1. Divide into groups of 2 .
a. You are responsible for collecting 2 types of data, make of a car and the color. Each is independent of each other.
2. Open your Charts workbook.
3. Insert a new tab and rename Parking Lot. Give the tab a different color.
4. Insert a header with the title Parking Lot.
5. Enter data into a spreadsheet.

|  | A | B | C | D | E | F |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | Name |  |  |  |  |  |
| 2 | Miamisburg Middle School Parking Lot |  |  |  |  |  |
| 3 | Date |  |  |  |  |  |
| 4 |  |  |  |  |  |  |
| 5 | $\underline{\text { Make }}$ | \# | $\underline{\%}$ | $\underline{\text { Color }}$ | \# | $\underline{\%}$ |

6. Calculate the total number of cars.
a. Skip a row after your last car and color and type "Total"
b. Use the SUM function to calculate the total number of cars.
7. Calculate the percentage of each make and color.
a. Change the number format to Percentage and display one (1) decimal point.
b. Small number divided by the big number (Total). Use absolute cell reference for Total. (\$)
8. Sort the data of the make of car so the number of cars are listed from largest to smallest.
9. Create a sub table for the make of cars (this is a smaller representation of the data).
a. Copy and paste the top 5 makes, number and percentage.
b. Create an "Other" category and use the SUM function to add the remaining cars.
c. Use the total number of cars to calculate the percentage of the Other category.
10. Create a pie chart that displays the percentage of each make of car using your sub table.
a. Insert a title.
b. Format Data Labels to Percentage, not value (Chart Tools>Design>Chart Layout>Add Chart Element>Data Labels>More Data Labels Options)
c. Format the pie pieces with different colors.
11. Create a column chart that displays the color. Only select the Color and the \# for your data.
a. In the Chart Tools>Design>Chart Layout>Add Chart Element group, do the following:
i. Insert a title "Color of Cars"
ii. Add a vertical axis "Number of Cars".
b. Format each bar as the color of the car. (Select bar>Home>Font>Fill Color)
c. BONUS: Change the fill color of the chart
12. Insert and format a relevant Clip Art

Mr. Kurtz's Example


