up for what you believe is right 	<ul style="list-style-type: none"> ✓ Respect Mother Nature ✓ Clean up your community ✓ Teach others about taking care of the environment ✓ Think of ways to make your environment better for everyone 	<ul style="list-style-type: none"> ✓ Help keep animal and plant environments clean and safe for all the inhabitants ✓ Be thankful of those who give their time to you ✓ Give everyone equal chances when playing games or giving demonstrations
Respect	Fairness	Citizenship
<ul style="list-style-type: none"> ✓ Observe from a safe distance -don't interfere with animal and plant habitats ✓ Return natural items to nature once you have recorded your findings ✓ Don't take or use property without the permission of the owner or Conservation Agent ✓ Be tolerant of new ideas 	<ul style="list-style-type: none"> ✓ Share resources with others ✓ Allow everyone to experience outdoor areas equally ✓ Share your space with the wildlife living around you 	<ul style="list-style-type: none"> ✓ Take care of the world and community you live in ✓ Recycle ✓ Conserve water and electricity ✓ Try adopting a pet rather than spending money on one that has a good chance of finding a different home

Character Connection: Environmental Sciences

Activity: Watershed

Supplies: 6 squirt bottles filled with: Liquid Dish Soap, Cooking Oil, Vinegar, Baking Soda, Water with yellow food coloring and clean water

Tarp or large trash bag

Rock or heavy piece of wood

DO:

The impact of humans on the environment is something you have learned a lot about in your environmental issues 4-H project. Spread the news of protecting your environment by taking a few minutes to educate your 4-H club and classrooms at your school about environmental impact. Use the following script to explain how watershed's work in your community: Have the participants of your activity sit with their knees up, covered with a tarp or large trash bag. Place the rock or heavy piece of wood in the middle of the tarp to create a valley in the tarp.

*We are going to pretend that this tarp is Farmer John's new farm he bought in _____ (your town). Farmer John is very excited about his new venture and wants to plant crops and put 100 head of cattle on his new farm. Before he can do this Farmer John needs to plow the fields to get them ready for planting. Unfortunately, Farmer John has a very old tractor and it broke down as he was plowing. **Ask:** What happens when an old tractor breaks down? It leaks oil. **Squirt the Cooking Oil over the "hills" of the tarp.** Farmer John isn't too concerned about his tractor so he leaves it in the fields and continues on building his new farm. The next day it rains, **spray clean water all over the tarp making sure to send the oil into the "valley".** After the rain clears Farmer John decides to spread fertilizer on his newly planted crops. **Spread baking soda over the "hills".** The bad thing about the fertilizer he choose is that it's the wrong time of year to fertilize and the next day rains move in again. Unfortunately, this time they move in from _____ (closest big city to your town) and the mixture of the pollutants in the air create acid rain. **Squirt the "hills" with vinegar.** Farmer John decides it's time to get his old tractor out of the fields before he moves his cattle in. He goes out to the field and hauls his new tractor in. **Ask:** What would you do if your tractor was old and dirty from sitting in the field? Clean it. **Squirt dish soap on the "hills".** And, unfortunately it's still the rainy season and Farmer John's farm gets hit with a huge rain storm. **Spray clean water over the "hills" moving all of the soap and other pollutants into the "valley".** Finally, the rain has cleared up and Farmer John can move his cattle in. **Ask:** What do cattle do a lot? Go to the bathroom. That's right, **spray the yellow water over the hills. One final rain with clean water.***

Source:

Ask the group: What happened to Farmer John's land? Where did all of the pollutants go? Why? Do you know what this is called?

Talk to your group about watersheds and the importance of keeping your impact on the environment as small as possible.

REFLECT:

1. How does it make you feel to know that you understand the importance of keeping your environment clean? Do you think you have helped your peers learn about what they can do to minimize their impact?
2. What does it mean to you to educate others?
3. What types of things can you do to minimize your daily impact? Do you think responsible people understand these things and try to do them? Why or Why Not?
4. Did this presentation help you better understand your role in your club and community?

APPLY:

Today it seems nearly impossible to educate everyone on minimizing their impact on the environment. Each of us influences the environment each time we choose to throw away a recyclable or unknowingly dump chemicals into local streams. Help to minimize this impact by helping educate people about issues that are important to you. Being a person of good character means you share what you value and feel strongly about. Stick to your beliefs and others will appreciate you sharing what you know with them. Remember that you can't always change everyone's habits, but next time you have the opportunity, share something that can change your community with someone and eventually you will see results.

Expand on this Activity: Visit your local water treatment plant to find out more about keeping water in your community clean. Check out your state's Department of Health to find out if there are any waste dumps or sewage drain-off points near your community that negatively impact the quality of your water and the safety of the animals and plants in the area.



Character Connection: Environmental Sciences

Activity: Clean a Stream

DO:

Use what you know about environmental safety and ethics to work towards a cleaner community. Find an organization in your area that works to help keep your community clean. Check with your local parks department or contact the state Department of Conservation to find out about clean-up days in your area. Invite your 4-H club to help in a stream or park clean up day. If the day goes well, talk as a club about adopting a section of your state's highway system. You will be responsible for cleaning up your section of the highway once a month to help keep your community clean. By doing this, you will be able to educate your 4-H club about the environmental issues you have learned about in your project and help keep your community safe for animals and plants.

REFLECT:

1. How does it make you feel when you see litter in your local streams and parks? Have you ever thought about helping to clean it up before?
2. What feelings did you experience while you were cleaning? Were they all positive feelings?
3. Did this activity help you think of other times you could have helped someone but passed up the chance because you weren't sure how to help?
4. Can you think of other ways you can use your knowledge about the environment to help your community?

APPLY:

Bringing up environmental issues helps remind your community how important it is to take care of the world around you. While you are cleaning up your adopted stream or highway think about other ways you can positively impact your environment. Every time you work towards a cleaner community you are demonstrating good citizenship and responsibility for yourself and the actions of others. When you change the way people think and act around you, you help your community move in a positive direction.

Expand on this Activity: Join a local Stream Team. These teams work all year to keep local waterways clear of debris. You will learn about water quality and how people influence the water in your area. Invite your club or a group of your friends to join and make cleaning up your community something fun to do.

Expand your impact around the globe. Put together a fundraiser to help you adopt a rainforest.

Check the internet for organizations that accept donations to help preserve rainforests and choose one that you would like to donate money to. Make sure you help people understand the importance of keeping not only your community clean, but also doing the same for the rainforests around the world.

