

8. Magnet and matchstick

Reviewer:

Team Romania

Opponent:

Team Romania

Reporter:

Team Russia Island 418

Task

A matchstick is not attracted to a magnet, however the head of a burned matchstick is attracted by a strong magnet. Investigate the reasons and the role of relevant parameters.

Matchstick, mathbox

- Theoretical information

Attraction of a burned matchstick by a magnet

- Experimental
- Relevant parameters

Reporter summary



Strong points

- Goal and main points were presented clear
- The chemical composition of the match was presented
- Chemical reaction was briefly presented (in a very simple form)
- The experiment had clear hypotheses

Weak points

- Unclear structure of the presentation
- Absence of role of relevant parameters (temperature, humidity, age of the matchstick, colour of the head of the matchstick)
- Poor understanding of the phenomenon (wrong answers in the discussion with the opponent)
- NO quantitative data was presented and also NO graphs

Opponent summary



Strong points

- Clear and relevant questions were asked
- He observed the main mistakes in the reporter presentation (the absence of carbon in his reactions, the missing compounds of the matchbox)
- Clear presentation

Weak points

- The theory was medium understood by the reporter team (not poorly as the opponent presented)
- Didn't explain which were the wrong reactions and why

Clashes during the fight

- O: Compounds of the matchbox? Are they relevant? Which are they?
R: Yes they are. Didn't know the compounds of the matchbox.
We: We agree with the opponent.
- O: Is Carbon in the matchstick? It is in the matchbox.
R: Yes, it is in the matchstick. In the wood.
We: We agree with the opponent.
- O: Role of the chemicals that exist in the matchstick?
R: No answer.
We: Good question posed by the opponent.
- O: Why does the matchstick ignite?
R: No answer
We: Good question posed by the opponent.
- O: Role of the neutralizer (ZnO) in the matchstick?
R: No answer.
We: Good question posed by the opponent.
- Is the magnet losing its properties at low temperatures?
R: No answer.
We: Good question posed by the opponent.