

# ***THE SCIENTIFIC METHOD***

## ***1. Observation***

Empirical data or experience.

## ***2. Question Formulation***

What is going on here?

## ***3. Exploration of Alternative Resources***

What is already known about this subject?

## ***4. Hypothesis Formation***

A possible answer to the question.

## ***5. Experimentation***

Test the hypothesis using a control group and an experimental group.

## ***6. Theory Formation***

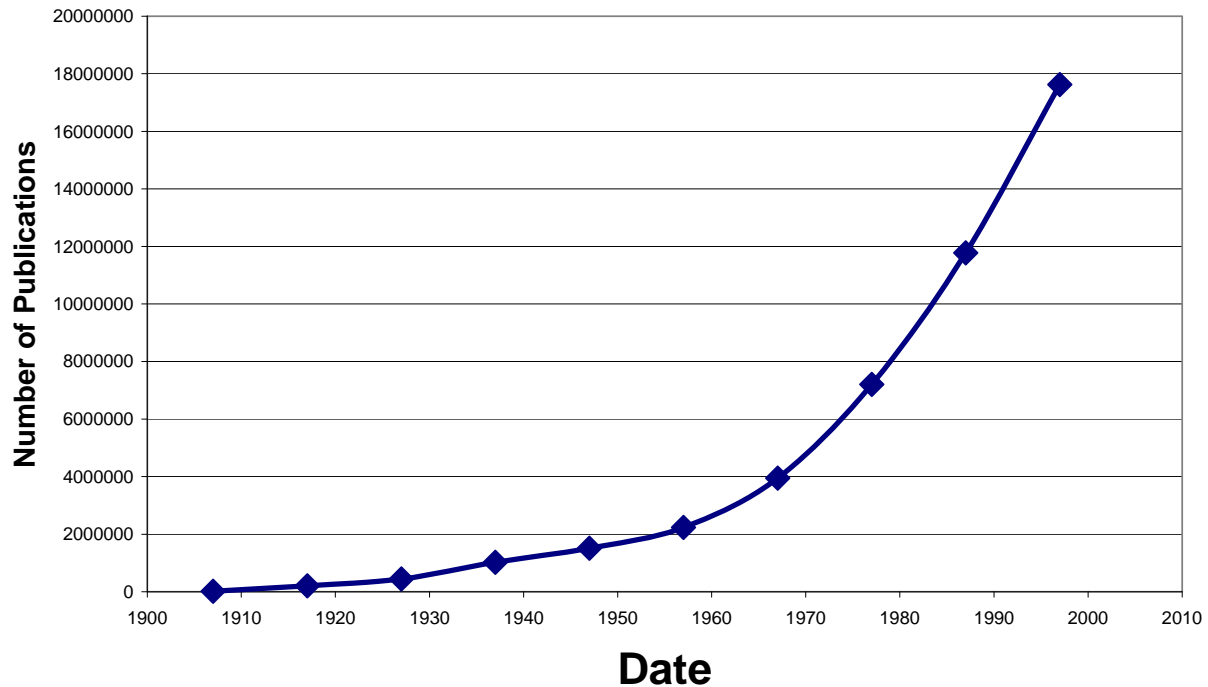
Repeat the experiment, analyze and share the results with other scientists, comparing your conclusions with existing theories.

## ***7. Law Formation***

If there is widespread acceptance of the findings and theoretical description, then the theory is accepted as law.

# Scientific Progress

## Number of Scientific Publications



*Scientific progress is predicated on the steady, incremental accumulation and integration of experimental results and analyses. Formal dissemination (e.g. publication) of scientific results is therefore an important aspect of scientific progress, as it makes each contribution permanent and gives all researchers access to the body of scientific results.*