

## 8<sup>th</sup> Grade Math/Science AMI

**8<sup>th</sup> Grade Student,**

Complete the following stations on the AMI day listed below. Return the completed work for the corresponding AMI day when you return to school. Keep the 'Graphing Notes' page at home in your packet to use on subsequent AMI days. Don't forget to put your name on your work. This work shouldn't take you more than 15 minutes to complete. If you need help shoot us an e-mail. We hope you enjoy your snow day (spend some time outside). 😊

***Mrs. Donaldson & Mrs. Nevels***

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**AMI Day 1: Station 1 & 2**

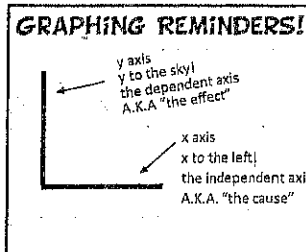
**AMI Day 2: Station 3**

**AMI Day 3: Station 4**

**AMI Day 4: Station 5 & 6**

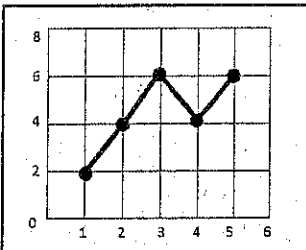
**AMI Day 5: Station 7 & 8**

# GRAPHING NOTES

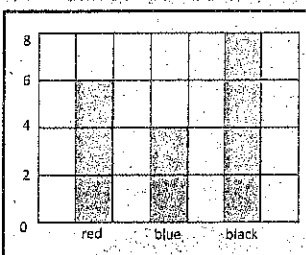


The purpose of a graph is to show a visual representation of relationships between various quantities, parameters or variables.

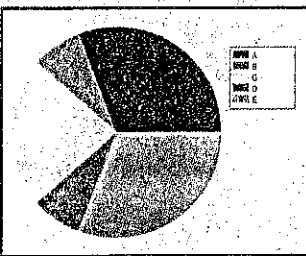
## 3 TYPES OF GRAPHS



1. Line graph: A graph that uses points that are connected by lines. This graph is to be drawn so that the independent data are on the horizontal x-axis and the dependent data are on the vertical y-axis. Line graphs are used to track changes over short and long periods.



2. Bar Graph: A graph that uses bars to show comparisons between categories of data. A bar graph will have two axes and is a way to visually represent a set of data. Bar graphs are useful for data that is easy to categorize. The category is traditionally placed on the x-axis, and the values are put on the y-axis.



3. Pie Chart: A chart (or a circle chart) is a circular graphic divided into slices to display data, information, and statistics in an easy-to-read 'pie-slice' format. A pie chart with varying slice sizes will show how much of one data element exists, hence the bigger the slice, the more of that particular data was gathered. Good for percentages and fractions.

## DATA TABLE

A collection of related data that is presented in columns and rows.

Data Table

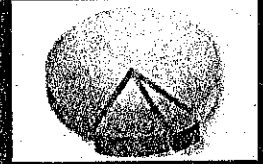
x	y

## ELEMENTS OF A GOOD GRAPH FOLLOW THE SULTAN METHOD

<b>S</b>	scale	Number the axes on the graph Common numbers (0,2,4,6,8) Clearly written, neat and easy to read
<b>U</b>	units	Relays what the numbers stand for Written in parenthesis Examples: (m), (s), (cm), (mL)
<b>L</b>	labels	Describes what is being measured on each axis
<b>T</b>	title	Place across top of graph Clearly states purpose of the graph Includes information about the x & y axes
<b>A</b>	accuracy	Plots points are precise Lines are drawn with a ruler
<b>N</b>	neatness	Written clearly Ruler used for lines



# STATION 7



Directions: Create two pie charts on the student handout based on the information below. Use the graphing notes as a resource.

## **PIE CHART 1:**

In Albert's science class his grade is broken down into the following:

50% homework

25% tests & quizzes

25% projects

## **PIE CHART 2:**

A survey shows that:

$\frac{3}{4}$  of people prefer driving during the day.

$\frac{1}{4}$  prefer driving at night time.



# STATION 8



Directions: Using knowledge of the types of graphs and the SULTAN method, answer the questions on the student handout based on the information below. Use the graphing notes as a resource.

**CONSIDER  
THIS!**

- 1) What is the purpose of a graph?
- 2) What are the three types of graphs?
- 3) What goes across the top of a graph?
- 4) How do you demonstrate neatness when making a graph?
- 5) Give two examples of units that can be used on a graph?
- 6) Which graph would you most likely use to show fractions? Why?
- 7) Explain why each of these are important when making graphs.

Scale

Units

Label

Title

Accuracy

Neatness

- 8) What kind of graph would use for this data? The months of the year and the amount of rainfall.

**STATION 7:** Create two pie charts from the information provided at the station. Use a compass and a ruler.

Pie Chart 1

Title:

Pie Chart 2

Title:

**ARE YOU FINISHED?** Consult the graphing notes and apply SULTAN to your graph. Check them off for completion.

S- scale    U- units    L- labels    T- title    A- accuracy    N- neatness

**STATION 8:** Answer the questions from this station in complete sentences on the lines below.

1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

4) \_\_\_\_\_

5) \_\_\_\_\_

6) \_\_\_\_\_

7) Scale: \_\_\_\_\_

Units: \_\_\_\_\_

Label: \_\_\_\_\_

Title: \_\_\_\_\_

Accuracy: \_\_\_\_\_

Neatness: \_\_\_\_\_

8) Line graph or bar graph.

