

2. Slow match

Reviewer:

Team Romania

Opponent:

Team Russia - Uranium 239

Reporter:

Team Croatia

Task

A **cord** in which the **flame** front propagates with a **constant low speed** has been important to ignite cannons. **Produce such cords and investigate their burn rates and other properties.**

Burning cords

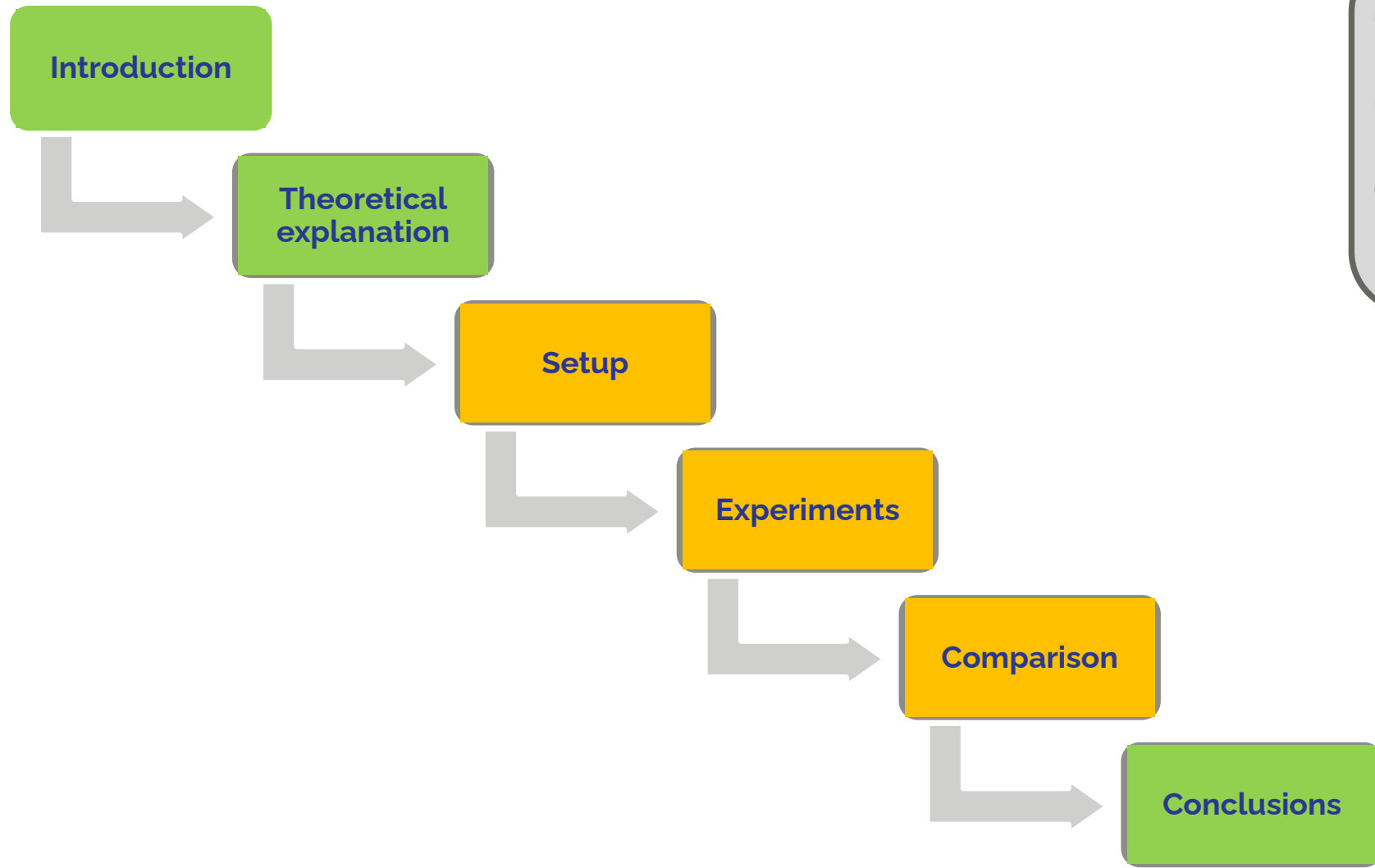
- Theoretical information

Burn rates

- Experimental
- Other properties



Reporter summary



Reporter summary



Strong points

- Well understanding of the theoretical part
- Chemical explanation of the chemical reactions
- Clear setup of the experiments
- Good explanation of the experimental part
- Beautiful visual aids and graphs
- Error bars were presented on the graphs
- Presence of additional slide/appendix

Weak points

- Variation of the cords (used only 1 type , hasn't researched others)
- Not adequate cord measurement - not parallel with the ruler (slide 7)
- Climate parameters not presented (humidity, temperature)

Opponent summary



Strong points

- Observed the burning uniformity lack
- Structure of the cord missing (he observed this as well)
- Relevant questions

Weak points

- Different types of cords weren't mentioned (opponent hasn't observed this)
- No answer to the reviewer's questions (decomposing in the oven)

Clashes during the fight

- O: Spontaneous reaction between potassium nitrate and sugar?
R: No, the water evaporated completely, so no reaction had place
We: Agree with reporter
 - O: Process of fuse making
R: Choosing the rope, soaking the rope, putting the rope in the oven
We: AGREE with the reporter
 - O: Potassium nitrate reacts with sugar?
R: No, the potassium nitrate is the oxidizer, so they don't react with each other!
We: Agree with the reporter
 - O: Cords burn uniformly?
R: No, there slight differences but shown with error bars
We: Agree with the reporter. Good question asked!
 - O: Process of creating the cords. Are there any crystals on the cord?
R: No crystals on the cord
We: Agree with the opponent (crystals form on the cord)
- CONCLUSION: We think that the reporter had a good presentation and some of the questions asked by the opponent were on point.



Thank you for your attention!