Making Mixtures

Procedure

1. **Collaborate** Work with a partner. Record your observations in the chart below.

<table>
<thead>
<tr>
<th>Cup</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td></td>
</tr>
<tr>
<td>Sand in Water</td>
<td></td>
</tr>
<tr>
<td>Salt in Water</td>
<td></td>
</tr>
<tr>
<td>Both in Water</td>
<td></td>
</tr>
</tbody>
</table>

2. Use a marking pen to label four cups *Water, Sand, Salt,* and *Both*. Half fill each cup with water.

3. **Experiment** Add a spoonful of sand to the cup labeled *Sand*, a spoonful of salt to the cup labeled *Salt*, and a spoonful of both sand and salt to the cup labeled *Both*. Stir the contents of all four cups. **Safety:** Wear goggles when handling sand.

4. **Observe** Examine the liquid in each cup with a hand lens. Record your observations in your chart.
Conclusion
Write the answers to the questions below.

1. **Communicate** What happened to the mixture in each cup when you stirred it?

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2. **Compare** In what way did the mixtures in the cups look the same when viewed with the hand lens? In what way did they look different?

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3. **Predict** Suggest a way you could separate the sand, the salt, and the water in the cup labeled *Both*.

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4. **Use Variables** What was the purpose of the cup labeled *Water*?

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**Investigate More!**

**Design an Experiment** Use your answer to Conclusion 3 to design an experiment that will separate sand, salt, and water mixed together. With permission, carry out the experiment.