

Water We Have Here

Location: RiverWalk Learning Station 8
Program Levels: Cadette, Senior, Ambassador

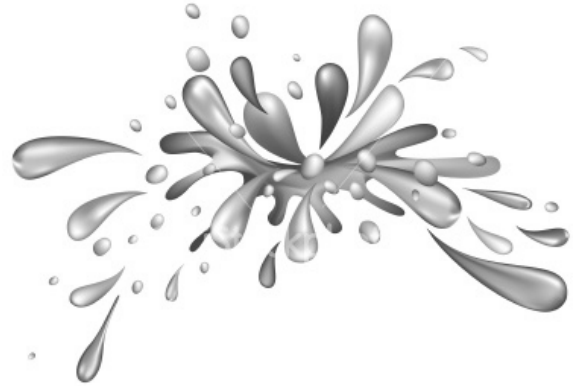
Objective: Girls will conduct water quality tests in Peace Creek and analyze the results to see how different factors affect the health of the creek.

Materials Provided

- Water quality testing kits
- Peace Creek Water Quality Record Book
- Water Data Analysis Chart

Materials Needed

- ❖ Paper
- ❖ Pens/Pencils



Activity Steps

1. Before you hand out the testing kits, ask the girls what they think they could look at to see how healthy the creek is. Use the pre-discussion questions to facilitate a talk about stream health and why it is important.
2. Now that the girls understand a little more about stream health, explain that you are going to test the water in Peace Creek and pass out the test kits. Use the Water Data Analysis chart to go over the different tests before conducting them.

For small groups, girls can work together to test each quality, while larger groups may wish to split up the tests then regroup and discuss the results.

3. Review the measurement procedures for each test. Since the testing materials are consumable, please be careful not to waste test products. **Remember to follow Safety-Wise rules for water safety while working in the creek.**
4. Record test results in the master water quality record book. Use the post-discussion questions to help you analyze your results and compare them to previous testing done by other groups.

Pre-discussion Questions

- **How can you tell if a river or stream is healthy?**
Animal/plant life, no scum, flowing, test water qualities
- **What water qualities might you be able to test for? Why are they important?**
Qualities from the activity, use the water quality data analysis chart to see why they are important
- **How does the health of a stream impact the area around it?**
Animals that eat near and drink from creeks would lose their supply, plants need water, remember web of life!

Post-discussion Questions

- Compare your results to other groups' results. Are they the same? Different? Why might results change? *Different seasons, storms recently, human error*
- Do all of your readings fall in the "normal" zones according to the Water Data Analysis Chart? If not, what might be the cause and what could be done to remedy the situation?
- What can you conclude about the health of Peace Creek? What might this mean for the health of the Potomac River nearby?

Extensions

On the Trail

Test the water in the Potomac River. How does the quality of the river water compare to the quality of the creek water?

Beyond the Trail

Find a stream near your meeting place and test the water each week or month for at least one season. How do storms and different seasons affect the water quality? Report your findings to your local environmental agency – volunteer-collected data can be extremely helpful to them!

Water testing supplies can be purchased online or at local aquarium supply stores.