

SCIENTIFIC METHOD

In the floor wax test scenario below, identify the following components of an experiment.

1. Independent variable
2. Dependent variable
3. Constants
4. Repeated trials
5. Control

6. Title: The Effect of (changes in the independent variable) on the (dependent variable)

7. Hypothesis: If the (independent variable - describe how it will be changed), then the (dependent variable - describe the effect)

The Palisades shopping mall wanted to determine whether the more expensive "tough stuff" floor wax was better than the cheaper "Steel seal" floor wax at protecting its floor tiles against scratches. One liter of each grade of floor wax was applied to each of the 5 test sections of the main hall of the mall. The test sections were all the same size and were covered with the same kind of tiles. Five other test sections received no wax. After 3 weeks, the number of scratches in each of the test sections was counted.