Investigation 6: Our Visiting Friend

Students will work in groups to make a claim, provide evidence, and attach reasoning to answer the question “What should your friend pack in their suitcase when they come visit you?” For this project, students will be required to apply their understanding of local weather conditions throughout the year.

Engage

Ask students: “Is the weather the same everywhere in the world or is it different in some places? Why do you think that? What is your evidence?”

Give students some time to think about their answers before discussing with a partner or as a class.

Read (or re-read) “On the Same Day in March” with students. Ensure that all students understand that the weather can be very different depending on where you live.

Now introduce the project. “Your friend is planning to come for a visit. S/he lives very far away and does not know what the weather is like here. Your friend needs help choosing what to pack in his/her suitcase. You are going to give them advice on what they should bring. What do you need to know to answer this question?”

Give students some time to think about their answers before discussing with a partner or as a class.

If no one mentions that they need to need to know what time of the year their friend is planning to visit, ask “Is it important for you to know when your friend is coming? Why?”

Make sure all students understand that weather can be very different depending on the time of year.

Explore

Put students into 4 or more groups. Assign each group to a different season (Winter, Spring, Summer, Fall).

Explain that students can only choose four items. They should use the weather graphs to decide what to tell their friend to bring. They might want to bring more than four things, but your students should choose the four MOST IMPORTANT things to bring.

Tell students that they should discuss their choices as a group and call you when they are ready to explain their claim and evidence.

Materials

1 set of item cards (per group)
1 set of Weather Graphs (per group)
**Explain**

When students are ready, ask them to explain their reasoning for their choices. Even if their choices make sense for the season they were assigned, ask probing questions to understand their reasoning. If they made incorrect or poor choices, ask probing questions to help them make new choices.

Question ideas include:
- Why did you choose ______ (item) over __________(item)?
- Can you explain the graph for your season? (Temperature or rainfall)
- How will you use ________ (item) during ______(season)?
- If you could have chosen one more item, what would it be?
- Which items from the card set were easy to rule out and why?

**Elaborate**

Use the Notebooks to have the students write about their choices and the evidence behind their choices. If your students need more structure, provide the following sentence structure:

My friend is visiting in ___(season)____. My friend should bring ___(item)___, ___(item)___, ___(item)___, and ___(item)____. I chose ___(item)___ because ___(evidence from weather graphs)______.

You can decide if you will require evidence for each of the four items or for only one or two or three items. When they are finished writing, each group member should share what they wrote with their own group.

**Evaluate**

When all groups are ready, have each group explain their choices, evidence and reasoning.
Temperature Graphs  Season Average - Bremerton, WA

Autumn

Winter

Summer

Spring

freezing cold cool warm hot

freezing cold cool warm hot

freezing cold cool warm hot

freezing cold cool warm hot
### Hours of Daylight in Bremerton

<table>
<thead>
<tr>
<th>Month</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 21</td>
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</tr>
<tr>
<td>February 21</td>
<td>11</td>
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<tr>
<td>March 21</td>
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<tr>
<td>November 21</td>
<td>9</td>
</tr>
<tr>
<td>December 21</td>
<td>8</td>
</tr>
</tbody>
</table>
Names: ___________________________________________________________

Claim: Our friend is visiting in ________________.

The four things our friend should bring are:

Evidence: What weather evidence helped you decide what your friend should bring?
Reasoning: How did the weather evidence help you make your choices?
<table>
<thead>
<tr>
<th>Flip-Flops</th>
<th>Sunglasses</th>
<th>Baseball hat</th>
<th>Swimming Suit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shorts</td>
<td>Sweater</td>
<td>T-shirt</td>
<td>Shoes</td>
</tr>
<tr>
<td>Umbrella</td>
<td>Blue jeans</td>
<td>Warm coat</td>
<td>Rain boots</td>
</tr>
</tbody>
</table>