

3) Controlled variables are quantities that a scientist wants to remain constant, and must observe them as carefully as the dependent variables.



For example, in the dog experiment example, you would need to control how hungry the dogs are at the start of the experiment, the type of food you are feeding them, and whether the food was a type that they liked. Why? If you did not, then other explanations could be given for differences you observe in how much they eat. For instance, maybe the little dog eats more because it is hungrier that day, maybe the big dog does not like the dog food offered, or maybe all dogs will eat more wet dog food than dry dog food. So, you should keep all the other variables the same (you control them) so that you can see only the effect of the one variable (the independent variable) that you are trying to test. Similar to our example, most experiments have more than one controlled variable. Some people refer to controlled variables as "constant variables."



In the best experiments, the scientist must be able to measure the values for each variable.

Example) Weight or mass is very easy to measure.

However, love cannot be measured.




## Quiz outline


- know the variables of the experiments      Sept. 15

-Know the 7 steps in order to an experiment      Sept. 27  
Oct. 3

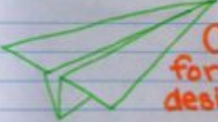
## Variables



Independent:  
size of paper




Dependent:  
distance the plane flies



Controlled:  
force of throw,  
design, paper type

Independent	Dependent	Controlled
<ul style="list-style-type: none"><li>what is being tested</li><li>the thing in an experiment that is changed</li></ul>	<ul style="list-style-type: none"><li>result</li><li>changes based on the independent variable</li></ul>	<ul style="list-style-type: none"><li>things we keep the same</li></ul>



## Attachments

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Unit 1 Space Test Outline.notebook

Simpson Variables of experiments worksheet.docx

SCIENCE PRACTICE ASSESSMENT - Grade 6.pdf

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