Conclusions

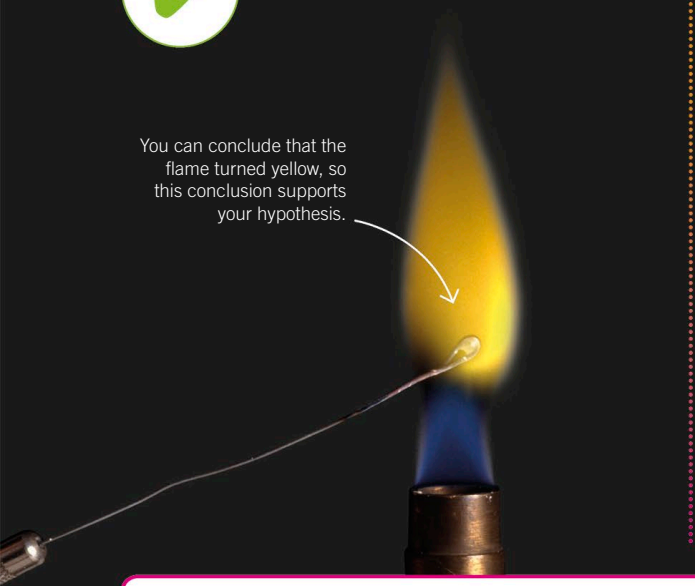
Reviewing your data can help you make a clear statement about what happened in your experiment—this is a conclusion. Identifying patterns, such as, over time, higher temperatures evaporate more liquid, can help form these conclusions. However, you can't assume why this is. It's important to check whether your conclusion supports your hypothesis.

Key Facts

- ✓ It's important to make concise conclusions about your data.
- ✓ Only comment on what the data is showing, not why you think that may be.
- ✓ A pattern in your data doesn't mean something is causing something else.

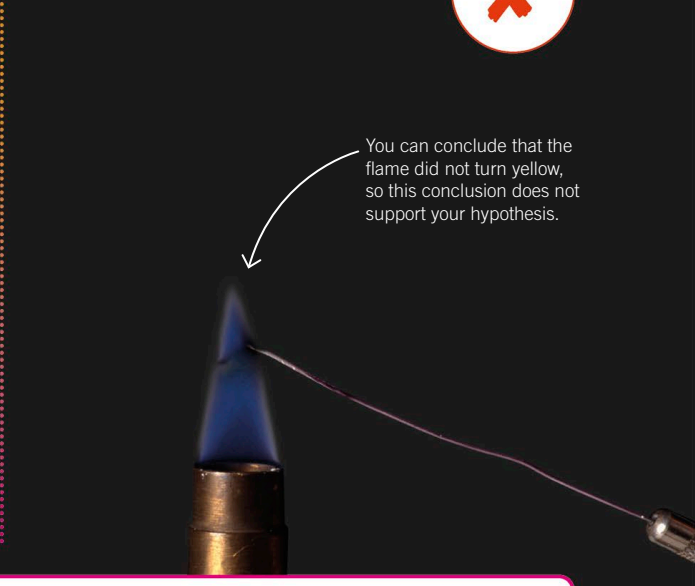
Hypothesis
For the below flame test, the hypothesis is that a metal will turn a Bunsen burner's flame yellow.

Hypothesis supported



You can conclude that the flame turned yellow, so this conclusion supports your hypothesis.

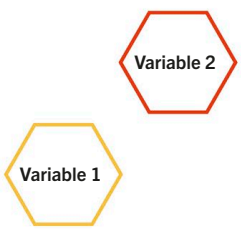
Hypothesis unsupported



You can conclude that the flame did not turn yellow, so this conclusion does not support your hypothesis.

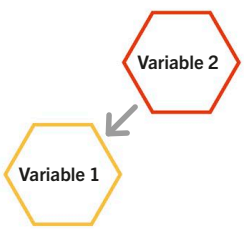
What Conclusions Can't Tell You

Even though you can conclude that the flame turned yellow in the presence of a metal, you can't assume why that is in your conclusion. This may inspire you to do more experiments to find out more.



The relationship between two variables may be up to chance—one does not affect the other.

The relationship between two variables may be influenced by an unknown third variable.



Your data may show that one variable directly influences another.