## Data Handling

A Carroll diagram, is a diagram used for grouping things in a yes/no fashion. Numbers or objects are either categorised as ' $x$ ' (having an attribute $x$ ) or 'not $x$ ' (not having an attribute ' $x$ ').

Eg.

|  | Prime | Not prime |
| :---: | :---: | :---: |
| Even | 2 | $\begin{array}{lll} 4, & 6, & 8, \\ 10, & 12, & 14, \\ 16, & 18, & 20 \end{array}$ |
| Not even | $\begin{array}{lll} 3, & 5, & 7, \\ 11, & 13, & 17, \\ 19, & 23, & 29 \end{array}$ | $\begin{array}{lll} 1, & 9, & 15, \\ 21, & 25, & 27, \\ 33, & 35, & 39 \end{array}$ |

A Venn diagram, is used to present and organize information. Data is categorized as either having one or two of the features and placed in the correct circle. Where the circles overlap is where objects that possess both criteria are placed.


## Bar Charts

Every bar chart should:

* have a title.
* have numbered and labelled axis.
* have clear bars
* answer questions about the data.
* be numbered with sensible intervals.
(Intervals are the size of the spaces used on the numbered side. They should always go further than the highest number recorded.)



## *Important information to remember about bar charts

You must always look at the amount the interval represents. E.g in the above chart each interval represents 10 children.

The number of children with rabbits is just slightly over the 20 interval so we can deduce that the number of children with rabbits is 21 .

The number of children with cats is about 46 etc.

