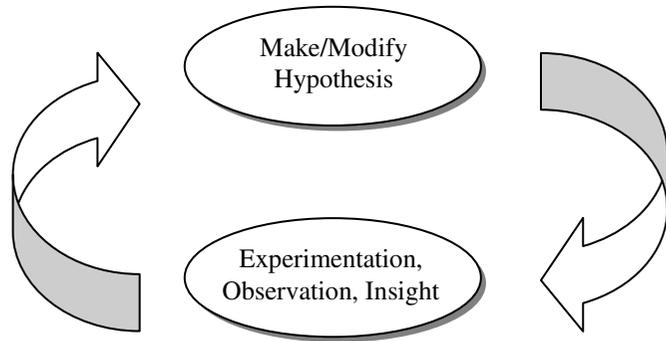


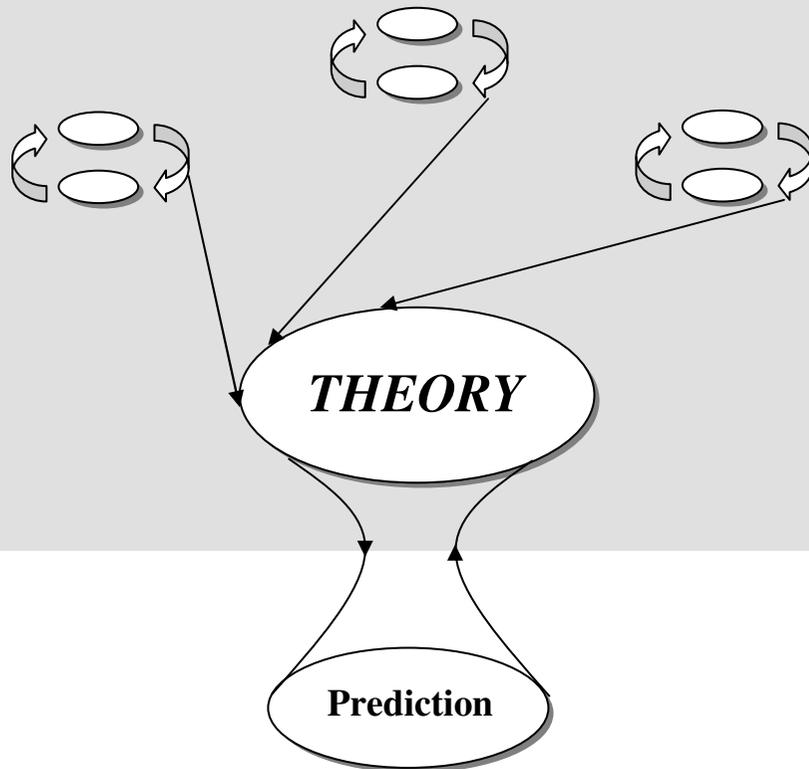
The Scientific Method

PETER ELLERTON



An **hypothesis** is always a tentative explanation - and must be falsifiable.

An **hypothesis** can be disproved, but never proved with absolute certainty.



One or more **hypotheses**, after testing and modification if necessary, contribute to the development of a **theory**. A **theory** attempts to explain observed phenomena by creating a model of how a system works.

A **theory** is tested by predicting the outcomes of observations & experiments that have not been done before.

LAW

A **law** of nature is an account of what occurs in given circumstances. It is descriptive only and does not explain why this behaviour occurs.

- We do not impose **laws** on nature.
- **Laws** may inform the development of a theory
- Theories do not become **Laws**, they should explain them.