

reports of experiments





how to write a report

1. **introduction + question + presentation** of the experiment
2. **expectations** (*I know the results*) OR **hypothesis** regarding observations (*I don't know the results*)
3. **equipment and chemicals; safety instructions** (e.g. dangerous material, disposal of waste)
4. **practical implementation / observations / explanations** as a table
5. **evaluation:** summary and generalization; hypothesis was correct or not + answering the questions
6. **errors:** Are there results which are unclear or which you can't use? Give opportunities to avoid those errors if repeating the experiment.
7. **preview:** Are there new questions? Think of new or further aspects to investigate.

example



introduction + question + presentation

All substances have specific characteristics, e.g. the aqueous solubility.

Lighter fluid and sulphur can be dissolved in water?

We give both substances in water to prove.

hypothesis

If sulphur and lighter fluid can be dissolved in water, then they won't be seen in water.

If + guess, then + observation (+ justification).

If + observation, then + guess (+ justification).

equipment and chemicals

- test tube stand
- two test tubes
- spatula
- sulphur
- lighter fluid (dangerous substance: flammable)
- water

- disposal of waste:
 - filter off sulphur > could be used again
 - give lighter fluid and water in special vessel

practical implementation / observation / explanaiton

practical implementation	observation	explanaiton
Give the sulphur in a test tube by using the spatula. Add water.	before: during: after:	
Give lighter fluid in a test tube and add some water.	before: during: after:	
<ul style="list-style-type: none">• What am i doing with equipment and chemicals?	<ul style="list-style-type: none">• What am i observing? (only percipience and measures)	<ul style="list-style-type: none">• Why?

evaluation

Sulphur can be seen on the surface of water. It has no aqueous solubility. Lighter fluid cannot be seen after water was added. It can be dissolved in water. The hypothesis is correct regarding the lighter fluid.

All substances have specific characteristics. There are some substances which can be dissolved in water and some which can be not. It is possible to investigate more characteristics to describe the substance completely. Furthermore the solubility in other liquids (e.g. alcohol) can be investigated.

summary + hypothesis

generalization

preview