

Biology – Understanding Your Child’s Performance: Below is a summary of skills and knowledge students must demonstrate to achieve each performance level. A student should demonstrate mastery of knowledge and skills within his/her achievement level *as well as* all content and skills that precede it. For example, a Proficient Learner should also possess the knowledge and skills of a Developing Learner *and* a Beginning Learner.

	Beginning Learner	Developing Learner	Proficient Learner	Distinguished Learner
<p>End-of-Course Biology</p>	<p>In general, your child can:</p> <ul style="list-style-type: none"> • recognize that macromolecules provide organisms with different nutrients • recognize the structure and function of DNA • recognize that organisms can be grouped into six kingdoms based on similarities • recognize that some human activities affect the environment • recognize that investigators control the conditions of their experiments • use standard laboratory tools 	<p>In general, your child can:</p> <ul style="list-style-type: none"> • identify the functions of each of the four major macromolecules (carbohydrates, proteins, lipids, and nucleic acids) • distinguish between osmosis and diffusion • compare hypertonic, hypotonic, and isotonic solutions • distinguish between RNA and DNA • compare structures among the six kingdoms of life • explain human activities that affect the environment • recognize the role of natural selection in the development of the theory of evolution • describe the appropriate use of tools for scientific investigations • describe characteristics of living things and viruses 	<p>In general, your child can:</p> <ul style="list-style-type: none"> • explain the role of cell organelles • identify enzymes as catalysts • explain the effect water has on life processes • identify factors that can alter DNA • use Mendel’s law to explain the role of meiosis • describe the processes of photosynthesis and respiration • recognize biological factors that influence reproductive differences • identify differences in the structure and function of the six kingdoms of life • recognize the basis of modern classification systems • identify the relationships between biological communities • explain the flow of matter and energy using a food chain • compare amounts of energy using an energy pyramid • relate natural selection to changes in organisms • describe biological resistance • describe evidence supporting evolution 	<p>In general, your child can:</p> <ul style="list-style-type: none"> • apply homeostasis given a real-world scenario • describe how changing the genetic code of an organism can result in advantageous traits • analyze how genetic manipulation changes the genetic frequency of traits • explain the advantages and disadvantages of the different types of reproduction • analyze the relationships between different cellular processes • analyze the need for cycling essential elements • draw conclusions from data • explain how successful species evolve