

Project Title:
Water Filter
Description:
Your goal is to build the most effective water filter and be able to explain the process.
Purpose: (Why do I have to do this?)
Water filtration is one of the most important issues facing all human beings on the planet. All across our planet, drinkable water is in short supply. Even in Canada, a country that has one of the largest supplies of fresh water in the world, there are communities that do not have access to potable (drinkable) water. It is specifically important to us when we are on camping trips and need access to clean drinkable water. An inexpensive effective solution could potentially help these people.
Topic Options:
<p>Create a water filter that will allow us to pour dirty water into it and get drinkable water out of it.</p> <p>Science Terminology that you could look up online and use in your notes, records and presentation:</p> <ul style="list-style-type: none"> • Solution • Mixture • Colloid • Saturated • Dilute • Dissolve • Solvent • Solute • Potable
Final Product Presentation:
<ul style="list-style-type: none"> • You are allowed to use anything that would be reasonable for you to have with you on a camping trip or could find in the park to assist you in creating the filter. • All materials that you use must be clean. • You must have an intake where the liquid will be poured into the filter and an outtake that allows the clean water to come out into a container. <p>Research Report</p> <ul style="list-style-type: none"> • You must record everything that you do throughout the process of planning, building and testing your filter. These records must be typed up into Pages or Word and placed in the Water Filter Project Hand-in Folder with a completed criteria checklist. • This includes your plan for your filter. Your plan must include in point form: your name, if you have a partner, your partner's name, detailed description of how you are going to build it including a large diagram with pictures and words, list of materials you plan on bringing,

and a list of materials you are gathering out at camp.

- Final report should include at least one photograph of the actual water filter, a diagram of the actual water filter, photos of the water going in and the water coming out, any water test results done on the water. Must also include what you feel you would change to make it work more effectively.

Product Presentation

- You will be required to present your filter to the whole group which will require you to fully explain your planning, building and testing of your filter, how you did things, why you choose to do them that way and what you think of it so far.
- The final part of your presentation will be a final demonstration of the filter with a water sample that we provide at our October Camp.

Evaluation Criteria:

Items to be evaluated include:

- Planning: a complete description, including diagrams, of the process you went through to plan your creation of the filter.
- Building: a complete description, including diagrams / photos, of how you built the filter
- Testing: record of what happened in the testing and the changes that you made due to your results (at least once)
- Accurate and typed records

Criteria Checklist

Criteria Checklist