Introduction to Mapping: 6-8 Activity Sheet

Activity 1: Your Journey to School

Materials needed: White paper, stickers, markers, pencils, pens

A mental map represents your personal perspective of an area you interact with. Create a mental map of your route to school, starting from home. The map should include a legend showing natural features (rivers, mountains) and human-made features (roads, buildings). Your mental map should also include other key map features like a title. If you are working with someone else, compare your map with theirs to see how your perspectives of the same landscape may differ or be the same. Remember, this mental map represents your perspective, so get creative and have fun!

Work through the following questions:
1. What natural features did you put on your map?
2. What human-made features did you put on your map?
3. How does the landscape change throughout your route to school?
4. How does the landscape affect the route you take to school?
5. Think back on the different types of maps we learned about in the lesson. What type of map have you drawn?
6. Optional: What direction(s) does your route follow?
   • Suggested method: Using a parent’s smartphone, use the compass app to find the orientation of your map (North, South, East, West). Add a North Arrow to the map.

Technology Connection
Using Google Maps, you can look deeper into your data!
• Open Google Maps and put in your home address if the map is not centered on your location.
• Enter into the direction bar your school address.
Consider the following:
1. How does your mental map compare to the actual map?
2. How long does it take you to get to school?
3. How far is the school from your home?
4. Did the route you drew match the route suggested by Google Maps? If not, why do you take a route different than the one suggested?
5. Why do you think your parents, supervisor, or bus driver takes the route that they do?
Activity 2: Claim your Castle

Materials: Paper, markers, colored pencils or pens

First, create a mental map of the floor plan of the house. The map should include some of the key map elements we learned about in the lesson, including a title and a legend.

Now, carry the tally box below around with you for the day or a few hours, marking each time you enter that room. If there are rooms in your house that you use a lot that are not listed below, add them in the blank rows.

<table>
<thead>
<tr>
<th>Room</th>
<th>Tally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living Room</td>
<td></td>
</tr>
<tr>
<td>Bedroom</td>
<td></td>
</tr>
<tr>
<td>Kitchen</td>
<td></td>
</tr>
<tr>
<td>Bedroom</td>
<td></td>
</tr>
</tbody>
</table>

Now, using your colored pencils, shade in your rooms based on how frequently you use them. The room you used the most should be shaded the darkest, and the room you used the least should be the lightest. By shading in your map based on how frequently you used them, you have created a heat map that shows each room in your house based on how frequently you use it.

Work through the following questions with your student:
1. Which room can you claim as your castle (which do you use the most)?
2. Which room do you use the least?
3. What other patterns do you notice in your data?
4. What are some possible factors that could have influenced which room got the most tallies?
   - Did you only keep track of your movement from room to room for a short period of time? How might your map look different if you recorded your movements for a shorter or longer period of time?
   - Were other people using certain rooms, making you less likely to frequent them?
   - Did the time of day affect your results? You may use your bedroom a lot at nighttime, but have no need to go there during the day. This could affect your results.
5. Optional: Perform the same analysis on other members of your family. Ask them to track their movements from room to room during part of the day and compare their use of rooms to yours.
   - Do you share your castle with another family member (do you have the same most frequently used room)?
   - Why is it useful to know which rooms you and your family members use the most?