

The Central Propaganda Department of the Ministry of Science and Technology
Chinese Citizens' Scientific Quality Standards

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The "Chinese Citizens' Scientific Quality Standard" (hereinafter referred to as "the Standard") refers to the standard of basic scientific and technological knowledge and capabilities that Chinese citizens [over age 18] should possess. Citizens with basic scientific qualities generally mean understanding the necessary scientific and technological knowledge, mastering basic scientific methods, establishing scientific thoughts, advocating scientific spirit, and having the ability to apply them to deal with practical problems and participate in public affairs.

The Standard has 26 benchmarks containing 132 reference points, which basically cover the scientific spirit, knowledge or knowledge that citizens need to have, or the ability to possess.

Benchmark 1. Know that the world is cognizable, and understand the world with a scientific attitude.

(1) Establish a scientific worldview and know that the world is material and can be recognized, but human beings have limited knowledge of the world.

(2) Respect for objective laws can make us live in harmony with the world.

(3) Science and technology are constantly evolving, and scientific knowledge itself needs to be continuously deepened and expanded.

(4) Knowing that philosophy and social sciences, like natural sciences, is an important tool for people to understand the world and transform the world.

(5) Understanding Chinese excellent traditional culture plays an important role in understanding nature and society and developing science and technology.

2. Know to use systematic methods to analyze and solve problems.

(6) Know that the world is universally connected, and things are developed and changed by movement and unity of opposites; can understand and solve problems with a universally connected and developmental perspective.

(7) Knowing that the various parts of the system are interconnected and interacting, the complex structure may be composed of many simple structures; realize that the whole has functions that the sum of the parts does not.

(8) Know that there may be multiple ways to analyze and solve problems, and know that solving one problem may cause other problems.

(9) Knowing the traditional Chinese philosophical concepts such as Yin and Yang, the five elements, the unity of heaven and man, and knowledge-giving to

knowledge is the simple materialism and overall systematic methodology of ancient China, and has practical significance.

3. Have a basic scientific spirit and understand the basic process of scientific and technological research.

(10) Have the scientific spirit of seeking truth, questioning, and empirical knowledge, knowing that scientific and technological research should have the basic elements of curiosity, observation, and honesty.

(11) Understand the basic process and methods of scientific and technological research.

(12) For those who intend to become the subjects of the experiment, they should fully inform themselves or their stakeholders of the possible risks of the experiment.

8. Advocate science and have the basic ability to distinguish the authenticity of information.

(32) Knowing that practice is the only standard for testing truth, and experiment is an important means of testing the authenticity of science.

(33) Know that explaining natural phenomena depends on scientific theory, respects objective laws, seeks truth from facts, and is not superstitious or blindly following natural phenomena that cannot yet be explained by scientific theory.

(34) Know that the information may be affected by the background and intention of the publisher, have the ability to identify the authenticity of the information, and do not believe the unverified information.

11. Master basic physics knowledge.

(47) Understand the common forces in life, such as gravity, elasticity, friction, electromagnetic force, etc.; know the changes in atmospheric pressure and its impact on life.

(48) Know that force is the cause of the movement of all things in nature; it can describe Newton's laws of mechanics and can be used to explain the common movement phenomena in life.

(52) Knowing the law of conservation of energy, energy will neither be generated nor destroyed, it will only be transformed from one form to another, or transferred from one object to another, while the total amount remains unchanged.

17. Know common sense of common diseases and safe medication.

(79) Awareness of disease prevention and timely medical treatment.

(85) Know to follow the doctor's advice or take the medicine according to the instructions for the medicine, and understand the common knowledge of safe medication, rational medication and adverse drug reactions.

(87) Understand that traditional Chinese medicine is a traditional Chinese medical method and has its own advantages compared to Western medicine.