

MiSP Speed Worksheet #2 L2

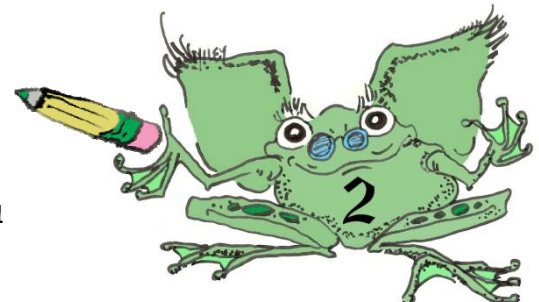
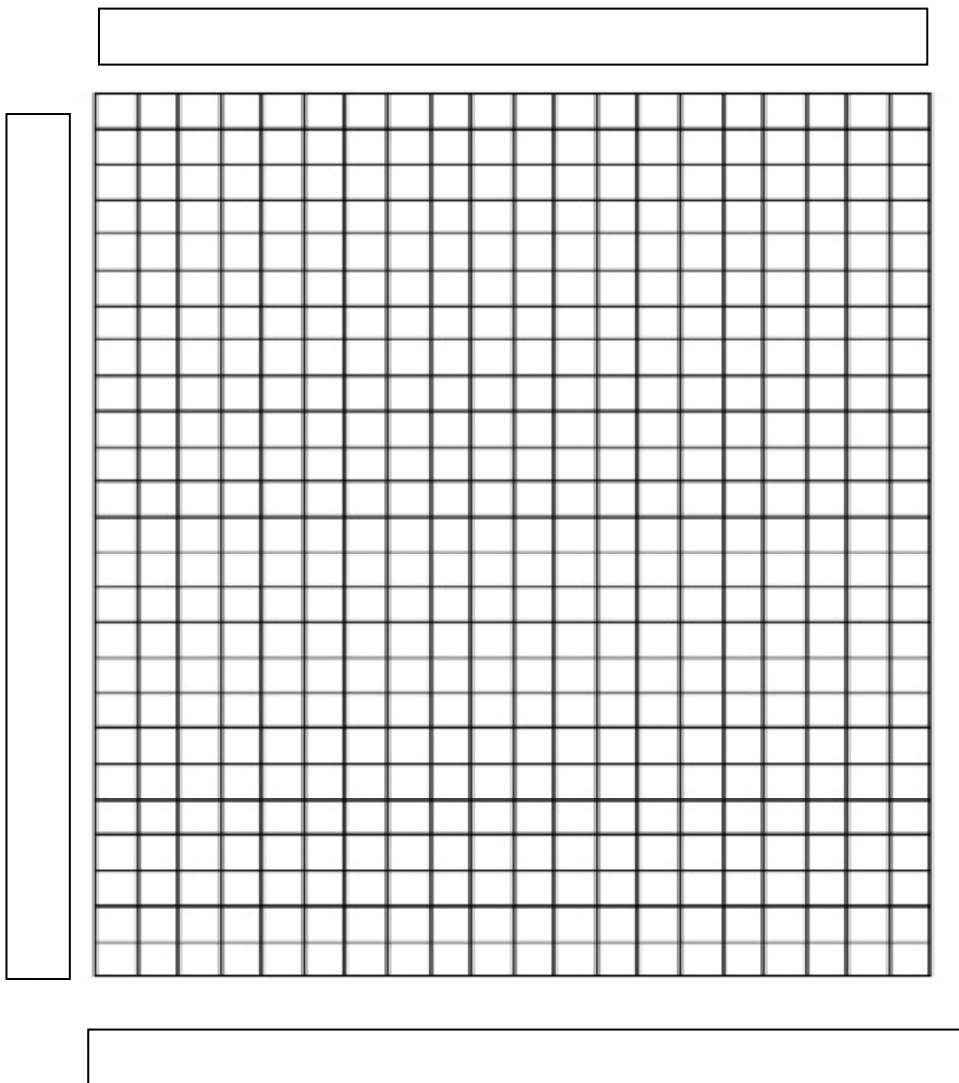
Name: _____

Date: _____

Cars

Yesterday you calculated the speed at which three characters from the movie *Cars could travel*.
Today you will graph the data.

Directions: Use the data for each of the cars to graph the relationship between time and distance. The relationships will all be linear.



Analysis:

Fillmore:

1. Use the formula below to find the slope of the line.

Slope of a line = $\frac{\Delta y}{\Delta x}$ or Slope of a line = $\frac{(y_2 - y_1)}{(x_2 - x_1)}$

a. Calculate the slope of the Fillmore line:

$(20, 20)$ and $(40, 40)$
 (x_1, y_1) (x_2, y_2)

Slope of a line = $\frac{(y_2 - y_1)}{(x_2 - x_1)} =$



b. What else does the slope represent? _____

Lightning McQueen:



1. Calculate the slope of the line for Lightning McQueen, using any points you would like.

(\quad , \quad) and (\quad , \quad)
 (x_1, y_1) (x_2, y_2)

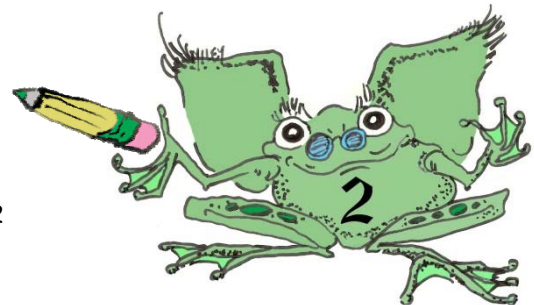
2. Calculate the slope, using the appropriate formula and showing all of your work:

Formula:

Slope of a line = $\frac{(\quad - \quad)}{(\quad - \quad)}$

Slope =

Luigi:





1. Predict what the slope of the line is for Luigi. _____

2. Choose two ordered pairs on the Luigi line:

(____, ____) (____, ____)

3. Calculate, using the appropriate formula:

Formula:

Slope of a line $\equiv \frac{(\quad - \quad)}{(\quad - \quad)}$

Slope =

4. Was your prediction correct? _____

Record your data here:

Car	<u>Time</u>	<u>Distance</u>	<u>Speed</u>	<u>Slope</u>
Fillmore				
Lightning McQueen				
Luigi				

1. What is the relationship between slope and speed?

