

<b><u>Step</u></b>	<b><u>Definition</u></b>	<b><u>Example</u></b>
<b>Question</b>	- <b><u>1<sup>st</sup> step</u></b> in scientific inquiry	Does the shape of ice affect how quickly the ice melts?
<b>Observe</b>	-Using one or more of your <b><u>senses</u></b> to gather information and noting what occurs	-shapes include square, rectangular, circle -when ice reaches 0°C, it starts to melt
<b>Infer</b>	-To make a logical explanation of an observation that is drawn from <b><u>prior knowledge</u></b>	The more clear the ice is, the more pure the water that was used.
<b>Hypothesis</b>	- <b><u>Possible explanation for the question</u></b> & observations that can be tested by scientific investigation	<b><u>If</u></b> I change the shape of ice, <b><u>then</u></b> the time of melting will not change.
<b>Test/Experiment</b>	An investigation which has only <b><u>one independent variable</u></b> and everything else is the same	Independent variable = shape of ice All other variables kept the same Dependent variable = time to melt
<b>Analyze</b>	<b><u>Interpret data</u></b> to look for trends, patterns, and relationships; graphs, charts, diagrams	Picture of graph is here.
<b>Conclusion</b>	A <b><u>summary</u></b> of the information gained from testing a hypothesis	I wanted to know if the shape of an ice cube would affect the speed it melted. I hypothesized that the shape would not affect the time for melting. I used crescent and square shaped ice and discovered that the crescent shaped ice melted an average of 4 minutes faster than the square. My hypothesis was disproven. My next experiment will be to test Honey Ham vs Sonic ice to discover which one melts last.

Scenario	Independent	Dependent	2 Constants
One chicken is injected with a growth hormone while another chicken is not injected. Both chickens are weighed after a year.	Growth hormone	Weight of chickens	-Same kind of chicken -Injected in the same place
A bug repellent is sprayed on one arm the other arm is not sprayed. The number of bug bites is recorded after 2 hours.	Bug repellent sprayed on one and not the other	Number of bug bites	-type of bug repellent -same person sprayed and not sprayed
Javier sleeps 9 hours the night before his science exam. His twin sister has the same exam and sleeps 6 hours the night before the test. Afterwards, they compare their scores.	Hours of sleep	Exam scores	-Study same amount -take same exam
Group A exercises for a month. Group B does not exercise. They measure the amount of weight they gained.	Exercise	Weight	-weigh on same scale -weigh at same time
One math class studies for an assessment while the math class next door does not. The scores of the two classes are compared.	Studying	Test score	-same test -same time
One plant is given sunlight every day. Another plant is not given any sunlight. After 3 weeks, we measure how tall the plant is.	Sunlight	Height of plant	-same type of plant -same amount of water
One plant is given sunlight for 12 hours a day. Another plant is not given any sunlight. After 3 weeks, we compare how green each plant looks.	Sunlight	Color/shade of green	-same type of plant -same amount of water