

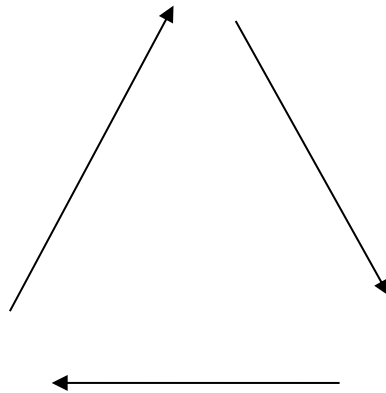
7th Grade Science
**The Nature of Science:
Scientific Processes**

Vocabulary: science, observation, inference, hypothesis, variable, constant, control, data, bias, theory, law, technology



Science is...

Science is the _____ and _____ of
_____ and
the _____ that results from
these investigations.



The _____ is a general set of steps that helps scientists perform _____.

- An _____ leads to a _____.
- A good scientist always does _____ to see what information is already available.
- A _____, or _____, is an answer to the question that can be _____.
- The _____ procedure is used to test the _____.

2 types of data:

- _____ - uses _____
- _____ - uses _____

Experimental Design

A good experiment is one that can be replicated by other scientists. The steps must be clear, and the potential for error should be as small as possible. Every year, experimental results are published, only to later be redacted (_____) because of procedural mistakes or irreproducible results.

Groups in an experiment:

- _____ - the group that receives _____
_____. It serves as a _____ against
which other groups can be _____.
- _____ - the group or groups for which
something is _____. This factor is usually
related somehow to the _____.

Factors in an experiment:

- Any factor that changes is called a _____.
 - The _____ variable is _____
by the scientist. This can also be called the
_____ or the _____. There
should be only _____!
 - The _____ variable(s) changes in
response to the treatment. These factors are
_____ by the scientist. This can also
be called the _____ or the
_____.
 - _____ are factors that do not change. They
should remain the _____ for all groups.



Experimental Analysis

_____ is the _____ obtained from the investigation. It can be

- _____ - uses _____, or;
- _____ - uses _____.

A _____ is an _____ error introduced into the experiment by _____ or _____ one outcome or answer over others. It may be intentional or unintentional. A _____ or _____ - _____ study can reduce potential bias.

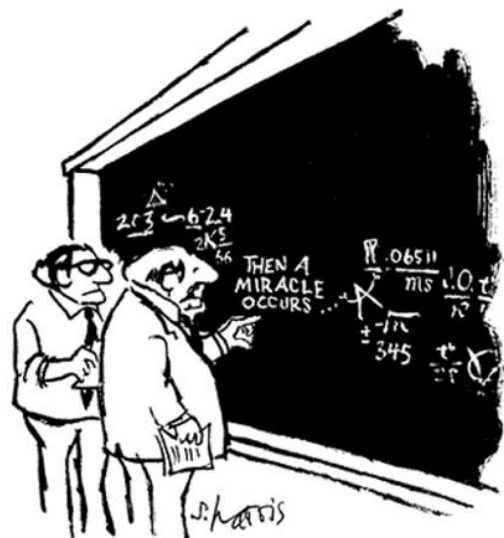
Charts and graphs assist in _____ and _____ data in a useful and understandable way.

- _____ - used to show continuously _____ data over _____.
- _____ - used for distinct _____.
- _____ - shows the _____ of the _____ group.

_____ are made with the
_____ or with _____
that _____ our senses.

_____ are _____
_____ of those observations
drawn from prior _____ and
_____.

The process of _____ the new information with what you _____ is called _____.



"I think you should be more explicit here in step two."