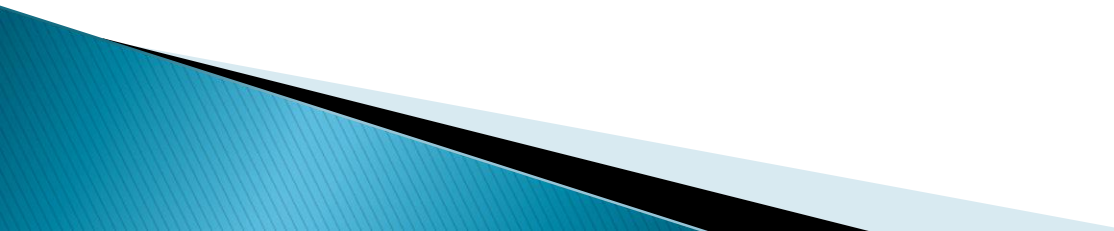


Nature of Science

By: Anamika Kumari

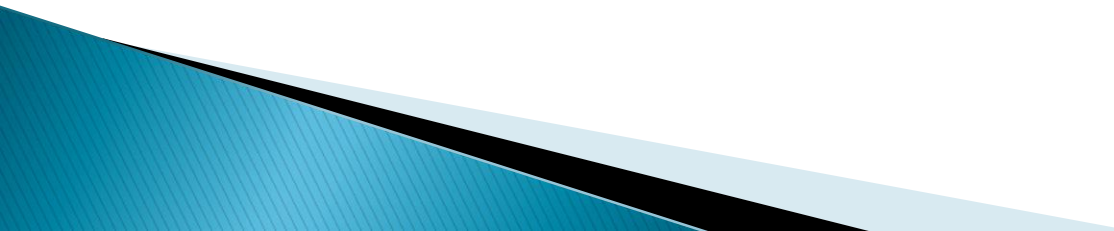
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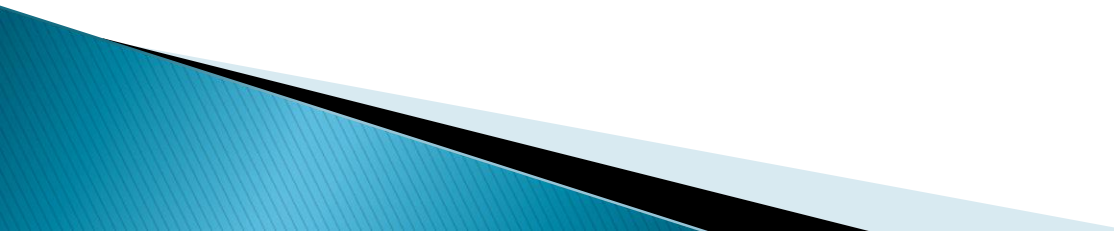
Meaning of Science

The term science is derived from two Latin words *scientia* and *scire* which mean knowledge or to know. So, Science is considered as a body of knowledge, a way of investigation and a way of thinking in the pursuit of an understanding of nature.



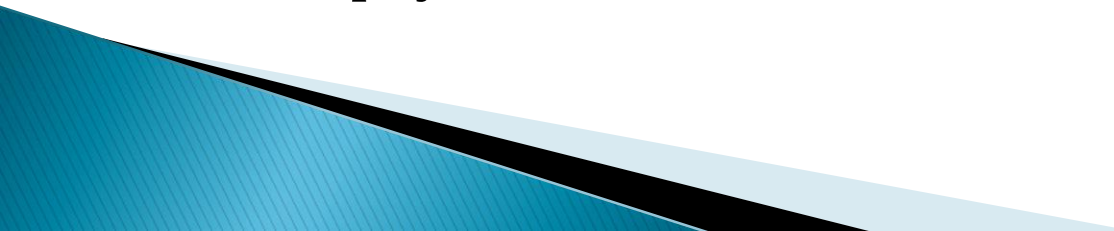
Nature of Science

Several interconnected steps involved in : observation, looking for regularities and patterns, making hypotheses, devising qualitative or mathematical models, deducing their consequences: verification or falsification of theories through observations and controlled experiments and thus arriving at the principles, theories and laws governing the physical world. There is no strict order in these various steps. Sometimes, a theory may suggest a new experiment; at other times an experiment may suggest a new theoretical model.



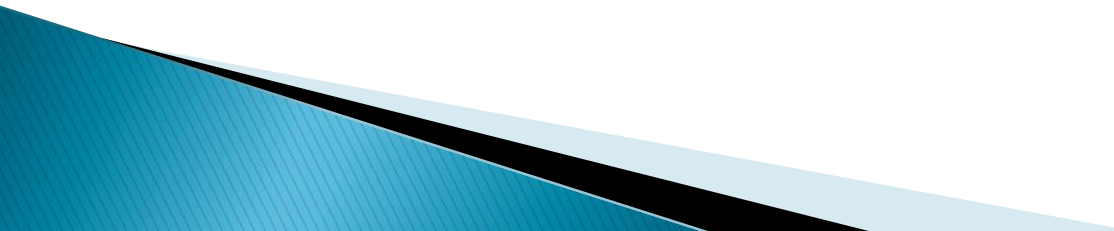
The laws of science are never viewed as fixed external truths. Even the most established and universal laws of science are always regarded as provisional, subject to modification in the light of new observations, experiments and analysis.

Moreover, while science is at its best in understanding simple linear systems of nature, its predictive or explanatory power is limited when it comes to dealing with nonlinear complex system of nature. Yet, with all its limitations and failings, science is unquestionably the most reliable and powerful knowledge system about the physical world known to human.



Science is knowledge and knowledge is power. With power can come wisdom and liberation .Science has the potential to be beneficial or harmful emancipative or oppressive History, particularly of the twentieth century, is full of examples of this dual role of science.

How do we ensure that science plays an emancipative role in the world? The key to this lies in a consensual approach to issues threatening human survival today.



This is possible only through information transparency and a tolerance for multiple viewpoints. In a progressive forward- looking society, science can play a truly liberating role, helping people out of the vicious circle of poverty, ignorance and superstition. In a democratic political framework, the possible aberrations and misuse of science can be checked by the people themselves. Science, tempered with wisdom, is the surest and the only way to human welfare.

