A piece of the chemical element phosphorus was placed in a flask. The phosphorus was covered with water. The flask was sealed with a stopper. The mass of the flask, stopper, phosphorus and water was measured. The mass was 400 g.

The Sun’s rays are focused on the flask. White smoke is produced in the flask. The flask gets hot. The flask is cooled down and then its mass is measured again.

Questions

1. Did a chemical reaction happen in the flask? Yes / No
   How do you know?

2. What do you think the mass of the flask would be afterwards?
   More than 400 g  400 g  Less than 400 g
   Why do you think this?

3. What does chemical reaction mean?