

Problem Restated

➤ Design a Water Filter using the Following Materials:

- Activated Carbon
- Sand
- Gravel
- Cotton
- Plastic Cups
- Wood structural members
- Hot glue

➤ Design the filter to remove particles, neutralize pH, reduce turbidity and capture the filtered water.

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Material Costs and Limits

- Activated Carbon - \$100 per 1/4 cup (limit 1/2 cup)
- Sand/Gravel - \$10 per 1/4 cup (limit 1 cup)
- Cotton - \$20 per packed cup (limit 2 cups)
- Wood structural supports - \$50 per ft. (limit 2 ft.)
- Plastic cups - \$100 per cup (limit 2 cups)
- Hot glue sticks - \$5 per stick (limit 4 sticks)

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