

Name \_\_\_\_\_ Date \_\_\_\_\_

### **Don't Muddy the Water!**

**Objective:** You will be able to create a water filtration system and draw conclusions about the best materials to use for a successful water filtration system.

**1. Formulate a problem question to be answered through this experiment**

Our drinking water supplies may become polluted with sediment and other pollutants. Human beings have devised ways to purify water so that it is safe to drink.

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**2. Formulate a hypothesis** \_\_\_\_\_

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**3. Materials** that you used. \_\_\_\_\_

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**4. Procedure:** (*check off as you complete each step*)

\_\_\_\_ 1. Look through materials and decide what you want to use for the filters

\_\_\_\_ 2. Record the materials needed to create your filter.

\_\_\_\_ 3. Describe the appearance of the water sample **before** filtering it (use chart provided)

\_\_\_\_ 4. Pour some of the dirty water sample through your filter into the empty cup with no holes labeled A.

\_\_\_\_ 5. Describe the water's appearance **after** being filtered on the sheet provided.

\_\_\_\_ 6. Repeat filtering the water as needed. You may also change the materials that you used for your filter as needed.

\_\_\_\_ 7. Describe the water's appearance **after** being filtered on the sheet provided

**5. Data and Results:** Explain your observations.

Before Filtering	After Filtering

**6. Analyze Data and Draw Conclusions**

What method of filtration worked best?

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**7. Extension of Results**

How would you change what you did if you could repeat the experiment? (Write using complete sentences, please.)

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Was your hypothesis correct? Why or why not? \_\_\_\_\_

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