# Sampling with sweets

1. **Target population:** tip all the sweets out of the bag and record how many of each colour there is in a table.

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| --- | --- | --- |
| Colour | Number | % |
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1. **Random Sampling:** everyone has an equal chance of being picked.

Line up all your sweets in no particular order and count the total. Close your eyes and pick 10 sweets at random. Write down the colour and how many of each were picked.

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| --- | --- |
| Colour | Number |
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1. **Stratified sampling:** subgroups which are proportional to the target population.

You need to create a sample of 12 sweets that is similar to the target population in percentage of each colour.  
So if you have 25% red sweets in your target population, you need 25% red sweets in your sample.

**How?** 25% of 12 = (25÷100) x 12 = 3 so I need 3 sweets to show 25% of the sample.

Ask if you need help!

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| --- | --- | --- |
| Colour | % in target population | Number of sweets needed for sample |
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|  |  |  |
| Total |  |  |

1. **Systematic sampling:**every nth person/sweet

Line all of your sweets up in a line. Divide the total number of sweets by 12 (as this is your sample size). Count along the line in this number, recording the colour of the sweet as this is in your sample.

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| --- | --- |
| Colour | Number |
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1. **Opportunity sampling:** whoever is willing and available

Tip out 12 sweets from the bag. These are who is available to do your research. Record the results in the table.

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| Colour | Number |
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**Evaluation:**

1. How close were your samples to the target population?
2. Which sampling method produced the most representative / similar sample to your target population? Why?
3. Which sampling method produced the least representative / similar sample to your target population? Why?
4. Which sampling method took the greatest / least time? Why?
5. Which sampling method produced the most uneven sample?