

Lesson Plan

Statistics

Statistics is about collecting real life data and using various mathematical processes to make sense of that data.

Always be aware of the famous quote:

“There are lies, damned lies and statistics”

Data collection – is the process whereby, information is collected about a subject to later be analysed mathematically.

Data is usually collected on data sheets – specially prepared sheets that allow the data to be collected. This is usually in tabular form, usually providing answers to direct questions.

After showing the children some example of data sheets ask the children to devise their own surveys – just simple questions at this stage, like:

1. The different colours of the cars in the staff car park (should this survey be used then car must be taken to ensure children's safety)
2. Record the number of different cars or the colour of those cars passing by the school in a set period of time. This could be done at different times of the day – this may be useful when demonstrating a Line Graph.
3. Survey the children in the class about the football team they support. Or what their favourite sport is or even favourite snack
4. Those with a scientific interest might want to survey the school grounds list all the different trees on the school grounds.

Basically anything that will lead to a collection of data that the children can ask about collect on data sheets and analysis.

Show the children how to calculate the data: Average, Mode and Mean. Ask the children to calculate these using their data.

Finally show the children how to analysis the information by showing them how to construct:

- A bar graph
- A Carroll diagram
- A Pictogram
- A Venn diagram

- And a Pie Chart

Wherever possible ask the children to construct these analytical tools for their data.