

The Scientific Method

6th Grade

The six steps plus the variable vocabulary that trips people up.

1

ASK A QUESTION

Something testable. "Which paper towel absorbs most?" not "Are towels good?"

2

RESEARCH

Find out what is already known before you design anything.

3

HYPOTHESIS

If I change ..., then ... will happen, because ...

4

EXPERIMENT

Change one thing only. Keep everything else the same.

5

ANALYSE DATA

Record, table, graph. Look for the pattern, not the answer you wanted.

6

CONCLUDE & SHARE

Was the hypothesis supported? What next?

VARIABLES — the bit everyone loses marks on

Independent the ONE thing you change *amount of light*

Dependent the thing you measure *height of the plant*

Controlled everything kept the same *pot, soil, water, seed*

Change two things at once and you cannot tell which one caused the result.