"Student Trip!" Unit II - Final Project

Students will determine and present the shortest path between various destinations.

Preparation

Students will reflect and write down 5 destinations they traveled to in the past week – these trips could have been taken on different days. I recommend that the destination be limited to your local area. The student needs to determine what is the shortest path between these locations.

Scenario

Write a real or fictitious story explaining your need to go to these destinations. The trip must always begin at your home and finish at your home.

Minimal Spanning Tree

"Most Direct!": Each student will create a Minimal Spanning Tree on a Map. Show the order from 1st to last and the distances. Remember, the goal of a Minimal Spanning Tree is to find the shortest route within whatever constraints are provided. *(Refer to the teacher's model)*

C. S. Graph

Each student will create a Graph in which the destinations are represented by dots and the lines connecting the dots state the distances and the approximate times to drive the distances. Your home must be part of the Graph (*Refer to the teacher's model*)



Your Presentation

Each student will present their diagrams using Google Slides. Here is a link to a Google Slides online video training guide I created for you: <u>Google Slides Video Tutorial!</u>

Using Maps

Use Google Maps to get distances and times. It is very simple to use. To Access Maps in Google Slides, go to Main Menu/Tools/Research. Search for a map, drag it into the Slide and edit!

Window Screen Shot:

Either,

Press "PrtSc" ->. An image of the screen is copied to the computer memory. Just open your Google Slide and paste..

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Press the Windows Key and "PrtSc" -> A .png file is created & saved to the Pictures folder.



"Mr. Harrington's Trip" (Model!)

Scenario: It was Saturday and I was planning to start the day by getting breakfast at Model Bakery for my daughter. From there, I was going to bring her to the Boys and Girls Club for her basketball game at 9 am. I was also told to take my daughter from the game to a birthday party that starts at 11 am at Jacob Meiley Park. While she was at the party, I was going to stop by Central Valley to purchase materials necessary to rebuild a fence. I was then going to continue home so I could begin the fence repair.

Minimal Spanning Tree



