

Flashlight does not work

Hypothesis - educated guess

Test

- batteries dead

test batteries
in a functioning
piece of equipment

- bad wiring

observation
(maybe not definitive)

- bulbs out

replace bulb

- Flashlight is
living and is
being defiant

Hypothesis (good hypothesis) is a
testable guess.

Make up tests to disprove a
hypothesis

It takes a community of scientists attempting to disprove a hypothesis in order to be valid

Hypothesis \longrightarrow theory
many, many rounds of experiments and peer review to disprove
Conceptual relationship

Ideal Gas Law Law
 $PV = nRT$ mathematical relationship
Mathematical relationship

Force of gas through cylinder

$$F = ART$$

$$E = mc^2$$

energy = (mass) (speed of light)²
 $3 \times 10^8 \text{ m/s}$
Law \rightarrow concise mathematical

$\text{CO}_2 \rightarrow$ compound

$\text{H} \rightarrow$ element

$\text{H}_2\text{O} \rightarrow$ compound

$\text{NaCl} \rightarrow$ compound
sodium chlorine

$\text{O}_2 \rightarrow$ element
diatomic

Quiz #1
due 9/23

HW Review 1-13
slides
HW 2 due Sep 30th
Fri 2
Quiz 2

Compound is
2 or more
elements that
bind together
in fixed ratios.