

Does combustion make things heavier or lighter?

The topic of the class is “combustion.” First, the teacher places a candle on a scale and lights the candle. As expected, the scale indicates less and less weight as the candle burns down.

Next, the teacher lays a fireproof surface on the scale, places steel wool on top, and lights the steel wool. The scale indicates more weight as the steel wool burns down; apparently, the steel wool becomes heavier.

The teacher has prepared the following for an experiment:
a test tube has two matches inside, and a balloon is pulled over the opening.

“In a moment, I will heat the test tube using the burner.

What do you think will happen?

And even more important,

what do you think this experiment will reveal?”



Your task

Find out what the purpose of the experiment is.

Write down step by step how the experiment should be conducted.

If you want to **use the online hints to solve the task**, scan the QR code with the **H**.



You can try to solve the task without using the provided hints.
When you are finished, compare your result with the sample solution. To do so, scan the QR code with the **S**.

