## Why do we perform experiments?

Test Hypothesis

**Explore** 

To test hypotheses

To answer a scientific question

Discovery

to get results

**TEST HYPOTHESIS** 

To test our hypothesis

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To test theories and hypotheses

## Why do we perform experiments?

To draw conclusions from our hypotheses

investigate

to answer questions

to test hypothesis

Observe in a controlled environment

I agree that it's for exploration, too.

to improve science

to go trough our study

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to answer basic questions

#### Mentimeter

# Why do we perform experiments?

to confirm prior observations

### What should a well-designed experiment have?

```
null hypothesis
                                          clear treatments
         clear parameters
                                              clear hypothesis
                 structured workflow
                                      testable hypothesis
                      ability to reproduce
                                 well designed process
        definitive metrics
                    well-defined hypothesis
                                                       cost implication
                       well defined expectation
reproductibility
                              well-defined parameters
    clears objective
                            sound study objectives
             well-defined methods
                                define the objective
          postive controls
          sound hypothesis
                                         negative controls
                              sound methodology
```