



Cool stuff for Nerdy Teachers

Maths Lesson Plan

Designing a survey and generating data

Key Learning Areas	Maths			
Key Concepts	Fractions ,Decimals, Percentage & Graphs			
Age / Level	Age 11-12	USA	UK	Australia 5-6
Duration	One 40 minute session			

Learning Intention / Overview

- This lesson will assist students in further developing their knowledge of fractions, decimals and percentage.
- The data collected can also be used in developing an understanding of graphical representation in the form of graphs; for example: Pie, linear, bar graphs etc.



Cool stuff for Nerdy Teachers

Lesson Instructions

- Design a survey by choosing a topic. eg. pets, favourite holiday destination, favourite ice-cream flavour.
- Collect the data from within the class or year level
- Convert results to fraction, decimal and percentage. Eg. $\frac{5}{24}$ students like vanilla ice cream, 0.2083; 21%



Cool stuff for Nerdy Teachers

Lesson Instructions

- Create a Linear Graph
- Transfer data to a Pie graph representation
- You can also work out ratio and chance and data. Eg. The possibility of a student liking vanilla is 1 in 4 (approx)



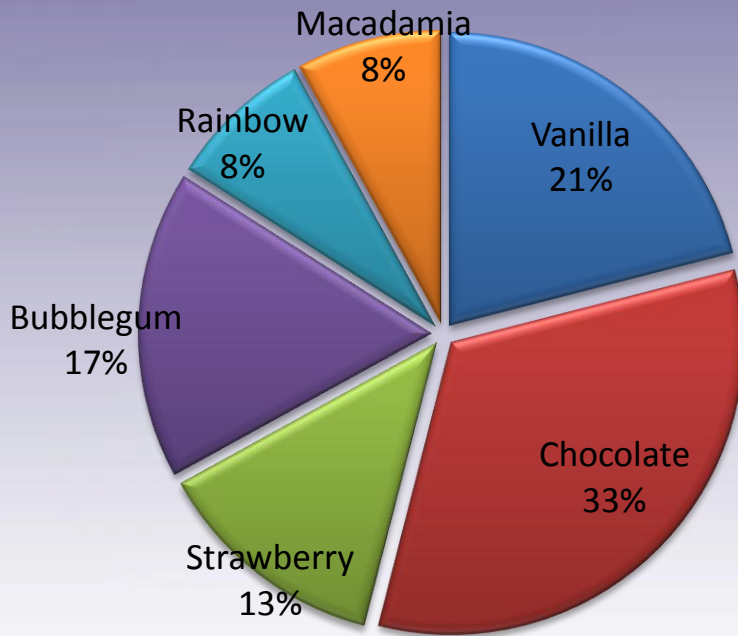
Cool stuff for Nerdy Teachers

Lesson Instructions

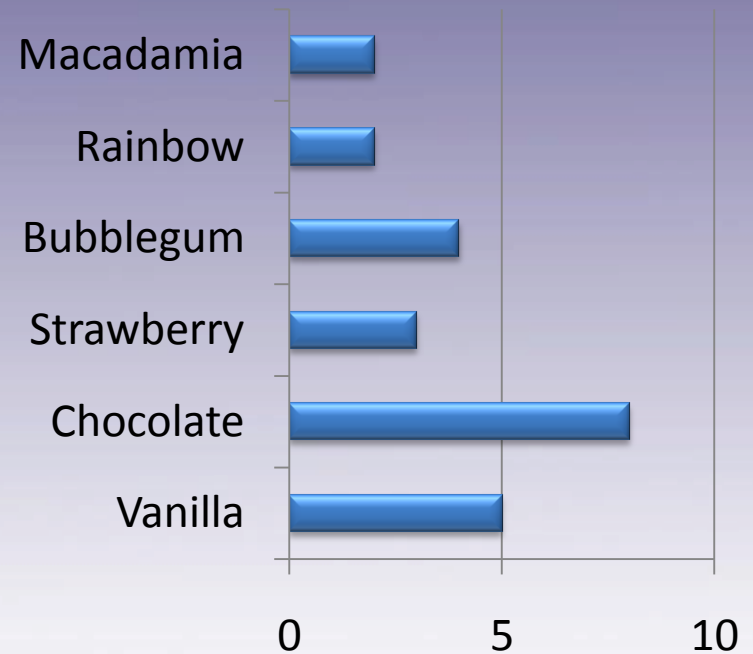
Ice Cream Flavour	Data	Number	Fraction	Decimal	Percentage
Vanilla	11111	5	$5/24$	0.2083	21%
Chocolate	11111111	8	$8/24$	0.3333	33%
Strawberry	111	3	$3/24 (1/8)$	0.125	13%
Bubblegum	1111	4	$4/24(1/6)$	0.1666	17%
Rainbow	11	2	$2/24$	0.0833	8%
Macadamia	11	2	$2/24$	0.0833	8%

Graphs

Favourite Ice Cream Flavour



Pie Chart



Bar Graph



Cool stuff for Nerdy Teachers

Assessment

- What needs to be done to change any decimal into a percentage? Multiply by 100
- Making the decision to round up or down.

Resources, Links & Further Reading



- For more lesson plans please visit www.edgalaxy.com
- [How to create a graph in PowerPoint](#)
- [Online maths fun](#)