Student experiment (1st - 4th grade)	**The balloon in the bottle**	**Time:** max. 10 min.

Safety:

Instruments:

- a bottle
- a balloon
- a stabile drinking straw

Experiment:

- Place the balloon in the bottle so that the end of the balloon barely protrudes from the mouth.
- Fold the balloon over the sides of the bottle mouth.
- Seal both the balloon and bottle with your lips and try to blow up the balloon. Does it work?
- Place the straw between the balloon and the inside rim of the bottle neck.
- Make sure the straw doesn't get crushed.
- Can you blow up the balloon now?

Advice for the teacher:

It is impossible to blow up the balloon in Part 1, but not in Part 2.

This experiment should show the learners that something is already in the bottle, namely air. The balloon cannot be blown up, because the air inside the bottle cannot escape. But placing the straw in the bottle neck gives the air an escape hatch. The balloon can then be inflated inside the bottle.

The pupils can recognize that the "empty" bottle really contains something besides empty space: air. Air takes up space and exerts force on other objects. The balloon can only be blown up when the air inside the bottle has a chance to escape.