

Topic: Diversity and Evolution of Living Organisms	
Included Standards: SC.7.L.15.2 SC.7.L.15.1 SC.7.L.15.3	
Grade: 7th	
Score 4.0	<p>In addition to Score 3.0, the student will be able to make in-depth inferences and applications that go beyond what was taught.</p> <ul style="list-style-type: none"> • Research the scientific theory of evolution and the contributing factors.
Score 3.0	<p>The student will understand the scientific theory of evolution and be able to recognize factors that contribute to the theory.</p> <ul style="list-style-type: none"> • Performs complex skills: <ul style="list-style-type: none"> ○ Distinguish what inferences can be made in which genetic variation and environmental factors contribute to evolution by natural selection and diversity of organisms. ○ Distinguish what inferences can be made in which fossil evidence is consistent with the scientific theory of evolution. ○ Distinguish what inferences can be made in how a species' ability to adapt may contribute to the extinction of that species. <p>The student exhibits no major errors or omissions regarding the score 3.0 content.</p>
Score 2.0	<p>The student:</p> <ul style="list-style-type: none"> • Recognizes or recalls specific terminology: <ul style="list-style-type: none"> ○ evolution, genetic variation, natural selection, diversity of organisms, fossil evidence, scientific theory, species, extinction, adaptation. • Performs basic skills: <ul style="list-style-type: none"> ○ Identify and explain ways in which genetic variation and environmental factors contribute to evolution by natural selection and diversity of organisms. ○ Identify and explain ways in which fossil evidence is consistent with the scientific theory of evolution. ○ Identify and explain how a species' ability to adapt may contribute to the extinction of that species. <p>No major errors or omissions regarding the score 2.0 content.</p>
Score 1.0	With help the student knows some of 2.0 and 3.0.
Score 0.0	Even with help, the student is unable to understand.

Topic: Energy Transfer and Transformations (Heat)	
Included Standards: SC.7.P.11.4 SC.7.P.11.1	
Grade: 7th	
Score 4.0	<p>In addition to Score 3.0, the student will be able to make in-depth inferences and applications that go beyond what was taught.</p> <ul style="list-style-type: none"> • Generate and test examples of heat transformations involving heat.
Score 3.0	<p>The student will understand energy transformations involving heat and be able to describe that heat flows in predictable ways.</p> <ul style="list-style-type: none"> • Performs complex skills: <ul style="list-style-type: none"> ○ Differentiate between conduction, convection and radiation. ○ Understand under what conditions that heat flows from warmer objects to cooler ones until they reach the same temperature. <p>The student exhibits no major errors or omissions regarding the score 3.0 content.</p>
Score 2.0	<p>The student:</p> <ul style="list-style-type: none"> • Recognizes or recalls specific terminology: <ul style="list-style-type: none"> ○ Heat, temperature, conductors, insulators, specific heat, heat transfer, conduction, convection, radiation, degree Celsius, calories, thermal energy • Performs basic skills: <ul style="list-style-type: none"> ○ Observe and describe that heat flows from warmer objects to cooler ones until they reach the same temperature. ○ Recognize that adding heat to or removing heat from a system may result in a temperature change and possibly a change of state. ○ Illustrate examples of conduction, convection and radiation. ○ Describe the effects of specific heat on a system. <p>No major errors or omissions regarding the score 2.0 content.</p>
Score 1.0	With help, the student knows some of 2.0 and 3.0.
Score 0.0	Even with help, the student is unable to understand.

Topic: Energy Transfers and Transformations	
Included Standards: SC.7.P.11.2 SC.7.P.11.3	
Grade: 7th	
Score 4.0	<p>In addition to Score 3.0, the student will be able to make in-depth inferences and applications that go beyond what was taught.</p> <ul style="list-style-type: none"> • Generate and test examples of energy transformations.
Score 3.0	<p>The student will understand energy transformation and will be able to describe transformation of energy from one form to another.</p> <ul style="list-style-type: none"> • Performs complex skills: <ul style="list-style-type: none"> ○ Explain situations where energy is transformed between kinetic and potential energy. ○ Explain examples of the Law of Conservation of Energy. <p>The student exhibits no major errors or omissions regarding the score 3.0 content.</p>
Score 2.0	<p>The student:</p> <ul style="list-style-type: none"> • Recognizes or recalls specific terminology: <ul style="list-style-type: none"> ○ Energy, Law of Conservation of Energy, Potential Energy, Kinetic Energy, Energy Transformations, Chemical Energy, Electrical Energy, Mechanical Energy, Efficiency • Performs basic skills: <ul style="list-style-type: none"> ○ Identify the transformation of energy from one form to another. ○ Differentiate between potential and kinetic energy. ○ Identify situations where energy is transformed between kinetic and potential energy. ○ Identify examples of the Law of Conservation of Energy. <p>No major errors or omissions regarding the score 2.0 content.</p>
Score 1.0	With help, the student knows some of 2.0 and 3.0.
Score 0.0	Even with help, the student is unable to understand.

Topic: Heredity and Reproduction	
Included Standards: SC.7.L.16.1 SC.7.L.16.2 SC.7.L.16.3 SC.7.L.16.4	
Grade: 7th	
Score 4.0	<p>In addition to Score 3.0, the student will be able to make in-depth inferences and applications that go beyond what was taught.</p> <ul style="list-style-type: none"> • Generate and test examples of DNA passing from one generation to another.
Score 3.0	<p>The student will understand DNA and be able to describe that heredity is the passage of DNA from one generation to another.</p> <ul style="list-style-type: none"> • Performs complex skills: <ul style="list-style-type: none"> ○ Compare and contrast the general processes of sexual and asexual reproduction that result in the passage of hereditary information from one generation to another. ○ Determine what would happen for genotype and phenotype combinations using Punnett Squares and pedigrees. <p>The student exhibits no major errors or omissions regarding the score 3.0 content.</p>
Score 2.0	<p>The student:</p> <ul style="list-style-type: none"> • Recognizes or recalls specific terminology: <ul style="list-style-type: none"> ○ Traits, heredity, DNA, genes, chromosomes, cell, generations, probabilities, genotype, phenotype, Punnett squares, pedigree, sexual reproduction, meiosis, asexual reproduction, mitosis, cell cycle, fertilization, allele, dominant, recessive, offspring, biotechnology, cloning, genetic engineering, artificial selection. • Performs basic skills: <ul style="list-style-type: none"> ○ Describe the key parts of mitosis and meiosis. ○ Illustrate and use models or diagram examples of different combinations of Punnett Squares and pedigrees for dominant and recessive traits. ○ Identify parental genotypes that result in certain genotypic or phenotypic probabilities in offspring. ○ Identify that hereditary information (DNA) contains genes located in the chromosomes of each cell. ○ Recognize that heredity is the passage of genetic instructions from one generation to another. ○ Recognize and explore that impact of biotechnology (cloning, genetic engineering, artificial selection) on the individual society and the environment. <p>No major errors or omissions regarding the score 2.0 content.</p>
Score 1.0	With help, the student knows some of 2.0 and 3.0.
Score 0.0	Even with help, the student is unable to understand.