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A Drop in Time

The purpose of this study is to see what filters water better: sand, gravel, or clay. I thought that clay would filter water better but slower than sand or gravel. To start the project, get three-20 ounces water bottles. Cut the bottom of each bottle off. Put two wire screens in the bottoms of all three bottles. Then put the middle of a coffee filter next to the screens in all three bottles. In each bottle add an inch of cotton swabs next to the coffee filter. Clean some gravel to add to one of the bottles. In second bottle add sand till it is full. Get air dry clay, set out until completely dry then add to third bottle until it is full. Go to excel and make a water classifier graph. To start making the water you have to test the pH before you start filtering the water to put four hundred mL of water. Add one drop of food coloring, twenty-six drops of weak pH, and twenty drops of used oil. At the end record the color, the pH, and how fast it filters through. After the water is all the way filtered through and you have test how fast the water went through and then you have to test the pH of the water, and record data. The filter system that filtered out the water the best was clay.