

Name _____
Assignment Code _____
Date _____

CONTROLLED EXPERIMENTS

-planned tests to see what will happen when ALL factors are kept constant (unchanged) except for the ONE factor being tested.

ALL experiments should be CONTROLLED.

HOW would you make one Uncontrolled? _____
_____)

VARIABLE: the factor that is allowed to change.

CONTROLS: the factors which are kept constant (controlled).

e.g. In a track competition the following are controls =
(factors kept constant)

1. type of running surface
2. wind
3. temperature
4. type of shoes
5. altitude
6. distance

The VARIABLE IS _____

Experiments are often done in TWO GROUPS.

CONTROL GROUP

-contains controls only

EXPERIMENTAL GROUP

-contains same controls AND the
VARIABLE

CREST TOOTHPASTE COMPANY WANTS TO PROVE THEIR BRAND WORKS BETTER
IN AN EXPERIMENT. LIST FACTORS UNDER EACH GROUP.

CONTROL GROUP

EXPERIMENTAL GROUP

VARIABLE _____

REPEATABILITY

-In order to be accepted as true an experiment or procedure must give the SAME results when done again.

In order to be REPEATABLE, information must be OBJECTIVE.

OBJECTIVE INFORMATION- based on "external" standards such as pounds, feet, meters, degrees, volts, decibels, etc.

SUBJECTIVE INFORMATION- based on "internal" standards, i.e. based on JUDGEMENT. e.g. cold, fast, kind, etc.