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INTRODUCTION:

Scientific Progress is the idea that Science increases its problem-solving ability through the application of the scientific method. The progress of science is the scientific method. It is the complex process of "doing science" that is, being expert in the content area and the scientific method.

**Science is a way of thinking
Much More than it is a body of Knowledge.**

Science Makes Progress Precisely when it shows the accumulation of Scientific Knowledge; an episode in science is progressive when at the end of the episode there is more knowledge than at the beginning.

DEFINITION:

The word "Science" is derived from the Latin word scientia, which is knowledge based on demonstrable and reproducible data, according to the Merriam – Webster Dictionary. True to this definition, Science aims for measurable results through testing and analysis. Science is based on fact, not opinion or preferences.

**Science is Organized Knowledge
Wisdom is Organized Life.**

The Three Approaches to characterising scientific Progress:

- * The Epistemic Approach
- * The Semantic Approach
- * The Functional – internalist Approach.

The epistemic approach takes knowledge to be the concept we need in order to understand what progress is in the scientific.

HISTORY OF SCIENCE PROGRESS:

The history of science is the study of the development of science and scientific knowledge, including both the Natural Sciences and Social Sciences. Science is a body of empirical, theoretical, and practical knowledge about the Natural world, produced by scientists who emphasize the observation, explanation, and prediction of real world phenomena. Historiography of Science, in contrast, often draws on the historical methods of both intellectual history and social history.

**Science, My Lad, is made up of mistakes.
But they are mistakes which it is
Useful to make, because they Lad
Little by Little to the truth...**

NATURE OF SCIENCE:

Some teachers have asked how "The Nature of Science' differs form "The Scientific Method". There is a common myth that there is only one may to de science: The scientific method. The " Nature of Science" (Nos), on the other hand, consists of those seldom – taught but very important features of warking science, eg... its realm and limits, it levels of uncertainty, it biases, its social aspects, and the reasons for the reliability.

**The Characteristic of Scientific Progress is
Our knowing that we didnot know.**

Popular ignorance of these features of Science has lead to many misuses, misrepresentations and abuses of science. in the nature of science.

ROLE OF SCIENCE PROGRESS:

Science – the study of the Natural world. The Role of Science in sustainable Development Global Change is creating enormous challenges for humanity. The world's Pupulation is expected to grow from nearly 6 billion today to 8.5 billion by the year 2025. Gobal energy requirements will continue to increase. The newly industrialized countries of Asia and Latin America are experiencing very rapid economic growth that is bringing modern society's environmental problems, including air and water Pollution and waste problems, to wider areas of the gobal in the Role of science.

BENEFITS OF SCIENCE PROGRESS:

Science and technology are probaly the most debated topics in society. Scientific and technological developments have been debated as to whether they affect people's life styles are cause hassle. On the contrary, science and technology has improved our way of life for the better of mankind.

Medical advancements, computers, and simple inventions such as the light bulb are all enamples of how science and technology is beneficaill.

LIMITATIONS OF SCIENCE PROGRESS:

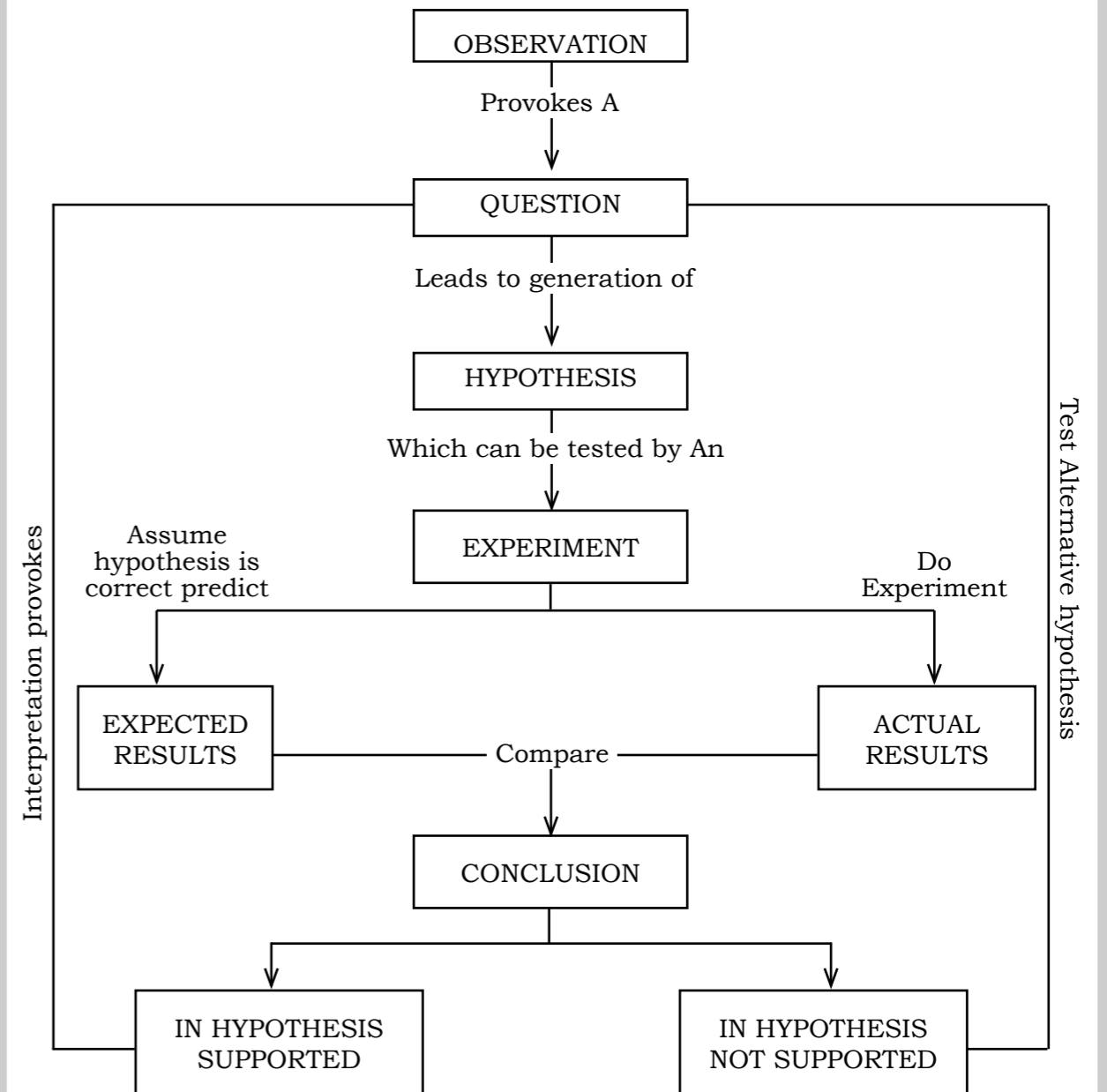
Science has limits. A few things that science does not do. Science is powerful. It has generated to knowledge that allows us to call a friend halfway around the world

with a cell phone, vaccinate a bady against polio, build a skyscraper, and drive car. And science helps us answer important questions like which areas might be hit by a tsumani after an earthquake, how did the hole in the Ozene layer from, how can we protect our crops from pests, and who were our evolutionary ancestors? which such breadth, the reach of science might seen to be endless, but it is not. Science has definite limits.

Science doesn't make moral judgments. Science doesn't draw conclusions about super Natural explanations.

Science doesn't tell you how to use scientific knowledge.

STEPS IN SCIENCE PROGRESS:



STEP IN SCIENCE PROGRESS

PROGRESS AND THE AIM OF SCIENCE:

Our conception of scientific progress is linked to what we take the aim of science to be. In general something like the following principle holds:

(A) if the aim of X is Y, then X makes progress when X achieves Y or promotes the achievements of Y.

That scientific progress is the accumulation of knowledge is what one would expect if one takes the aim of science to be the production of knowledge.

(A) includes a clause that says that progress is made when one promotes the achievement of one's goal. While I do not think that just anything that makes success more likely, it is nonetheless true that we think that progress is made when certain means to an end are achieved making necessary preparations, clearing obstacles, getting half-way there.

If so, one should regard science as progressing when a development promotes the growth of knowledge.

The view that science aims at knowledge is a natural one, but not one that is universally accepted. Some might argue that knowledge is not enough—science aims at understanding.

SCIENCE SKILLS:

Scientists use many skills to gather information. These skills are sometimes called science skills. You use science skills, too, you probably used some science skills today. When you use most science skills, you use five senses. Your senses are seeing, hearing, touching, smelling and tasting.

OBSERVING

When you observe, you use your senses. You must pay close attention to everything that happens.

MEASURING

When you measure, you compare an unknown value to a known value. Measuring makes observation more exact.

INFERRING

When you infer, you form a conclusion based upon how things are without making observation.

CLASSIFYING

When you classify, you group things based upon how they are alike.

ORGANIZING

When you organize, you work in an orderly way you put your information in order.

**One can Not impede
Scientific Progress**

PEOPLE IN SCIENCE:

* Lord Kelvin (English engineer) galvanometer

* Marie Curie worked with her husband Pierre Curie. Together, the Curies studied radioactive elements.

* Jean Louis Agassiz (Swiss naturalist, Geologist) research was on fossil fishes.

* Jacques – Yves Cousteau (French inventor) built this station at the edge of the continental shelf.

* Evangelista Torricelli (Italian mathematician and scientist) was discovered mercury barometer.

* Rachel Carson (marine biologist and science writer) discusses how pesticides are harmful to the environment.

CONCLUSION:

In the long term, "Progress" works against us if it continues to be detrimental to nature. This realization will find increasing acceptance. Environmental Protection will play a central role in the 21st Century and will be a major challenge for politicians and scientists alike.

**Science is fun. Science is
Curiosity. we all have
Natural curiosity. Science is
a process of investigating. It is
posing questions and coming up
with a method. It's delving.**