**GPS Extension Activity:**
**Gifted Resource Classroom**

**Shadows and Light: Going Camping**

**Activity Description:**
Your best friend is going camping and you want to go. On this camping trip there will be no electronics, or batteries. You are not even allowed to wear a watch or bring a cell phone. Unfortunately, you are recovering from an illness, and your mom is very concerned that you take your medicine at the SAME time every day. She doesn’t know how you can do this without wearing a watch or carrying a cell phone. In order to convince her that you can go on this camping trip you need to devise a solution that will make sure you take your medicine at the SAME time every day. Design and implement an experiment that proves your solution works. Then write your mom a letter to persuade her to let you go camping explaining how you will make sure that you take your medicine at the SAME time every day. Your dad says that the good news is that it will be sunny every day you are camping!

**Grade Level:** 1  
**Quarter:** 3  
**Bloom’s Taxonomy Level:** Application, Analysis, Synthesis, Evaluation  
**Related Strands:** Shadows and Light, Persuasive Writing  
**Related GPS Standards and Elements:**  
S1P1a Sources of Light  
Recognize sources of light.  
S1P1b Shadows  
Explain how shadows are made.  
ELA2W2 Persuasive Writing  
a. Captures a reader’s interest by stating a clear position/opinion  
d. Adds supportive details throughout  
e. Uses appropriate formats (letter, list of pros and cons, advertisement)  
ELA3W2B Persuasive Writing:  
Sustains a focus.  

**Checklist for Providing Guidance:**  
1. Students will identify the problem they need to solve. (How to figure out it is the same time each day without using a time keeping device)  
2. Students will identify several possible solutions. Hint: Why did Dad say “The good news is that it will be sunny every day you are camping!” If students need more direction, give them the additional hint that the solution uses shadows. (Teacher note: students should create some sort of sun dial using the sun’s position and a shadow to determine the time of day; some possible solutions include marking a tree’s shadow at a certain time of day; creating a sun dial using a paper plate and a straw or stick)  
3. Create experiments to try your possible solutions and identify the one that works the best for telling the same time every day (as long as it is sunny).
Your experiment should show that the solution you select actually works. (Teacher: provide a variety of materials that you might have when camping such as flashlights, paper plates, sticks, drinking straws, rope, bungee cords, plastic utensils, etc.)

4. Write a persuasive letter to your mom convincing her that you should be able to go camping by describing your solution to her concern about taking your medicine at the same time every day. Your solution should be described in detail and you need to explain why it works. (Teacher note: The persuasive letter should include the fact that the student wants to go camping and that they have designed a tool to make sure they take their medicine at the same time each day. Then they need to describe their tool for determining the time and how the tool works.)

Critical Objectives to assess:

Assessment type:
- ☑ Constructed response
- ☑ Performance task
- ☐ Informal assessment
- ☐ Selected response

Brief Description of Assessment:
Using the attached rubric, the students’ solution and process to arrive at the solution will be evaluated in the areas of Evaluative, Convergent, and Divergent Thinking. Their cooperation within their group will also be assessed.
# Going Camping – Extension Performance Task Rubric

Name ________________________________

<table>
<thead>
<tr>
<th></th>
<th>Meets Gifted Standards</th>
<th>Progressing Towards Gifted Standards</th>
<th>Does Not Meet Gifted Standards</th>
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<tbody>
<tr>
<td><strong>Evaluative Thinking</strong></td>
<td>Solution will allow you to identify the same time each day without using a time keeping device</td>
<td>Solution will sometimes help you identify the same time each day without using a time keeping device</td>
<td>Solution does not allow you to identify the same time each day without using a time keeping device</td>
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<tr>
<td><strong>Convergent Thinking</strong></td>
<td>Persuasive letter describes the solution in detail and tells why it will work</td>
<td>Persuasive letter describes the solution but does not adequately explain why it will work.</td>
<td>Persuasive letter does not adequately describe the solution or tell why it will work.</td>
</tr>
<tr>
<td><strong>Divergent Thinking</strong></td>
<td>Several ideas were considered before a solution was chosen</td>
<td>Two or three ideas were considered before a solution was chosen</td>
<td>Only one idea was considered.</td>
</tr>
<tr>
<td><strong>Respect for Others</strong></td>
<td>Teammates are shown respect.</td>
<td>Teammates are shown respect some of the time.</td>
<td>Teammates are not shown respect.</td>
</tr>
<tr>
<td></td>
<td>Other points of view are considered.</td>
<td>Other points of view are considered most of the time.</td>
<td>Other points of view are not considered.</td>
</tr>
<tr>
<td></td>
<td>Constructive feedback from others is accepted and utilized.</td>
<td>Constructive feedback from others is accepted and utilized some of the time.</td>
<td>Constructive feedback from others is not accepted.</td>
</tr>
<tr>
<td><strong>Personal Goal:</strong></td>
<td></td>
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</tbody>
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**Teacher Response:**
Going Camping - Task Checklist

Complete each task listed below. Check off each task as it is completed.

___ 1. Read Activity Description and the Going Camping rubric.

___ 2. Identify the problem you need to solve in order to convince your mom that you can go camping.

___ 3. Brainstorm possible ideas that will solve the problem identified in step 2.

___ 4. Use the materials provided to try your ideas to see if they work.

___ 5. Identify your best idea.

___ 6. Write a letter to your mom convincing her that you should be able to go camping by describing your solution to her concern about taking your medicine at the same time every day and explaining why your solution works.

___ 7. Turn in your Going Camping checklist with your letter.