

Elements of Good Experimental Design

- Builds on previous research
- Is based on a question, observation, or hypothesis
- Describes all steps in a procedure clearly and completely
- Includes a control for comparison
- Keeps all variables—except the one being tested—the same
- Describes all data to be collected
- Includes precise measurements and all records of data collected during experiment
- May require multiple trials
- Procedure can be reproduced by other investigators
- Respects human and animal subjects

Note: Elements may vary, depending on the problem being studied.