

8. Magnet and matchstick

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.

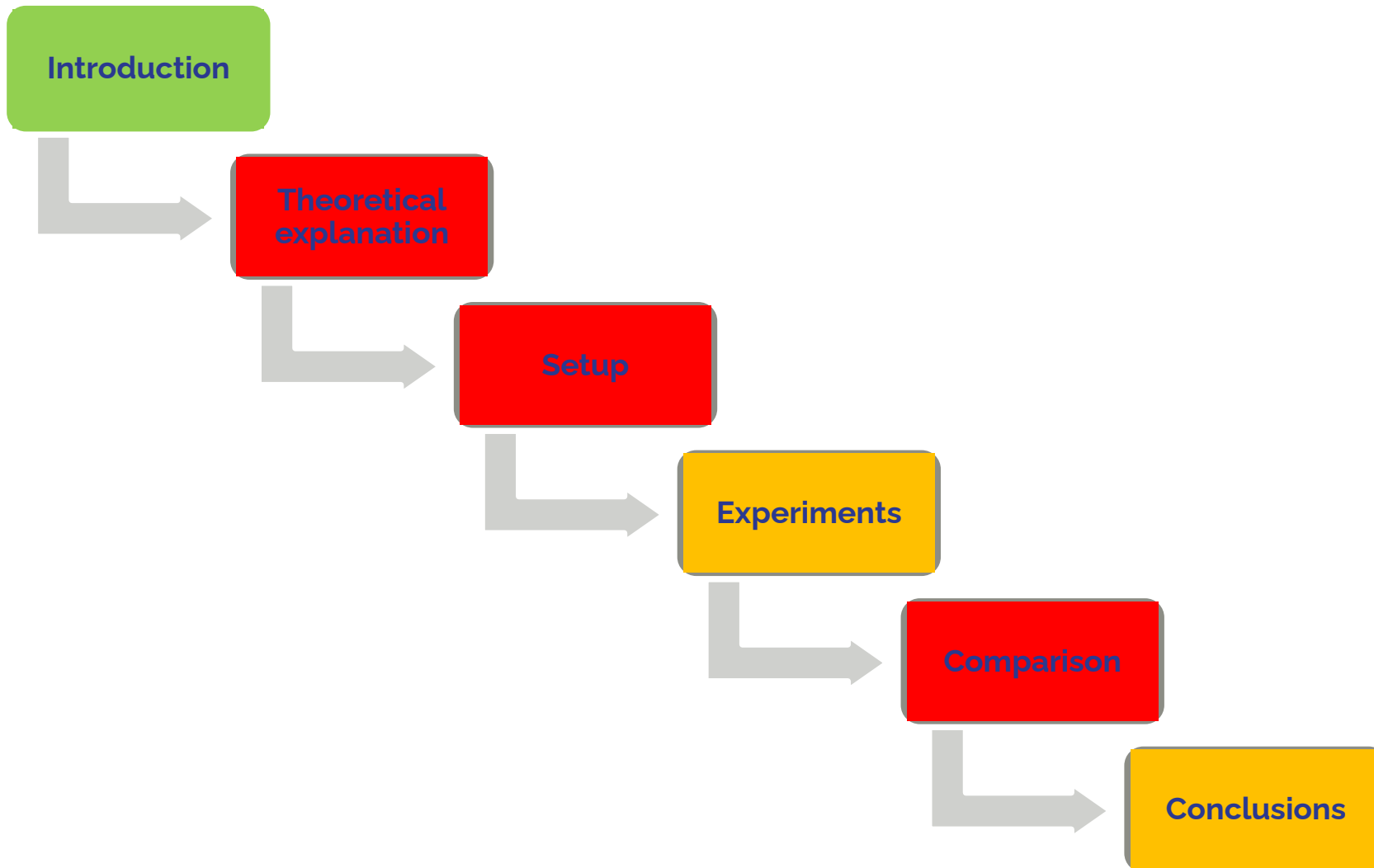
Matchstick, magnet

- Theoretical information

Attraction by a magnet of matchstick head

- Experimental
- Relevant parameters

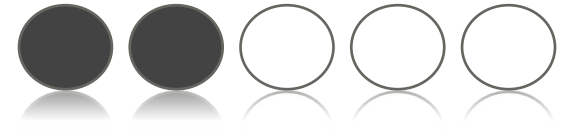
Outline



Legend for feedback status:

- Well done (Green circle)
- Good (Yellow circle)
- Needs improvement (Red circle)

Theoretical part



Strong points

- Clear visual aids
- Good visualization of the reaction

Weak points

- Presentation not well structured (experiments, theory, experiments, theory, conclusions)
- Too much text on slides
- Poor understanding of the theory
- Not any quantitative data
- Not fully explained the predictions of the hypotheses
- Variation of parameters

Experimental part



Strong points

- Hypotheses were presented
- Used a magnetic field

Weak points

- Wrong chemical reaction
- No relation with the theory
- Theory intercalated with the experimental part
- More visual aids could have been presented for better understanding of the phenomenon
- Results not clearly presented
- Not quantitative parameters

Discussion topics

- Role of the chemicals that exist in the matchstick
- Attraction of matchstick with other objects
- Iron valence changes! Why?
- Role of neutralizers
- Importance of the colour of the matchstick
- Magnets properties