

## What is science?

The following statement was originally drafted by the Panel on Public Affairs (POPA) of the American Physical Society, in an attempt to meet the perceived need for a very short statement that would differentiate science from pseudoscience. This statement has been endorsed as a proposal to other scientific societies by the Council of the American Physical Society, and was endorsed by the Executive Board of the American Association of Physics Teachers at its meeting in Atlanta, 20 March 1999.

Science is the systematic enterprise of gathering knowledge about the world and organizing and condensing that knowledge into testable laws and theories.

The success and credibility of science is anchored in the willingness of scientists to:

- (1) expose their ideas and results to independent testing and replication by other scientists; this requires the complete and open exchange of data, procedures and materials;
- (2) abandon or modify accepted conclusions when confronted with more complete or reliable experimental evidence.

Adherence to these principles provides a mechanism for self-correction that is the foundation of the credibility of science.

American Association of Physics Teachers