Finding the Volume of an Irregular Solid

Objective: In this activity, we will use a graduated cylinder and water to find the exact volume of several irregularly shaped objects.

Procedure: (Be sure to fill in each step for the procedure and the entire data table, including the spots for units!)

1. ____________________________________________________________

2. ____________________________________________________________

3. ____________________________________________________________

4. ____________________________________________________________
<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting Volume of Water</td>
<td>Objects</td>
<td>Combined volume of Water and Objects</td>
<td>Volume of Object</td>
</tr>
<tr>
<td>(unit: ________)</td>
<td></td>
<td></td>
<td>(unit: ________)</td>
</tr>
<tr>
<td></td>
<td>1 Bar Magnet</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 Marbles</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Stone</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 Pennies</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Nickel</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Using a Graduated Cylinder

Directions: For numbers 1-4, write the volume indicated by the line with the X on the line below the picture. For numbers 5-9, draw a line with an X where the volume written on the line below the picture would be.
Do Now: Fill in the Blanks.

1. A _______________________ is the crescent shape that forms at the top of a liquid in a graduated cylinder.

2. The units we will use to measure solid volume this year are ____________.

3. _______________________ is the amount of space that matter occupies.

4. When reading the volume of a liquid in a graduated cylinder, one should always read the ______________________ of the meniscus.

5. The units we will use to measure liquid volume this year are ________________.
Finding the Volume of an Irregular Solid

Objective: In this activity, we will use a graduated cylinder and water to find the exact volume of several irregularly shaped objects.

Procedure: (Be sure to fill in each step for the procedure and the entire data table, including the spots for units!)

1) Pour 50 ml of water into the graduated cylinder. Record this number in column 1 in the data table.

2) Gently drop the objects into the water and measure the combined volume of the water and the objects. Record this number in column 3 in the data table.

3) Subtract the starting volume of the water from the combined volume of the water and the objects. Record this number in column 4 in the data table.

4) Convert the units from milliliters (ml) to cubic centimeters (cm$^3$).