

Suggestions to Teachers (Lavoisier and respiration)

Expected results

After the lesson, the students are expected to:

1. Describe the Lavoisier's experiment about the human respiration, based on the narration.
2. Locate the Lavoisier's contribution to the foundation of the new theory concerning the role of respiration in the biological cycle of animals, based on the information provided.
3. Write a short text on the current scientific views concerning the human respiration, based on a web research.
4. Write the characteristics of the Nature of Science, based on the narration as well as the proposed lesson activities, according to the McComas' list.

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) The activity 2 concerns the characteristics of Nature of Science: a) "Science demands and relies on empirical evidence", b) "Scientific knowledge is tentative but durable" and c) "Science has a subjective element".

B) The activities 3 and 4 concern the characteristic of Nature of Science: "Scientific knowledge is tentative but durable".

C) The activity 5 concerns the characteristics of Nature of Science, which are quoted in the activities: 2, 3, 4.

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