

## HOW DO PRIMARY AND SECONDARY SCHOOL STUDENTS PERCEIVE THE CONCEPTS OF PLASMA IN OUR DAILY LIVES?

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### Abstract

Today, it is known that the matter is present in four states, and it is thought that the plasma is the most common state in the universe. The states of the matter is generally described in three forms as solid, liquid and gas in primary and secondary schools in the Turkish education system science programs. At this level, the fourth state of matter is never mentioned. The plasma state of the substance is only considered at the ninth grade high school level. This situation can cause the students not to be able to visualize the plasma concept in their minds or to make conceptual mistakes. For this reason, concept teaching needs to be taught in a timely manner, depending on the cognitive development of the students. The aim of this study is to reveal how the elementary and secondary school students have included the plasma-based concepts of the material that they constantly observe in everyday life in the state of matter. Survey model was used in the study. A data collection tool was developed by researchers to collect data, with pictures showing the state of the material that students constantly observed in everyday life. The collected data with the data collection tool were analyzed and recommendations were made in line with the conclusions.

**Keywords:** Plasma, states of matter, daily lives, concept.