**Water Filter Activity**

**Objective:** Design a filter to clean dirty water. Test parameters = cleanliness, cost.   
**Rules:** ● Your team has a $50 budget to buy materials for your water filter.   
 ● All filter materials must be put into the cup with a hole at the bottom.  
DO NOT DRINK THE WATER!  
**Bill of Materials:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Material** | **Cost Per Unit** | **Amount Purchased** | **Total Cost Per Material** |
| Gravel (limit: 1) | $15 per ½ cup |  |  |
| Sand (limit: 1) | $15 per ½ cup |  |  |
| Cotton Ball | $1 each |  |  |
| Polyester-Cotton (T-shirt) square | $10 each |  |  |
| Fibercloth Square | $10 each |  |  |
| White Paper (8.5x11) | $5 each |  |  |
| Napkin | $5 each |  |  |
| Paper Plate | $10 each |  |  |
| **Explain Your Designs:** | | **Total Cost:** |  |

In the space below, draw your design and write a short explanation of what materials you used and why.