

I International Young Naturalists' Tournament



Republic of Belarus
Gymnasium №29



Team "Universe"



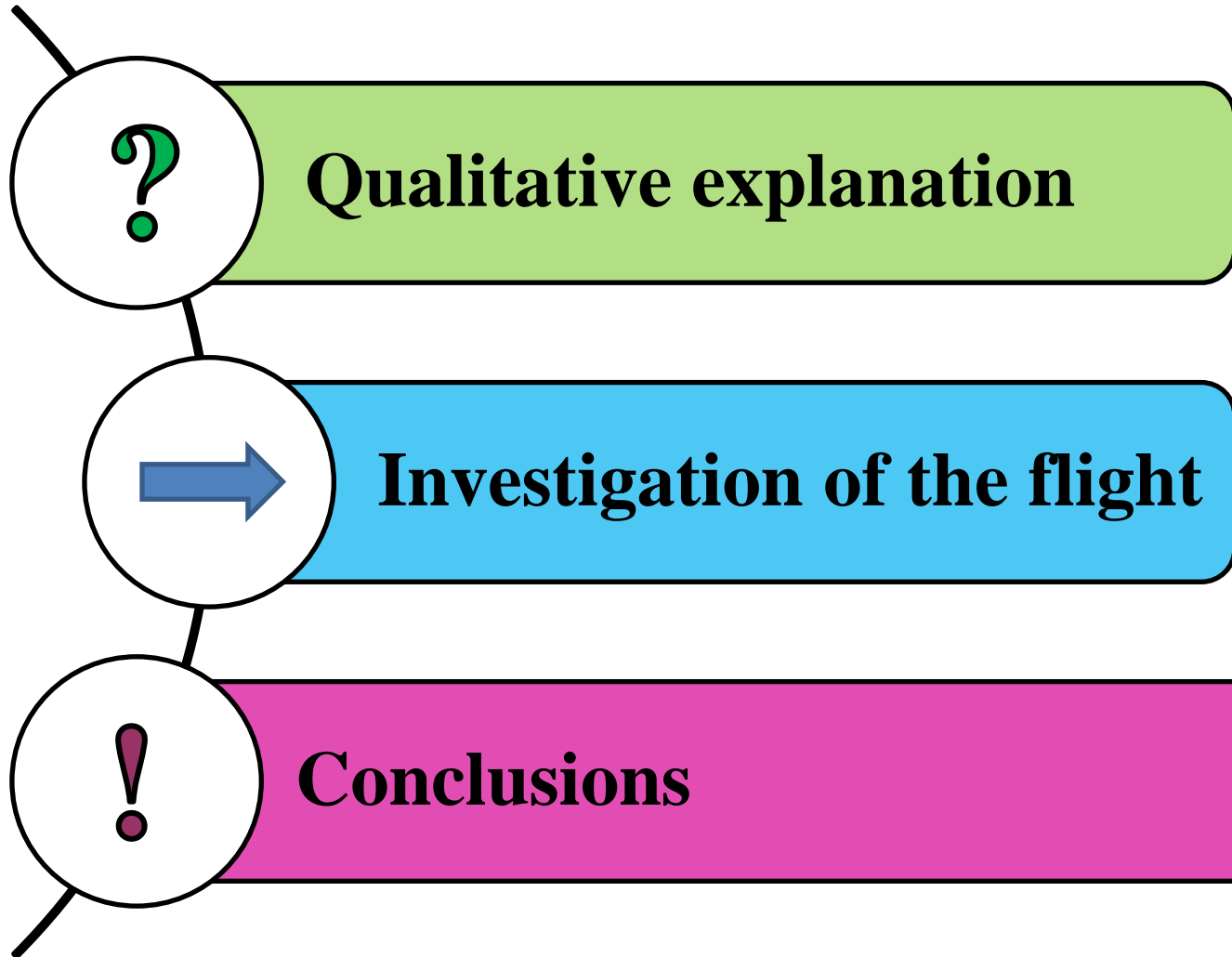
Experimental problem 23

Tea bag

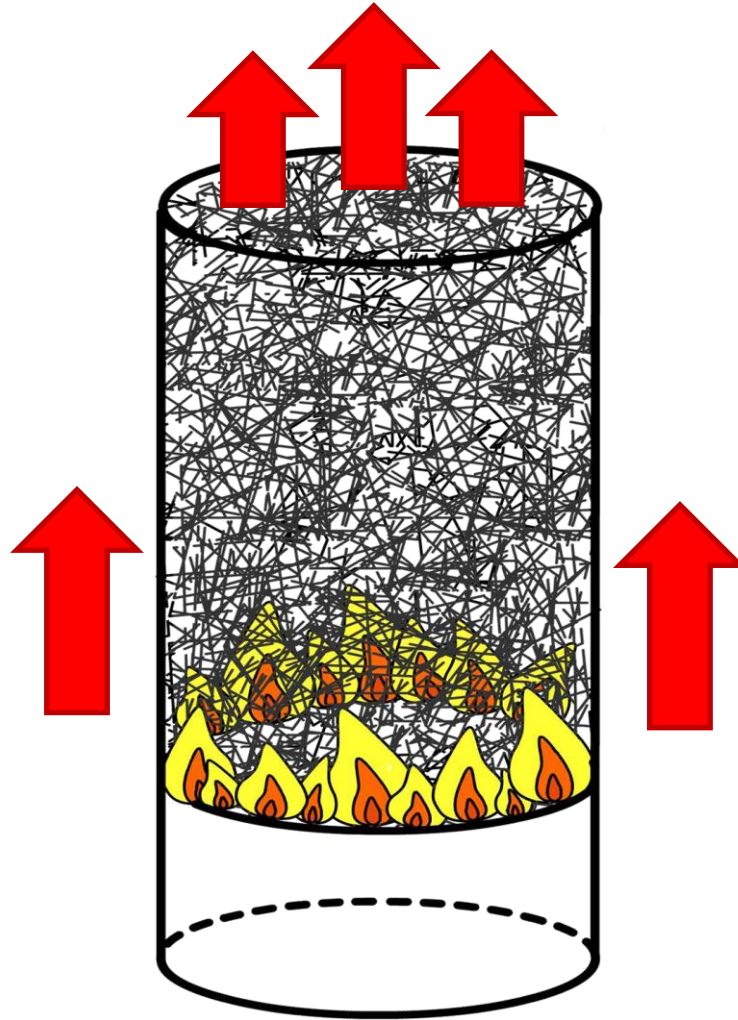
Tea bag

Produce a standing vertical cylinder from an empty tea bag and ignite it from the top. Observe and explain the flight. Estimate the quantitative parameters. What happens if four tea bags standing close to each other are ignited at once?

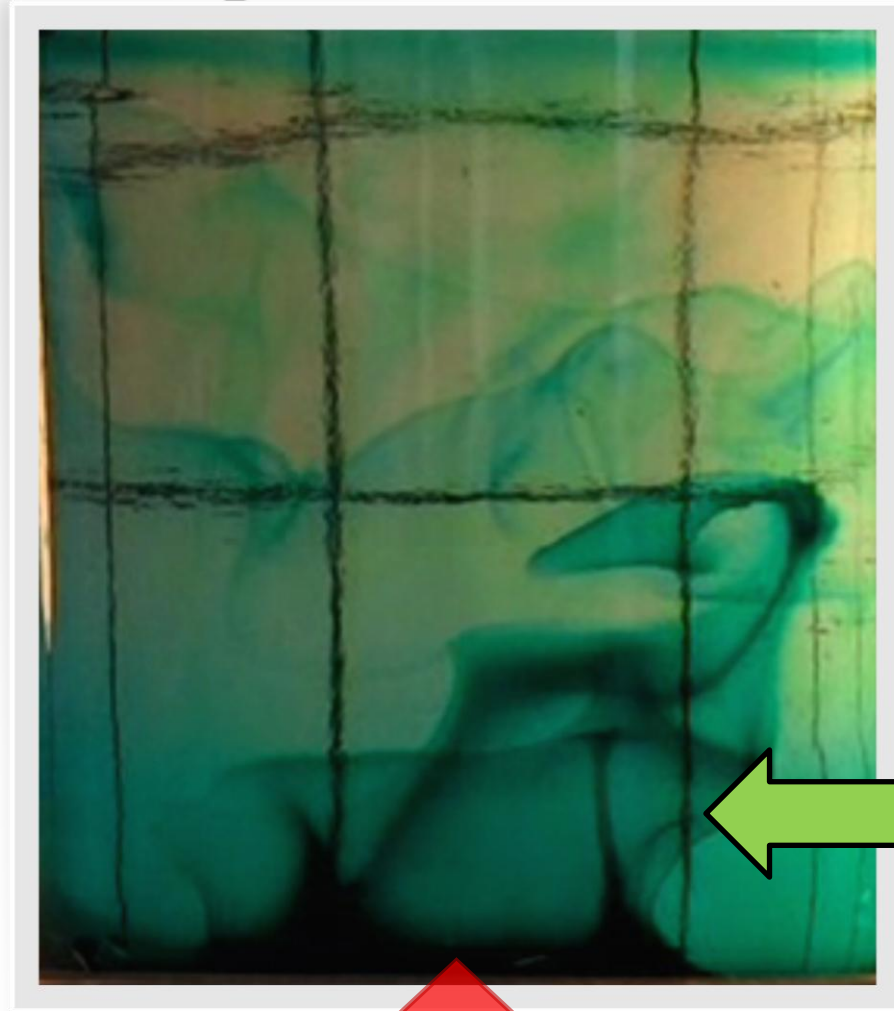
Plan of work



Explanation of the phenomenon



Explanation of the phenomenon



Convective streams

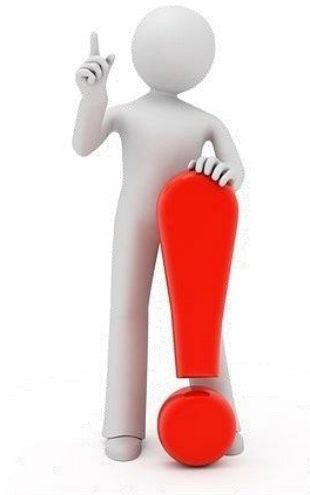
Heating

Relative parameters

- Material
- Method of burning
- Air humidity
- Air temperature
- Size of tea bag
- Surface

Method of burning

Should be burnt from the top



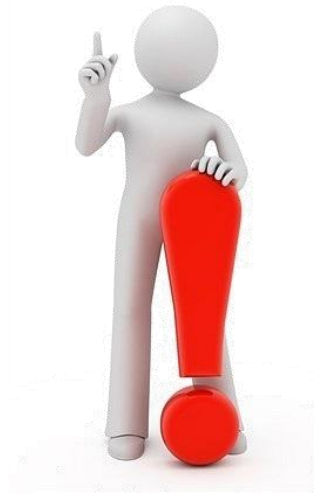
Air conditions

1. Influence of external airflows should be minimized
2. Humidity of the air should be as less as possible



Size of the tea bag

Tea bag should be long enough



Conclusions

- ✓ The tea bag should be burnt from the top
- ✓ Influence of the external airflows should be minimal
- ✓ Surface does not influence
- ✓ Influence of external airflows should be minimized
- ✓ Humidity of the air should be as less as possible

**Thank you for
attention!**