



SCIENCE

***HYPOTHESIS,
THEORY, LAW, FACT
OR BELIEF?***

REVIEW THE FOLLOWING DEFINITIONS:

Fact:

A basic statement established by experiment or observation. All facts are true under specific conditions. Some facts may be false when re-tested with better instruments.



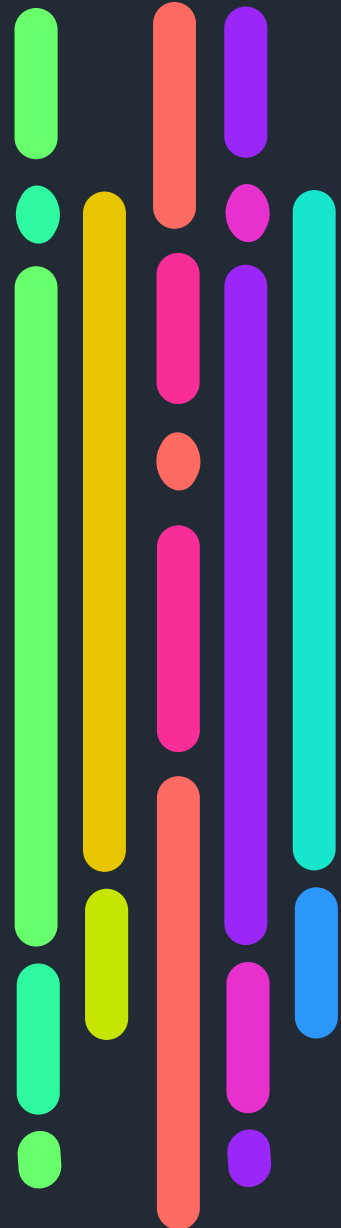
LAW

A logical relationship between two or more things that is based on a variety of facts and proven hypothesis. It is often a mathematical statement of how two or more quantities relate to each other.

HYPOTHESIS

A tentative statement such as 'if A happens then B must happen' that can be tested by direct experiment or observation.

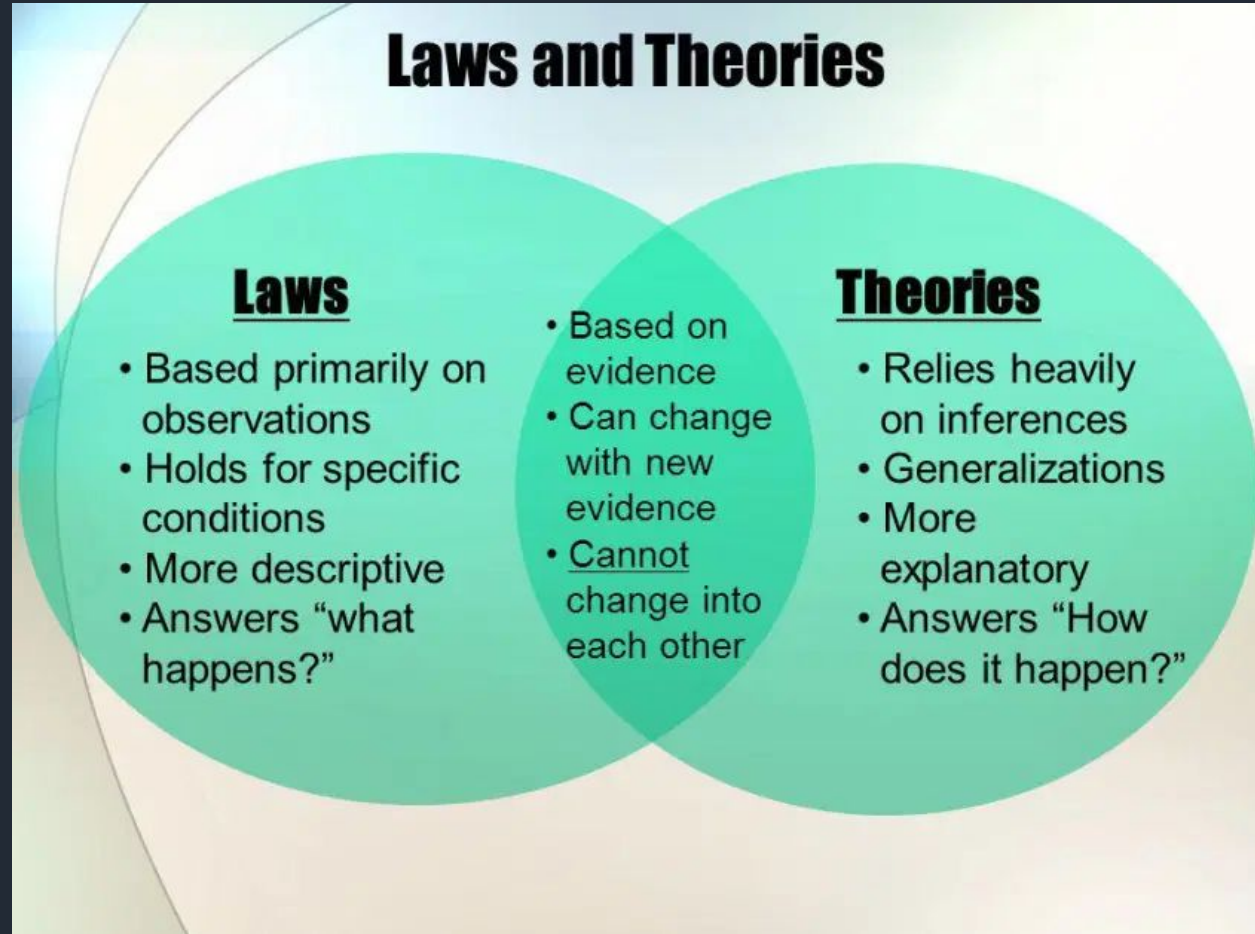
A proven hypothesis can be expressed as a law or a theory. A disproven hypothesis can sometimes be re-tested and found correct as measurements improve.



THEORY

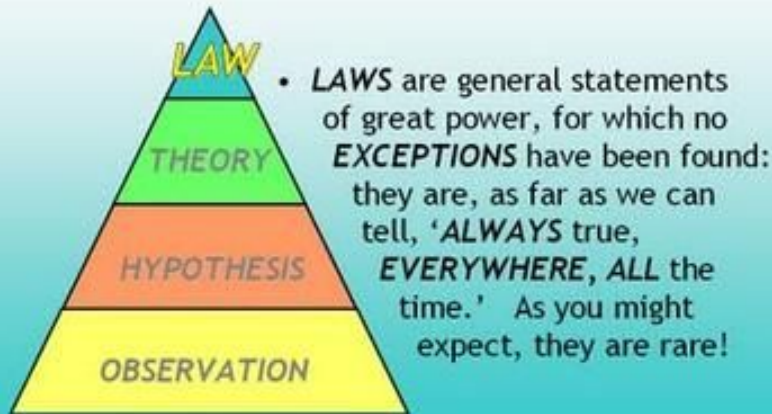
An well-established, highly-reliable
explanation for why certain laws and
facts exist that can be tested to
determine its accuracy.

LAW VS. THEORY



BELIEF

Levels of Scientific GENERALIZATION:



A statement that is **not** scientifically provable in the same way as facts, laws, hypotheses or theories. Scientifically disproven beliefs can still be held to be true.



NOW PRACTICE!

DRAG THE BOXES UNDERNEATH THE CORRECT LABEL.

BELIEF

FACT

THEORY

Law

HYPOTHESIS

The Earth is a sphere.

Evolution by Natural Selection

$F = ma$

For every action there is an equal and opposite reaction.

More babies are born during a full moon.

If I place light near a plant then it will grow

Matter is composed of atoms.

The universe was created by a Big Bang, aka a large explosion.

The positions of the planets can cause humans to act in specific ways.

Ghosts are real.

Water freezes at 32°F

Genetic mutation cause organisms to change over time.

***LET'S CHECK
YOUR
ANSWERS!!***





CHECK YOURSELF!

BELIEF

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FACT

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THEORY

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