

Unit Outline:

# THE SCIENTIFIC METHOD



Test Date: \_\_\_\_\_

Class website:

<http://blogs.sd41.bc.ca/hemingwaya/>

Learning Goals	Learning Goal unpacked in detail	Resources You learn....You choose
I can <b>describe the elements of a valid experiment.</b>	<ul style="list-style-type: none"> <li>• formulate an hypothesis</li> <li>• make a prediction</li> <li>• identify controlled vs. experimental variables</li> <li>• identify the independent and dependent variables</li> <li>• identify control and experimental groups</li> <li>• use appropriate sample size</li> <li>• observe, measure, and record using appropriate units to interpret data</li> <li>• interpret results to draw conclusions</li> <li>• determine whether the conclusions support or reject the hypothesis</li> <li>• determine whether the experiment is reliable</li> </ul>	<p><b>CREATE NOTES FROM TEXTBOOK:</b> p. 1060 - 1063</p> <p><b>HANDOUTS/NOTES FROM CLASS:</b> The Scientific Method package</p> <p><b>MAKE NOTES on VIDEOS &amp; WEBSITES:</b></p> <p>BOZEMAN SCIENCE YouTube Channel: <a href="http://www.youtube.com/watch?v=GyN2RhbbiEU">The Scientific Method</a></p> <p><a href="http://www.youtube.com/watch?v=GyN2RhbbiEU">What is the difference between a scientific law and theory ?</a> <a href="https://www.youtube.com/watch?v=GyN2RhbbiEU">https://www.youtube.com/watch?v=GyN2RhbbiEU</a></p>
I can <b>use information and conclusions to make further comparisons, investigations, or analyses of experiments.</b>		<p><b>CREATE NOTES FROM TEXTBOOK:</b> p. 1062 - 1063</p> <p><b>HANDOUTS/NOTES FROM CLASS:</b> The Scientific Method package</p> <p><b>MAKE NOTES on VIDEOS &amp; WEBSITES:</b></p>
I can <b>interpret data from a variety of text and visual sources</b>	<p>I can utilize data from:</p> <ul style="list-style-type: none"> <li>• diagrams</li> <li>• electron micrographs</li> <li>• graphs</li> <li>• photographs</li> </ul>	<p><b>CREATE NOTES FROM TEXTBOOK:</b></p> <p><b>HANDOUTS/NOTES FROM CLASS:</b></p> <p><b>MAKE NOTES on VIDEOS &amp; WEBSITES:</b></p>

## Vocabulary words: (for the scientific method)

(Visual Dictionary: If you cannot think of a picture think of a scenario)

hypothesis	conclusion	independent variable (manipulated variable) (experimental variable)	dependent variable (responding variable) (resulting variable)
the control (the control group)	replication	theory	controlled variables (standardizing variables)
experimental group	theory	qualitative data	quantitative data

