Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour: \_\_\_\_\_

**Graphing-6th Grade**

Use the following Data Table to make **a line graph** two different ways. The units are already labeled for you, just add the numbers.

**Average Monthly Temperature**

|  |  |
| --- | --- |
| **Month** | **Average Temp. (oC)** |
| January | 2 |
| February | 3 |
| March | 9 |
| April | 15 |
| May | 20 |
| June | 25 |
| July | 29 |
| August | 28 |
| September | 25 |
| October | 19 |
| November | 11 |
| December | 5 |

**Line Graph A**

**Average Monthly Temperature**



Average Temperature (oC)

 **Line Graph B**

**Average Monthly Temperature**



Month

**Questions:**

1. What are the two variables on the data table?
2. In your math class, which column on the data table always goes on the X-axis?
3. Is this column the independent or dependent variable?
4. Which variable is the independent variable?
5. Which variable is the dependent variable?
6. Which graph is the correct graph? Why?
7. Which variable **always** goes on the X-axis?
8. What happens when you put the wrong variable on the X-axis?
9. Why should time always go on the X-axis?

Use the following Data Table to make **a line graph**. And **a bar graph.** The units are already labeled for you, just add the numbers.

 **How Fast Can Animals Run?**

|  |  |
| --- | --- |
| **Animal** | **mph** |
| cat | 30 |
| horse | 47 |
| turkey | 17 |
| coyote | 43 |
| giraffe | 32 |
| elephant | 25 |

**Graph A- Bar Graph**

 **How Fast Can Animals Run?**



 Type of Animal

**Graph B- Line Graph**

 **How Fast Can Animals Run?**



Type of Animal

**Questions:**

1. Which graph makes more sense? Why?
2. When is it best to make a bar graph?