Title: Our Solar System
Grade(s): 4, 5
Subject(s): Science
Author: Pam Morton-Rodgers, Jennifer Walker, and Lynne Williams
Overview: The teacher will use Wallwisher on the Internet to have students tell what they know and what they would like to learn about the Solar System. Additional technology tools will be used to introduce students to the task of researching a planet. Students will be asked to select a planet, conduct research on the Internet, and use Word to produce an illustrated essay about a planet.

Content Standards: SC (4) 10. Describe components of our solar system -Defining comets, asteroids, and meteors.

SC (5) 11. Compare distances from the sun to planets in our Solar System.
-Relating the size of the Earth to the size of other planets in our Solar System.
-Identifying technology used to study planets.

Primary Learning Objectives: The students will identify components of our Solar System.

Approximate Duration of Lesson: 90 minutes (broken down into two 45-minute lessons).

Technology Resources Needed: Laptop or desktop computer with Scratch, Microsoft Word, Internet Access.

Background/Preparation: The students will have prior knowledge of creating a Word Document.

Procedures/Activities: Step 1 On Wallwisher, the teacher will give the students a question to answer. She will tell the students that this week we are talking about the planets and their components. She will then ask them what they know about planets. The students will attach notes to the Wallwisher page and write what they already know about the planets. The teacher will ask the students what they would like to learn about the planets. On Wallwisher2, the students will add questions that they have or what they would like to learn during this lesson.

Step 2 In groups, students will get on the computer and explore the Scratch lesson and Xtranormal movie that the teacher provides. This will allow students to build on their prior knowledge.
Lesson Plan format is adapted from the Alabama Learning Exchange (ALEX). Lessons were developed by staff of the UAB NSF project “Integrating Computing Across the Curriculum: Incorporating Technology into STEM Education Using XO Laptops.”

Step 3 The students will be asked to gather information about a planet, including its place in the Solar System, the size of the planet, and its make-up.

Step 4 Students will use their information to create a Word document describing their chosen planet. They will be asked to import a picture from the Internet into a Word document. The teacher will review the Rubric with students so that they know what is expected for their planet report.

Step 5 The teacher will ask the students what they learned about the planets. On Wallisher3, the students will write what they learned during the course of this lesson. The students will place their notes on the Wallisher page.

**Attachments:** Example of illustrated Word document project, Rubric

**Assessment Strategies:** Group presentation, Rubric
Jupiter, our Solar System’s largest planet, is primarily made up of gaseous materials. Jupiter is composed of brightly colored clouds and a Great Red Spot. Jupiter contains bands of gases that rotate in opposite directions. The rotating bands of gases cause intense storms.

Retrieved from “Facts about Jupiter” from
www.tritonfun.com/custom.em?pid=625082
Rubric for Our Solar System Report

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organization</strong></td>
<td>Information is very organized with well-constructed paragraphs and subheadings.</td>
<td>Information is organized with well-constructed paragraphs.</td>
<td>Information is organized, but paragraphs are not well-constructed.</td>
<td>The information appears to be disorganized.</td>
</tr>
<tr>
<td><strong>Sources</strong></td>
<td>All sources (information and graphics) are accurately documented in the desired format.</td>
<td>All sources (information and graphics) are accurately documented, but a few are not in the desired format.</td>
<td>All sources (information and graphics) are accurately documented, but many are not in the desired format.</td>
<td>Some sources are not accurately documented.</td>
</tr>
<tr>
<td><strong>Internet Use</strong></td>
<td>Successfully uses suggested internet links to find information and navigates within these sites easily without assistance.</td>
<td>Usually able to use suggested internet links to find information and navigates within these sites easily without assistance.</td>
<td>Occasionally able to use suggested internet links to find information and navigates within these sites easily without assistance.</td>
<td>Needs assistance or supervision to use suggested internet links and/or to navigate within these sites.</td>
</tr>
<tr>
<td><strong>Paragraph Construction</strong></td>
<td>All paragraphs include introductory sentence, explanations or details, and concluding sentence.</td>
<td>Most paragraphs include introductory sentence, explanations or details, and concluding sentence.</td>
<td>Paragraphs included related information but were typically not constructed well.</td>
<td>Paragraphing structure was not clear and sentences were not typically related within the paragraphs.</td>
</tr>
</tbody>
</table>

*Rubric created using rubistar.4teachers.org*