LESSON PLAN DESCRIPTION:

All lesson plans must include the following information provided at the top of the page.

☐ Kristen Gavinelli
☐ Friday, April 20, 2012
☐ Elementary School PTA Fifth Annual Science Day
☐ Science
☐ Creating Fossils

A comprehensive lesson plan must contain all of the following information. Under each area you will find essential questions that will guide your work.

1. **Content Area:**
   What are the predominant content areas you are addressing?

   The instructor needs to know different terrestrial and marine fossils, as well as the differences between them.

2. **National and New Jersey State Standards:**

<table>
<thead>
<tr>
<th>Content Area</th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>5.4 Earth Systems Science: All students will understand that Earth operates as a set of complex, dynamic, and interconnected systems, and is a part of the all-encompassing system of the universe.</td>
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<tr>
<td>Strand</td>
<td>B. History of Earth: From the time that Earth formed from a nebula 4.6 billion years ago, it has been evolving as a result of geologic, biological, physical, and chemical processes.</td>
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<tr>
<td>By the end of grade</td>
<td>Content Statement</td>
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<td>---------------------</td>
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<tr>
<td>4</td>
<td>Fossils provide evidence about the plants and animals that lived long ago, including whether they lived on the land or in the sea as well as ways species changed over time.</td>
</tr>
</tbody>
</table>

3. **Community Knowledge and Experience:**

Since I have never worked with these students, I will start with base knowledge. Pacing will be reflective on how readily students understand information.

4. **Purpose/Goal:**
   To investigate fossils

5. **Objective(s):**
   - Students will be able to identify whether a given fossil is terrestrial or marine in origin given clue cards. Once students have identified where their fossil is from, they will be able to create their own version of the fossil using Plaster of Paris.

6. **Procedures/Format:**

   *Step 1 INTRODUCTION:* To begin, I will focus and engage students by showing them different fossils in different areas. On one poster, a terrestrial scene. On the other, a marine scene will be shown. On the table, there will be pictures of different terrestrial and marine fossils that the students can stick onto either poster. Based on where students stick the fossils, I will ask them why they put them where they put
them. This will help me to assess prior knowledge on this topic and then segue into the lesson itself. The students will be motivated, and their attention will be gained because they will be able to manipulate what they are learning.

**Step 2 DEVELOPMENT:** Once the fossil pictures have been presented on the appropriate posters, we will list next to each poster the context clues that allow us to know whether fossils are from marine or terrestrial origin. The following website shows different context clues for where fossils come from:

http://www.earthhistory.org.uk/recolonisation/significance-of-fossils

**Step 3 CONCLUSION:** As a wrap up, students will be able to create a fossil of their own. Students will select a fossil or shell, and a ball of clay. They will then press the fossil into the clay. Next, they will pour plaster of paris and water (mixed by me) into the clay structures. After just a few minutes, students will have their own fossil that they can take home with them.

7. **Resources:**
   List all of the following:
   - Plaster of Paris
   - Water
   - Terrestrial Scene poster
   - Marine Scene poster
   - Pictures of fossils
   - Mixing supplies
   - Balls of clay
   - Fossils and shells

8. **Inclusive Instruction:**
   How will this lesson be inclusive of all students’ abilities?

   I will help any students that have difficulty following the lesson. The lesson can be simplified by focusing on just one type of fossil.
Part 2 and 3 - Participate in the full day of scientific presentations and experiments presented to second grade students. Over 100 different speakers and over 70 parent volunteers work together to make the full day of science a huge success last year and a great learning experience. The event will take place on Friday April 20, 2012 from 8:30 am to 2:00 pm. Seton Hall University will present a scientific topic to our students. Parent volunteers will be in each classroom to help with the workshop in the morning or in the afternoon.

Participants will present a 35 - 40 minute, hands-on science presentation that is appropriate for students in our first through third grades. Your presentation may be repeated up to five times during the day to groups of up to twenty-five students.