

# What makes an experiment?

## Materials:

- includes materials and how much will be used

Problem / Question: Defines the question you will try to answer by doing your experiment. It must be testable, and is better if open-ended. Only one variable.

- Brainstorm how to test your question (draw/label)

Claim / Prediction: • Stated as a fact  
ex: When the water is heated, it will freeze.

- Your answer to the question **BEFORE** testing

Independent Variable: What ONE thing are you changing?  
Dependent Variable: What are you measuring?

Procedure: • Step by step list of instructions  
• tells what materials to use and how much  
• tells when and what to measure

Data Table: include labels/units/etc.

Analysis: What happened? Facts are stated.

Inferences: Why do you think you got the results that you did?

Conclusion: P. 30



# Ice Cube Challenge

## Materials

- ice cubes (clear + green)
- Sodium chloride water  
( $H_2O + NaCl$ )
- Fresh Water
- Food Coloring
- Beakers
- Stop Watches
- Thermometer

## Amount used

Question:

How I am going to solve the question? (Draw/Brainstorm)

Claim / Prediction:



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Analysis: What happened? Facts.  
3 sentences

Inferences Why do you think it happened?  
3 sentences