

WHY STUDY PHYSICAL SCIENCE?

What causes a balloon to rise? Why do fireworks blaze in brilliant colors? What is the source of the sun's light? These are just a few of the questions raised in physical science. Physical science is a study of everything around us, and how it moves, works, and reacts. It investigates answers to questions like those above. Physical science gives us the chance to search for explanations of what we observe. And, best of all, it gives us the opportunity to wonder [1].

Each person, notably scientist, is trying to learn why things happen the way they do. Curiosity is the beginning of all science. As we study physical science, we will find out about some of the inventions resulting from this curiosity. We will also investigate how these discoveries affect the way we live.

Science is one of the methods we have of solving some of our most important problems. Some scientists are trying to find ways to produce enough food for a growing world population. Others work on finding new energy sources to replace a decreasing oil supply. The solutions to these problems affect everyone. The curiosity leads scientists into basic research. The latter is a careful study in some field of knowledge. The purpose of basic research is to add to our knowledge of nature. For example, some physicists are curious about light. During the 1950s they investigated ways of producing powerful beams of light. Their work produced the first lasers. These physicists did not plan to use the laser for any particular purpose. They were simply learning more about light.

The investigation of ways of using scientific knowledge to benefit human beings is applied research. Scientists doing applied research try to find ways to

put the results of basic research to work. For example, lasers that are being applied at a checkout counter in a supermarket.

Scientists will never run out of problems to solve. However, they have improved our lives in many ways. Basic researchers have built up a huge amount of knowledge about the world. Applied researchers have put some of this knowledge to work. As it was mentioned above, lasers are examples of technology. The latter is the use of scientific knowledge to serve human needs. In other words, technology is simply the application of scientific discoveries to the real world.

Technology has improved the way we live. Automobiles, jet planes, electric scooters, and hoverboards have made it possible for us to reach far off places quickly. Radio, television, web-camera, smart phones, and the Internet, have made us familiar with places and events everywhere in the world. Nowadays to have a laptop is as natural as to breathe. Technology solves a lot of problems, but it's a great responsibility as well. If technology is not used carefully, it can lead to new disasters. One of them is pollution. It is the presence of unwanted or harmful substances in the environment. The same technology that has provided rapid transportation has created smog. The latter is a kind of air pollution that hangs over cities. Smog results when smoke from factories and exhaust from vehicles enter the air. This pollution burns people's throats and eyes and hurts their lungs. It is our responsibility to control smog and keep the air as clean as possible [2].

References

1. Physical Science [Electronic resource]. — Mode of access: <https://www.britannica.com>. — Date of access: 18.12.2021.
2. Smog [Electronic resource]. — Mode of access: <https://www.nationalgeographic.org>. — Date of access: 21.12.2021.