Process Skills

Basic

Observing – a statement made using the senses (Taste, touch, sight, sound, and smell).
There are two kinds of observations:
  1. Quantitative – Using numbers to observe
  2. Qualitative – Using descriptive words to observe

Inferring – drawing a tentative conclusion based on prior knowledge. An inference is an interpretation of observations.

Measuring – quantitative (with numbers) observations

Communicating – giving explanations of observations.
  1. Verbal
  2. Written
  3. Graphically (line graph, bar graph, histogram)
  4. Visually

Classifying – arranging objects or information by using their attributes
  1. Binary – sorting into two groups
  2. Multistage – set of binary sorts resulting in one unique attribute for each object
  3. Serial – sorting objects in a logical order (size, alphabetical, etc)

Predicting – making statements about future outcomes based on prior knowledge or experience. This is a forecast for what might happen.

Comparing – Noticing the similarities or differences between the objects to be compared.

Integrated

Hypothesizing – a suggested explanation based on background knowledge.

Making models – creating a visual representation of an event or object

Data collection
  1. Data tables – quantitative data in chart form
  2. Graphing – a representation of data

Data Interpretation
  1. Interpolation – interpretation within a set of data
  2. Extrapolation – interpretation of information beyond the data

Experimenting
  1. Controlling variables