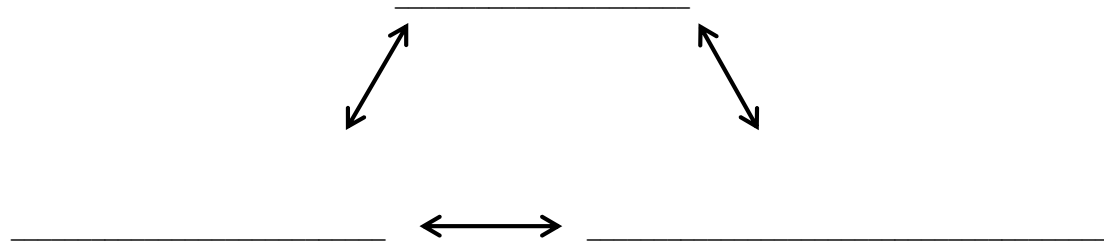## Science Process Skills– Guided Notes

Science process skills are _____.

The Engineering Framework:

_____

_____ ←→ _____

_____ is the step where we identify what the problem is and identify the constraints

Constraints are _____ ex. size, time, and budget

One example: It's the first day of football season and the parking lot of NC State's Carter-Finley Stadium is going to be under construction.
The problem is:

Some constraints are:

_____ is the step where we work within constrains in order to determine a solution while looking back at previous solutions or solutions to similar problems

One example: We need to carry heavy sandbags across a beach with deep loosely packed sand.
An example of a past or similar solution with this or a similar problem:

A possible solution is:

_____ is the step were we test solutions and ask questions (is this is most efficient solution, is this is least expensive solution, etc.)

Problem/solution Example: Road work needed to be done; currently workers are working from 1pm until 7pm
One way we could optimize this solution:

Observation vs. Inference:

Observation is-

Inference is-

Analyzing Data:

Qualitative data- describes the _____ of something

       Ex.

Quantitative data- describes something _____

       Ex.

Precision- How _____   _____ data is grouped

Accuracy- How close data is _____