

THESE ARE THE IMPORTANT CONCEPTUAL UNDERSTANDINGS I NEED TO MASTER FOR THIS UNIT:

A. Demonstrate an understanding of the nature of science and the qualifications for something to be considered science. " I CAN... "	RESOURCES THAT MAY SUPPORT MY LEARNING:	RESULTS/SCORES FROM LEARNING ASSESSMENTS	MASTERY REFLECTION: WHAT DO I STILL NEED TO MASTER BEFORE THE EXAM? (What is your strategy for <u>improvement</u> ?) 1 ON 1 : Most effective <u>DURING</u> instruction... HELP do not wait until the end of the unit!
<ul style="list-style-type: none"> Identify the six qualifications for something to be considered science: CONPTT Identify ideas as scientific or non-scientific using justification based on CONPTT Contrast deductive vs. inductive reasoning. Identify when these are used in science and explain why this is the case using an example. 	See Blackboard or your text for: *The Living World Textbook Section 1.5 page 10. * other documents and links posted in Course Documents and/or discussed in class. (notes) http://www.indiana.edu/~ensweb/lessons/conpt.ho.html http://www.sjsu.edu/depts/itl/graphics/induc/ind-ded.html	SELF ASSESSMENT(s) MASTERY CHECK(s)	INSTRUCTOR VERIFICATION:
B. Demonstrate an understanding of essential skills of science and the experimental method. " I CAN... "	RESOURCES THAT MAY SUPPORT MY LEARNING:	RESULTS/SCORES FROM LEARNING ASSESSMENTS	MASTERY REFLECTION: WHAT DO I STILL NEED TO MASTER BEFORE THE EXAM? (What is your strategy for <u>improvement</u> ?) 1 ON 1 : Most effective <u>DURING</u> instruction... HELP do not wait until the end of the unit!
<ul style="list-style-type: none"> Contrast between observations and inferences & provide examples of each. Contrast between qualitative and quantitative observations & provide accurate examples of each. Contrast hypothesis and theory & recognize examples. Define, & identify all of the necessary components for a well controlled experiment: Hypothesis, constants, Control group, experimental group, independent variable, dependent variable, and conclusions supported by experimental evidence. Recognize factors within an experimental setup which may limit the data's reliability (Limitations) Helpful hint.... Assume no experimental error when identifying these limitations. Write a testable hypothesis specific for a particular scientific question or problem in "If/Then "format. (or <i>possibly</i> If/and/then <i>if required</i>) Design an experiment correctly using all of the essential components provided above in order to test a scientific hypothesis and derive conclusions. 	See Blackboard and text for: *Living World Textbook: Sections 1.6-1.8 Pages 11-14. * Practice quiz in Assignments * other documents and links posted in Course Documents and presented in class (notes).	SELF ASSESSMENT(s) MASTERY CHECK(s)	INSTRUCTOR VERIFICATION:

THESE ARE THE IMPORTANT CONCEPTUAL UNDERSTANDINGS I NEED TO MASTER FOR THIS UNIT:

<p>C. Demonstrate an understanding of "living things" and properties of life, & the 5 biological themes which I will encounter repeatedly during this course. " I CAN... "</p>	<p>RESOURCES THAT MAY SUPPORT MY LEARNING:</p>	<p>RESULTS/SCORES FROM LEARNING ASSESSMENTS</p>	<p>MASTERY REFLECTION: WHAT DO I STILL NEED TO MASTER BEFORE THE EXAM? (What is your strategy for <u>improvement</u>?)</p> <p>1 ON 1 : HELP : Most effective <u>DURING</u> instruction... do not wait until the end of the unit!</p>
<ul style="list-style-type: none"> determine if something is "ALIVE" and provide a rationale for my decision define and recognize examples for each of the following: <ul style="list-style-type: none"> -Evolution -Flow of Energy -Cooperation -Structure determines/complements function -Homeostasis 	<p>See Blackboard and text for:</p> <ul style="list-style-type: none"> * Textbook Section 1.2 * TextbookSection 1.4 * other documents and links posted in Course Documents and/or presented in class. (notes) 	<p>SELF ASSESSMENT(s)</p> <hr/> <p>MASTERY CHECK(s)</p>	<p>INSTRUCTOR VERIFICATION:</p>

PATH 2 COLLEGE READINESS SCIENTIFIC SKILLS &/OR APPLICATION OF RESEARCH

<p>In order to become "college ready," I will work to master these standards during this unit (as well as throughout the course): " I CAN... " (13 - 15) reflects level of complexity</p>	<p>RESOURCES THAT MAY SUPPORT MY LEARNING:</p>	<p>RESULTS/SCORES FROM LEARNING ASSESSMENTS/ LAB EXPERIENCES</p>	<p>MASTERY REFLECTION: WHAT DO I STILL NEED TO MASTER BEFORE THE NEXT LAB/EXAM? OR the PLAN TEST, ACT, etc</p> <p>1 ON 1 : HELP : What is your strategy for improving your reasoning and data presentation/analysis skills?</p>
<ul style="list-style-type: none"> Identify basic features of a table, graph, or diagram (headings, units of measurement, axis labels)..... (13 - 15) <ul style="list-style-type: none"> ➢ also select proper graph to use based on the data to be graphed (line, bar, pie) Select two or more pieces of data from a simple data presentation (16 - 19) Understand the methods and tools used in a simple experiment (16-19) Understand basic scientific terminology (16 - 19) Find basic information in a body of text (16 - 19) Determine how the value of one variable changes as the value of another variable changes in a simple data presentation (16 - 19) Understand a simple experimental design (20 - 23) Identify a control in an experiment (20 - 23) Translate information into table or graph (20 - 23) Select a simple hypothesis, prediction, or conclusion that is supported by a data presentation (20 - 23) 	<p>See Blackboard for:</p> <ul style="list-style-type: none"> documents and links posted in Course Documents and presented in class. Graphing instruction/ handouts Lab report guidelines <p>For downloadable graph paper: http://incompetech.com/graphpaper/plain/</p>	<p>SELF ASSESSMENT(s)</p> <hr/> <p>MASTERY CHECK(s) / LABS / EXAMS</p>	<p>INSTRUCTOR VERIFICATION:</p>