

Science & Scientists

Reference to context:

Reference: 'Science and Scientists' is a short essay. F. Sherwood Taylor writes it. It is taken from 'The World of Science'.

Context: The writer gives (a) definitions of Science and (b) the cause of the growth of Science.

Definition of Science:

Man in the Street: Definition of Science, Meaning of the word 'Science'.

The man in the street (or the layman) knows the meaning of the word science fairly well. Of course, he knows it only in his own simple way. He thinks that:

Astronomy, Chemistry, Biology etc are definitely science.

Engineering of medicine may or may not be science and

Politics, History, Art, Religion etc are definitely not science.

This clearly shows that the 'man in the street' has a very vague idea about science. In fact, he does not know even its rudiments, much less its niceties.

A Scientist Definition of Science:

A scientist defines science as that which has the following characteristics in its outlook:

Exactness: i.e. is an exact (or accurate) as possible.

System: i.e. has a methodical arrangement.

Sound Evidence: i.e. is based on and supported by solid proofs. It does not jump to conclusions (or draw hasty inference without waiting for necessary proofs).

Truth: i.e. aims at finding out only the truth and nothing at all being influenced by personal views – for or against or personal prejudices – likes or dislikes.

Anything, say a piece of work or a book which has these qualities is "Scientific" otherwise it is 'unscientific'.

Needless to say, a scientist is so busy with his experiments that he has hardly any time for definitions.

Simple Definition of Science:

Simply stated, science is a big collection of (1) facts and (2) Laws, which explain the relationship between these facts.

The most essential characteristics of the Facts of Science and the laws of Science are that (1) these are stated in a language, which has a quite clear meaning so that no doubts arise in the mind. (2) Their truth can always be verified by scientific experiments.

Importance of the Definitions: These definitions may not sound interesting. Never the less, they are quite important for they bring to light the essential factor that is responsible for the phenomenal progress of science. That essential factor is the scientific attitude of mind.

Science made little progress so long as people had an unscientific attitude of mind i.e. people searched knowledge in a random careless way, readily believing what other said. The statements were never put to

test.

But science made astonishing progress when people acquired the scientific attitude of mind – i.e. people tested stated facts through experiments.

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