**Checklist:**

Aspect 1: Be able to collect data

Identify possible data sources

Obtain data from appropriate source (e.g. a database)

Produce original data (e.g. from an experiment)

Identify data and relate data to variables

Distinguish between relevant and irrelevant data

Aspect 2: Be able to manipulate data

Create a visual representation of data (e.g. a graph)

Generate a statistic appropriate to that field (e.g. “calculate an average”)

Use software to manipulate data (e.g. Excel)

Use algebraic tools to manipulate data

Aspect 3: Be able to analyze data to draw informed conclusions

Compare data with a theory or hypothesis

Determine a relationship between variables

Draw correct inferences from data