



HOCHSCHULE RUHR WEST  
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## Answering scientific questions 1: Introduction

Scientific questions deal with problems. Be it complicated issues, theories that can be proven or disproven, or whether an approach makes sense. No matter what a question aims at, there is always a way to answer it.

But what makes a good question? And is this already a good question?

In science, there are certain guidelines for this. On the one hand, a good question must be **precise**; on the other hand, it must be **open-ended** and should not be answered with a yes or no answer.

"What color is the sky above the school right now?" is a simple question. The result is open and the question precise. "Is the sky blue?", is not only imprecise, because somewhere and sometime it certainly is. The question also leaves no result open, but expects a yes or no answer.

Further, a question in science always wants to prove something. For this, first an assertion is made, the so-called **hypothesis**. Such a hypothesis as an example would be: "Today we don't need an umbrella!"

While a question whose answer strengthens or disproves our hypothesis would be the blue sky from our previous question, this is where you come in:

☐ Why is the question "Is the sky blue?" not helpful in our hypothesis?

☐ What other scientific questions can you think of for this hypothesis?



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