

The aim of this work is to focus on a few high school physics experiments, which are explained in several ways or incorrectly or contain a part that is somehow overlooked. Appropriate adjustment of the experiments I wanted to refute the false explanation, besides which is correct or complete lack of explanation. At the end, I chose four experiments. All of them can be found in any high school textbook or collection of tasks and their explanation are either incomplete or not clear. They are: Conducting electrical current in the glass, where I investigated why heated glass conducts current. Archimedes's law in gases, where I tried to find out, why the bubbles floating in CO₂, are after while falling to the bottom. Electrostatic motor, where I tried to find out, what causes the rotation of the motor, which is represented by PET bottle. And a free fall of a tennis ball, where I was finding out, how much is a time of fall influenced by air resistance and what is the minimal height, from which have to be balls thrown, for detecting different moment of impact by the human eye.