# M&M colour comparison

### Step 1

Open your bag of M&M’s. DO NOT EAT THEM! Take out the M&M’s one at a time and record the colour in the table below. Place the M&M to one side (DO NOT put it back into the bag)

|  |  |  |
| --- | --- | --- |
| Colour | Tally | Total |
| Red |  |  |
| Yellow |  |  |
| Orange |  |  |
| Blue |  |  |
| Green |  |  |
| Brown |  |  |

### Step 2

* How many M&M’s were in your bag altogether?
* What was the most popular colour?
* What was the least popular colour?
* Draw an appropriate graph to show the number of each colour.

### Step 3

Collect results from 5 of your friends and calculate the average number of each colour, and total.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Colour | Mine | 1 | 2 | 3 | 4 | 5 | Average |
| Red |  |  |  |  |  |  |  |
| Yellow |  |  |  |  |  |  |  |
| Orange |  |  |  |  |  |  |  |
| Blue |  |  |  |  |  |  |  |
| Green |  |  |  |  |  |  |  |
| Brown |  |  |  |  |  |  |  |
| Total in packet |  |  |  |  |  |  |  |

Using Microsoft Excel, choose to suitable graph to show the average number of each colour. How does the shape of this graph compare to the shape of your original graph?

### Step 4

Convert the number of each colour to a fraction of the bag, and then a decimal and percentage.

|  |  |  |  |
| --- | --- | --- | --- |
| Colour | Fraction | Decimal | Percentage |
| Red |  |  |  |
| Yellow |  |  |  |
| Orange |  |  |  |
| Blue |  |  |  |
| Green |  |  |  |
| Brown |  |  |  |

Use Microsoft Excel to draw a sector (pie) graph of your data.



### Step 5

In a bag of 100 M&M’s how many of each colour would you expect?

|  |  |  |  |
| --- | --- | --- | --- |
| Colour | Number | Colour | Number |
| Red |  | **Blue** |  |
| Yellow |  | **Green** |  |
| Orange |  | **Brown** |  |

Use Microsoft Excel to draw a suitable graph. How does the shape of this graph compare to your original graph.