**716**

 **![C:\Users\zastrocm\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\MYE2A9NN\MC900053192[1].wmf]() STARBURST ! ![C:\Users\zastrocm\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\Z5MJU8Y0\MC900053182[1].wmf]()**

 **(Fractions, decimals, percents and data analysis)**

**EQ’s : How would you use fractions, decimals and percents in our everyday life? (specific examples)**

 **Fractions: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **Decimals: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **Percents: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**BENCHMARKS:**

 **MA.6.A.5.1 Use equivalent forms of fractions, decimals and percents in real-world situations**

 **MA.7.A.1.2 Solve problems using percent**

 **MA.6.S.6.2 Analyze and/or summarize data for graph construction and answering questions**

**MATERIALS: Bag of Starburst ( place various amounts and colors in baggies)**

 **Lab sheet**

 **Ruler, colored pencils**

 **Graph paper**

**ACTIVITY: 1. Distribute a Baggie of Starburst to each student**

1. **Empty the bag of Starburst**
2. **Count the TOTAL number of Starburst in your baggie and RECORD (at top of table)**
3. **Write the Starburst colors, you have, in the first column of the table**
4. **Separate Starburst into piles by color**
5. **Count and RECORD the number of each color on data table (second column)**
6. **Write the ratio of each color to the total bag (third column)**
7. **Write the ratio in a decimal form (to the nearest hundredth)**
8. **Change the decimal to a percent (last column)**
9. **Total each column (ratio, decimal and percent) to check your calculations**
10. **Collect and Record Percent data from one other person (be sure their total**

 **percent is close to 100%)**

**TOTAL NUMBER OF STARBURST \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COLOR**  | **NO. OF STARBURST** |  **RATIO** **(Fraction Form)** |  **DECIMAL**  **EQUIVALENT****(round to hundredths)** |  **PERCENT EQUIVALENT** |
| **1.** |  |  |  |  |
| **2.** |  |  |  |  |
| **3.** |  |  |  |  |
| **4.** |  |  |  |  |
| **5.**  |  |  |  |  |
| **6.** |  |  |  |  |
|  **TOTALS** |  | **\*Fraction = 1 whole** | **\*Decimal = close to 1**  **whole** | **\*Percent = close to** **100%** |

 **PERCENT TABLE**

 **RECORD ONLY PERCENT**

 **(This information will be used on your graph)**

|  |  |  |
| --- | --- | --- |
| **COLOR** |  **PERSON # 1**  **(YOU)** |  **PERSON # 2**  |
| **1.** |  **%** |  **%** |
| **2.** |  **%** |  **%** |
| **3.** |  **%** |  **%** |
| **4.** |  **%** |  **%** |
| **5.** |  **%** |  **%** |
| **6.** |  **%** |  **%** |

**ANALYZE DATA AND CHECK FOR UNDERSTANDING:**

1. **Construct a double bar graph (Title, Label both axis, key, accurately construct bars from both sets of data, use a ruler, use of colored pencils, consistent spacing and neatness will be used for grading) ATTACH TO THE BACK OF THE LAB SHEETS**
2. **Answer these four questions in complete sentences:**
3. **Why is the double bar graph the most appropriate graphic display of this data? Why not a line graph? Explain**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **b) What conclusion can you draw from the two sets of data you gathered?**

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **c) Was there a color that was abundant in both sets of data? Explain how you know**

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **d) What color was found the least in both sets of data? Was it the same color?**

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**