

Research questions – Water

Discuss in your group which research question you find most interesting. Write down this research question in large letters in the box below.

Research questions – Plants

Discuss in your group which research question you find most interesting. Write down this research question in large letters in the box below.

Research questions – Weather

Discuss in your group which research question you find most interesting. Write down this research question in large letters in the box below.

Research questions – Soil

Discuss in your group which research question you find most interesting. Write down this research question in large letters in the box below.

Teacher information: Selection of research questions

The balloon method



Duration: ca. 30 min

Material: P9a-d (research questions), magnets or sticky tape, blackboard and chalk or white board and pens

Goal: Selection of a suitable question per topic.

Preparation: Draw the outline of a large hot air balloon on the blackboard or whiteboard. Fix (with magnets or tape) the worksheets P9a-d as "ballast" around the balloon. The balloon printed above can be downloaded from <https://creazilla.com/de/nodes/2270-heissluft-ballon-silhouette> for free in resolutions sufficient to print it largely.

Description: The students put themselves in the situation that they are sitting in the hot air balloon. But the balloon continues to descend because it is loaded with too many questions. In order for the balloon to rise again, the students have to exclude one question after the other and "throw it overboard". In the end, only one question should be left for each topic (one blue, one green, one grey and one yellow card). The following guiding questions can be used as criteria for evaluating a research question:

- There needs to be a way to answer the question.
- The question must be complex enough but not too complex
- Can we answer this question?
 - o with the means available?
 - o in the time available?

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