OYSTER SHELL ACTIVITY STUDENT WORKSHEET

Names: ____________________________ Date: __________________________

Part A Procedure:

Step 1: Record solution name: _______________________________________

Step 2: Measure solution pH: __________________

Step 3: Set the scale to measure in grams, and then zero the scale (it should read 0g with nothing on it).

Step 4: Measure and record the starting mass of shell in grams (before soaking):
________________________

Step 5: Record your observations of the oyster shell before it soaks in the solution. (What does the shell look like? What does the surface feel like? Are the edges sharp or dull?)

____________________________________________________________
____________________________________________________________

Step 6: Develop a hypothesis about what will happen to the shell over the next 3 months as it soaks in the solution. (Will it look different? Will it feel different? Will the mass be different?).

____________________________________________________________
____________________________________________________________

Step 7: Place your shell in the jar and add enough of your solution to cover the shell. Seal the jar.

Step 8: Label your sample jar (see example below) and give to the instructor for storage.

<table>
<thead>
<tr>
<th>Student Names</th>
<th>Date</th>
<th>Solution Name</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Part B Procedure:**

Note: Your shell will already have been removed from its soaking solution and dried completely.

**Step 1:** Record the starting mass of your shell on the line below (from Step 4 on the first page).

**Step 2:** Set the scale to measure in **grams**, then zero the scale (It should read 0g with nothing on it).

**Step 3:** Measure and record the ending mass of shell in **grams** (after soaking) on the line below.

**Step 4:** Calculate the change in mass, following the instructions in the box.

<table>
<thead>
<tr>
<th>Today’s Date: __________________</th>
<th>Instructions: To calculate the change in mass, subtract the ending mass from the starting mass.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting Mass: __________________</td>
<td>If your result is a positive number, you lost mass. If your result is a negative number, you gained mass.</td>
</tr>
<tr>
<td>Ending Mass: __________________</td>
<td></td>
</tr>
<tr>
<td>Change in Mass: ________________</td>
<td></td>
</tr>
</tbody>
</table>

Our shell   Lost   Grained   mass (circle one).

**Step 5:** Record your observations of the oyster shell after it soaks in the solution. How has it changed?

__________________________________________________________________________________________
                                                                                           ___________________________________________________________________________________  

**Step 6:** Was your hypothesis correct?

__________________________________________________________________________________________

**Step 7:** After discussing the results of each group, is there a particular solution that seemed to cause the greatest change in mass? If so, which solution was it, and why?

__________________________________________________________________________________________
                                                                                           ___________________________________________________________________________________