

# PROCESS

# SKILLS

## qualitative observation

Information you take in using your senses that involves shape, color, taste, smell or texture.

## quantitative observation

Information you take in using your senses that involves measurement or numbers

## measuring

Finding the size, volume or mass of something using liters, meters and grams.

## communicating

Giving or exchanging information by using reports, drawings, tables, charts, graphs or written records.

## classifying

Putting objects into groups based on common characteristics.

## estimating

Using a careful guess to determine things like *about* how long or *about* how much

## inferring

Coming up with an idea or conclusion based on an observation.

## predicting

Trying to determine what will happen in the future, based on data or evidence.

## interpreting data

Understanding and explaining the data shown on a table, diagram or graph.

## hypothesizing

Forming a possible answer to a question or solution to a problem.  
ex) What happens if.....

## manipulated variable

A factor in an experiment that is intentionally changed.

## responding variable

A factor in an experiment that is affected as a result of a variable being intentionally changed.

## controlled variable

A factor in an experiment that is not changed. It stays the same.

## collecting data

Gathering information about observations and recording it in tables, graphs, journals, etc.

## defining operationally

This process tells exactly how a variable will be measured and is important for everyone to test the variable in the exact same way. It is a "working definition".