**Layers of the Earth Model**

Name:_____________________________ Date: __________ Due Date: _April 22, 2015_

**Purpose:** Make a 3D Model of the layers of the earth

**Materials:** Be Creative! Recycled materials and other ideas are (cloth, paper mache, plastic bottles, etc...) encouraged to reduce cost and get extra credit. Common materials: Styrofoam ball, toothpicks, paper, and paint.

**A. 3D MODEL:**

10pts **Extra Credit:** will be given for creating a fully recyclable project.

*Your Model must:
  - Be 3-dimensional (3D)
  - Have 4 main layers and additional layers
  - Be Neat, Complete, Creative, and Colorful*

**B. LABELS:**

All parts of the Project must be LABELED on the project.

You can use toothpick flags or some other creative way to label each part.

1. Crust
2. Inner Core
3. Outer core
4. Mantle
5. Continental Crust
6. Oceanic Crust
7. Lithosphere
8. Asthenosphere
9. Mesosphere
10. Convection Currents in the Mantle

**C. DESCRIPTIONS Key:**

The Descriptions Key must be an attached piece of the Project that includes a full description of the 4 main layers of the Earth. This can be a cardboard chart, index cards, Ribbon attached to the model, or some other creative idea for describing each layer. A plain paper key will not be acceptable.

*Descriptions of the 4 MAIN Layers should include:
  1. Distance across (thickness)
  2. State of Matter: Solid, Liquid, or Semi-plastic
  3. Temperature
  4. Composition (What materials is it made of?)*

**D. Edible:**

Create a model out of cookies, cake, cupcakes, pie, pizza. The model must be single serve, that means SMALL. Any leftovers of your model will be thrown away.

**Layers of the Earth Project Grading Rubric**
<table>
<thead>
<tr>
<th>Project Part</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3D Model</strong></td>
<td>Model is 3 dimensional, has the 4 main layers and additional layers clearly shown, colorful and neat, shows time and effort. <em>Extra points if made of recyclable materials</em></td>
<td>Model is 3 dimensional, has the 4 main layers and some of the additional layers, colorful and neat. Shows effort.</td>
<td>Model is 3 dimensional, has the 4 main layers. Layers are not clearly marked or the project does not look like the Earth. Shows some effort.</td>
<td>Model is not 3 dimensional, or does not clearly show the 4 main layers. Model is not neat or colorful. Does not show effort.</td>
</tr>
<tr>
<td><strong>Labels</strong></td>
<td>All 10 parts are clearly labeled. Labels are securely attached to the project.</td>
<td>8 - 10 parts are clearly labeled. Labels are not securely attached to the project and fall off in transport.</td>
<td>5-7 parts are clearly labeled. Or labels are not securely attached to the project and fall off in transport.</td>
<td>4 or fewer parts are clearly labeled. Or labels are not securely attached to the project and fall off in transport.</td>
</tr>
<tr>
<td><strong>Descriptions Key</strong></td>
<td>- Descriptions of the 4 Main layers are complete. - Key is attached to the rest of the Project.</td>
<td>- Descriptions of 3 of the layers is complete or errors are minor. - Key is attached to the rest of the Project.</td>
<td>- Descriptions of most Layers are missing some information. And/or - Key is not attached to the rest of the Project.</td>
<td>- Descriptions of Layers are missing significant amounts of information. And/or - Key is not attached to the rest of the Project.</td>
</tr>
<tr>
<td><strong>Story</strong></td>
<td>Short, creative story about a journey to the center of the Earth includes the all of the 10 labeled parts. Story is typed or neatly written and attached to project.</td>
<td>Short, creative story about a journey to the center of the Earth includes the 6-9 of the labeled parts. Story is typed or neatly written and attached to project.</td>
<td>Short, creative story about a journey to the center of the Earth includes the 5 or fewer of the labeled parts. Story is typed or neatly written and attached to project.</td>
<td>Story is not about journeying to the center of the Earth or 4 or fewer of the labeled parts are included. Story is not neatly written or not attached to project.</td>
</tr>
</tbody>
</table>