Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Hour \_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **Skittle Investigation**

*Fill in your science notes as we discuss the scientific method and lab activity.*

1. Describe the scientific method.

2. Step 1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is our question?

3. Step 2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What kind of research could we do to answer our question?

4. Step 3:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is your hypothesis?

5. Step 4: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Activity directions***

a. Double check that you have all lab materials.

 -Bag of Skittles

 -Skittles investigation sheet

b. With your table partner count the number of Skittles you have in your bag and record your data on the “Tables Data Chart”.

c. Count the color of each Skittle and record your data on the “Tables Data Chart”.

d. Find your TABLES averages and record it on the “Tables Data Chart”

e. Record your TABLES averages on the “Class Data Chart” and on the chart on the whiteboard.

f. Graph your “class data” on the graph paper provided. Your Y axis should be the number of Skittles and the X axis should be the color of Skittles.

***Table Data Chart***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Student names****(Initials)** | **Total number of Skittles** | **Total number of Green Skittles** | **Total number of purple****Skittles** | **Total number of Yellow Skittles**  | **Total number of Orange Skittles** | **Total number of Blue** **Skittles** | **Total number of Red** **Skittles** |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| **Averages** |  |  |  |  |  |  |  |

**Class Data Table**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Tables** | **Total Number of Skittles** | **Total number of Green Skittles** | **Total number of Brown Skittles** | **Total number of Yellow Skittles** | **Total number of Orange****Skittles** | **Total number of Blue****Skittles** | **Total number of Red****Skittles** |
| **Yellow Table** |  |  |  |  |  |  |  |
| **Purple Table** |  |  |  |  |  |  |  |
| **Orange Table** |  |  |  |  |  |  |  |
| **Blue Table** |  |  |  |  |  |  |  |
| **Green Table** |  |  |  |  |  |  |  |
| **Red Table** |  |  |  |  |  |  |  |
| **Averages** |  |  |  |  |  |  |  |

 6. Step 5: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How can we determine the number of Skittles in one serving?

Why must scientist have several trials during an experiment?

7. Step 6: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Was your hypothesis correct?

How many Skittles on average are in one serving?\_\_\_\_\_\_How many in each color? (list below)