

Suggestions to Teachers (Democritus and the atoms)

Expected results

After the lesson, the students are expected to:

1. Locate the Plato's views and Democritus' views about the structure of matter and the vacuum.
2. Write the important differences between the Democritus' views and the Plato's views.
3. Make inquiry in the web and create a written text concerning the current scientific views about the structure of matter.
4. Locate the role played by religious beliefs of people in the medieval times, which made Aristotle's view prevail and Democritus' view be overlooked.
5. Write the reasons Aristotle's theory prevailed over the structure of matter for many years, based on the lesson activities.
6. Demonstrate the diachronism of scientific questions about the structure of matter.

About the activities of students

The proposed students' activities are indicative and they aim at the accomplishment of the above expected outcomes. Moreover, the teacher may choose some of them for the teaching process in relation to its aims, the needs of students and the available time. Finally, she/he can create her/his own activities.

About the emergence of the characteristics of science in the narration, these characteristics are quoted in the website, comprehensively (in classification of the stories by NOS).

About the locating of the characteristics of Nature of Science in the proposed activities, indicatively, we can quote the following:

- A) In the activity 3, the case 1 concerns the characteristic of Nature of Science: "There are historical, cultural, and social influences on science" and the case 4, concerns the characteristic: "Science demands and relies on empirical evidence".
- B) The activity 5 concerns the characteristic of Nature of Science: "Scientific knowledge is tentative but durable".
- C) The activity 6 concerns the characteristic of Nature of Science: "Science demands and relies on empirical evidence".

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