

State	Local	Indicator
S.HS.3.1.2	S.B1.2.2	<b>The student understands cell functions involve specific reactions.</b>
		<i>reactant/product</i> <i>monomer/polymer</i>
		<i>catalyst/enzyme</i> <i>amino acid/protein</i>
		<i>enzyme substrate complex</i> <i>lipid</i>
		<i>photosynthesis/respiration</i> <i>sugar/carbohydrate</i>
		<i>cellular transport</i> <i>nucleotide/nucleic acid</i>

State	Local	Indicator
S.HS.3.2.1	S.B1.3.1	<b>The student understands living organisms contain DNA or RNA as their genetic material, which provides the instructions that specify the characteristics of organisms.</b>
		<i>gene</i> <i>messenger RNA</i>
		<i>replication</i> <i>transfer RNA</i>
		<i>transcription</i> <i>transformation</i>
		<i>translation</i> <i>mutation</i>
		<i>ribosomal RNA</i> <i>gene regulation</i>

State	Local	Indicator
S.HS.3.2.3	S.B1.3.2	<b>The student understands heredity information is contained in genes, located in the chromosomes of each cell.</b>
		<i>mitosis</i> <i>gene</i>
		<i>cell cycle</i> <i>dominant/recessive</i>
		<i>meiosis</i> <i>diploid</i>
		<i>chromosome</i> <i>genotype</i>
		<i>chromatin</i>

State	Local	Indicator
S.HS.3.3.1	S.B1.4.1	<b>The student understands biological evolution, decent with modification, is a scientific explanation for the history of the diversification of organisms from common ancestors.</b>
		<i>evolution</i> <i>speciation</i>
		<i>adaptation</i> <i>reproductive isolation</i>
		<i>fitness</i> <i>punctuated equilibrium</i>
		<i>natural selection</i> <i>gradualism</i>
		<i>homologous structure</i>

State	Local	Indicator
S.HS.3.3.3	S.B1.4.3	<p><b>The student understands biological evolution is used to explain earth's present day biodiversity: the number, variety and variability of organisms.</b></p> <p><i>adaptive radiation</i>                      <i>binomial nomenclature</i>  <i>convergent evolution</i>                      <i>phylogeny</i>  <i>divergent evolution</i>                      <i>cladogram</i>  <i>coevolution</i>                      <i>derived character</i>  <i>taxonomy</i>                      <i>classification</i></p>

State	Local	Indicator
S.HS.3.3.4	S.B1.4.4	<p><b>The students understand organisms vary widely within and between populations. Variation allows for natural selection to occur.</b></p> <p><i>gene pool</i>                      <i>stabilizing selection</i>  <i>genetic equilibrium</i>                      <i>directional selection</i>  <i>genetic drift</i>                      <i>disruptive selection</i>  <i>allelic frequency</i>                      <i>phenotype</i>  <i>Hardy-Weinberg principal</i>                      <i>variation</i></p>

State	Local	Indicator
S.HS.3.4.1	S.B1.6.1	<p><b>The student understands atoms and molecules on earth cycle among the living and nonliving components of the biosphere.</b></p> <p><i>trophic level</i>                      <i>reservoir</i>  <i>ecological pyramid</i>                      <i>nutrient</i>  <i>food web</i>                      <i>primary productivity</i>  <i>biomass</i>  <i>biogeochemical cycle</i></p>

State	Local	Indicator
S.HS.3.4.3	S.B1.6.2	<p><b>The student understands the distribution and abundance of organisms and populations in ecosystems are limited by the carrying capacity.</b></p> <p><i>habitat</i>                      <i>resource</i>  <i>niche</i>                      <i>tolerance</i>  <i>abiotic/biotic factors</i>                      <i>population</i>  <i>population dynamics</i>                      <i>community</i>  <i>ecology</i>                      <i>competitive exclusion principle</i></p>

State	Local	Indicator
S.HS.3.5.2	S.B1.6.3	<b>The student understands the sun is the primary source of energy for life through the process of photosynthesis.</b>
		<i>Photosynthesis</i> <i>Chloroplast</i>
		<i>Glucose</i> <i>Chlorophyll</i>
		<i>Carbon dioxide cycle</i> <i>Water cycle</i>
		<i>Autotroph/Heterotroph</i> <i>Energy forms</i>
		<i>Chemical reactions</i> <i>Food chains/webs</i>

State	Local	Indicator
S.HS.3.5.3	S.B1.2.3	<b>The student understands food molecules contain biochemical energy, which is then available for cellular respiration.</b>
		<i>Mitochondria</i> <i>Aerobic/anaerobic</i>
		<i>Respiration</i> <i>ATP</i>
		<i>Fermentation</i> <i>Enzymes</i>
		<i>Carbohydrates</i> <i>Glucose</i>
		<i>Energy forms</i> <i>Chemical reactions</i>

State	Local	Indicator
S.HS.3.6.1	S.B1.5.1	<b>The student understands animals have behavioral responses to internal changes and to external stimuli.</b>
		<i>Homeostasis</i> <i>Instincts</i>
		<i>Stimulus/response</i> <i>Internal/External stimulus</i>
		<i>Learned/innate behavior</i> <i>Conditioning</i>
		<i>Habituation</i> <i>Imprinting</i>
		<i>Migration</i> <i>Courtship</i>

State	Local	Indicator
S.HS.3.7.2	S.B1.2.4	<b>The student understands that homeostasis is the dynamic regulation and balance of an organisms internal environment to maintain conditinos suitable for survival.</b>
		<i>Feedback loops</i> <i>Heart rate</i>
		<i>Stimulus/response</i> <i>Homeostasis</i>
		<i>Body temperature</i>
		<i>Active cellular transport</i>
		<i>Pasive cellular transport</i>

State	Local	Indicator
S.HS.3.7.3	S.B1.5.3	<b>The student understands that living things change following a specific pattern of developmental stages called life cycles.</b>
		<i>Metamorphosis</i> <i>Diploid (2N)</i>
		<i>Growth</i> <i>Haploid (N)</i>
		<i>Development</i> <i>Larvae</i>
		<i>Fertilization</i> <i>Zygote</i>

State	Local	Indicator
S.HS.4.2.1	S.8.10.1	<b>The student understands geological time is used to understand the Earth's past.</b>
		<i>Geologic time</i> <i>Geologic time periods</i>
		<i>Radioactive dating</i> <i>Absolute dating</i>
		<i>Relative dating</i> <i>era</i>
		<i>Index Fossil</i> <i>period</i>
		<i>Age of Earth</i> <i>half-life</i>

State	Local	Indicator
S.HS.6.3.1	S.B1.6.4	<b>The student understands natural resources from the lithosphere and ecosystems are required to sustain human populations.</b>
		<i>Ecosystem</i> <i>Carbon dioxide cycle</i>
		<i>Atmosphere</i> <i>Greenhouse gases</i>
		<i>Water Cycle</i> <i>Erosion</i>
		<i>Carbon Cycle</i> <i>Sustainable yield</i>
		<i>Oxygen Cycle</i> <i>Renewable resources</i>