

Wednesday Challenge Form

Group Members: Nicolas and Edgar

Problem Statement: Make a water filter. The formula for the score is: (number of components) * (time to filter water) * (measurement of dissolved solids). The group that gets the lowest score wins. A bottle, that is provided, must be used for the water filter. Only use materials found in the school for the water filter.

Approach: We started off by searching up how to make a water filter and a youtube video popped up. It listed the materials needed and we went around campus gathering those materials. We got some sand from the P.E. field. We also got some pebbles and rocks south of the baseball field. We gathered some grass from the field near the 7000 building 1st floor. We got a cotton ball from Tony. We got some charcoal by putting some wood inside an iron pipe and then burning it with a torch. We had Mr. Miller burn it for us. We did not get as much charcoal as we liked, but we worked with what we had. Afterwards, we put all of that into the bottle to make our water filter.

Solution: Matty's group won because their group paid attention to the rubric and made their water filter in a way that produced the smallest number possible. Their water filter took a few seconds and they did not use as many components.

Lessons Learned: If I were to do this again I would have used a minimal amount of components, possibly just the bottle, so that the water filter was as fast as possible. This is so that two of the three numbers used for the formula in the rubric would be as low as possible, so the score itself would be lower as a result.