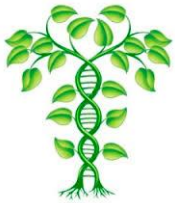
Survey of Life – Unit Need to Knows – NTKs

Processes of Life

I can identify and explain all of the process of life. (7)
I can explain how organ systems help maintain homeostasis.
I can identify the correct order of life hierarchy.

Scientific Investigation
I can define IV, DV, control, and constants.
I can identify an IV and DV in a hypothesis.
I can explain where the IV and DV are located on multiple graphs.

Quizlet #1 – Processes of Life	
Abiotic Factors	Non-living things
Adaptation	A trait that makes us better able to survive
Biology	The study of life
Biotic Factors	Living things
Cells	Microscopic units that make-up living organisms and carry out functions needed for survival
Development	The addition of characteristics as an organism moves through their cycle
Growth	The increasing number of cells within an organism
Inferences	A logical conclusion based off observations
Homeostasis	The ability to maintain a stable internal environment
Observation	Use of senses to gather and record information about structures or processes in nature.
Organization	Having an ordered structure that allows an organism to function.
Reproduction	The ability to produce offspring.
Response	A reaction to an event that occurs.
Using Energy	Obtain food and convert it into usable energy that allows organs to function.



Quizlet #2 – Scientific Investigation	
Scientific Method	A series of steps that scientists use to answer questions and solve problems.
Identify Problem/ Question	The question we are trying to answer by doing the experiment. Often found by observing situations around you.
Research/ Background Info	Getting information about a question or topic
Hypothesis	An educated guess; it is often written as an: If..... then....because statement
Design an Experiment	A detailed procedure to test the hypothesis; details and measurements: you always have to define the IV, DV, Control (comparison group), and Constants
Collect and Analyze Data	A summary of the data you have collected (graphs, tables, charts, photos, etc.); all your observations from the experiment that you recorded
Draw Conclusions	Does the data support your hypothesis? Further questions? The answer to your question; a summary of what you have learned from an experiment
Report Results	Allow other scientists to verify
Independent Variable	Changed by the scientist: factor in an experiment that a scientist purposely changes; the cause
Dependent Variable	Variable affected by the IV: the factor that changes (measured) as a result of the experiment; the effect
Control	Group remained unchanged: comparison group; part of an experiment that does not contain a variable; all conditions are kept normal; used as a COMPARISON
Constants	All other factors are kept the same.
Quantitative observations	Any observation of your experimental results recorded as NUMBERS ("after the second day the plant's height grew by 2.0 cm.")
Qualitative observations	Any observation that DESCRIBES your experimental results ("when I added the contents of the second test tube the contents of the test tube turned from blue to red")
Experimental set-up	The part of the experiment that contains the variable