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## MAP4C Representing Discrete Data

## What is the colour distribution of M\&Ms?

Using the bag of M\&Ms given to you by your teacher, you and your group will be asked to collect data on the colour distribution of M\&Ms in a standard bag. You will create a bar graph to graphically represent the data you collected.

| M\&M Colour | Count (Frequency) | Percent of Total (\%) |
| :--- | :--- | :--- |
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## Total Number of M\&Ms in the bag:

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## Activity:

1. Complete the chart above and create graphs of the data using Excel.

## Graphing:

1. Create a bar chart (column chart) of Colour vs. Frequency using Excel.
2. Create a bar chart of the percentage of each colour using Excel.

## You Must:

1. Copy and paste your graphs into a Word document. Include headers, titles, introduction and the answers to the discussion questions.
2. Answer the following discussion questions in your Word document. Use the equation editor to show the calculations for question 2.

## Discussion Question:

1. What is the most frequently occurring M\&M colour?
2. Estimate the number of $\mathrm{M} \& M$ s of each colour that you would expect to find if someone gave you a bag of M\&Ms containing $500 \mathrm{M} \& \mathrm{Ms}$.
3. Why is it more useful to look at the percentage bar chart instead of the frequency bar chart?
4. Describe what is meant by discrete data? (give some examples, besides colour)
