




















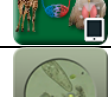


eMind Product Alignment to NGSS

This chart indicates which standards are supported by eMind Software.

	eMind Fish	<p>HS.LS1.2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.</p> <p>HS.LS1.3 Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.</p>
	eMind Frog	<p>HS.LS1.2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.</p> <p>HS.LS1.3 Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.</p>
	eMind Fly	<p>HS.LS3.3 Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population.</p> <p>HS.LS3.2 Make and defend a claim based on evidence that inheritable genetic variations may result from: (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors.</p> <p>HS.LS3.3 Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population.</p>
	eMind Pig	<p>HS.LS1.2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.</p> <p>HS.LS1.3 Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.</p>
	eMind Cat	<p>HS.LS1.2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.</p>
	eMind Invertebrate	<p>HS.LS1.2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.</p> <p>HS.LS1.3 Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.</p>
	Course Builder	See Below. (The 16 lessons listed below are all part of Course Builder.)
	Biomolecules and Metabolic Processes	<p>HS.LS1.5 Use a model to illustrate how photosynthesis transforms light energy into stored chemical energy.</p> <p>HS.LS1.6 Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids and/or other large carbon-based molecules.</p> <p>HS.LS1.7 Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen molecules are broken and the bonds in new compounds are formed resulting in a net transfer of energy.</p>
	Cells and Organelles	<p>HS.LS1.2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.</p>
	Membranes and Transport	<p>HS.LS1.3 Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.</p>

	<p>Chromosomes and Mitosis</p>	<p>HS.LS1.4 Use a model to illustrate the role of cellular division (mitosis) and differentiation in producing and maintaining complex organisms.</p> <p>HS.LS3.1 Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring.</p>
	<p>Meiosis</p>	<p>HS.LS3.1 Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring.</p> <p>HS.LS3.2 Make and defend a claim based on evidence that inheritable genetic variations may result from: (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors.</p> <p>HS.LS3.3 Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population.</p>
	<p>Genetics and Patterns of Inheritance</p>	<p>HS.LS3.1 Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring.</p> <p>HS.LS3.3 Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population.</p>
	<p>DNA Basics</p>	<p>HS.LS1.1 Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins which carry out the essential functions of life through systems of specialized cells.</p> <p>HS.LS3.1 Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring.</p> <p>HS.LS3.2 Make and defend a claim based on evidence that inheritable genetic variations may result from: (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors.</p>
	<p>DNA Technologies</p>	<p>HS.LS3.2 Make and defend a claim based on evidence that inheritable genetic variations may result from: (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors.</p>
	<p>Evolution</p>	<p>HS.LS2.8 Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce.</p> <p>HS.LS4.1 Communicate scientific information that common ancestry and biological evolution are supported by multiple lines of empirical evidence.</p> <p>HS.LS4.2 Construct an explanation based on evidence that the process of evolution primarily results from four factors: (1) the potential for a species to increase in number, (2) the heritable genetic variation of individuals in a species due to mutation and sexual reproduction, (3) competition for limited resources, and (4) the proliferation of those organisms that are better able to survive and reproduce in the environment.</p> <p>HS.LS4.3 Apply concepts of statistics and probability to support explanations that organisms with an advantageous heritable trait tend to increase in proportion to organisms lacking this trait.</p> <p>HS.LS4.4 Construct an explanation based on evidence for how natural selection leads to adaptation of populations.</p> <p>HS.LS4.5 Evaluate the evidence supporting claims that changes in environmental conditions may result in: (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.</p>
	<p>Classification</p>	<p>HS.LS4.1 Communicate scientific information that common ancestry and biological evolution are supported by multiple lines of empirical evidence.</p>
	<p>Bacteria and Viruses</p>	<p>HS.LS2.3 Construct and revise an explanation based on evidence for the cycling of matter and flow of energy in aerobic and anaerobic conditions.</p>

	Protists and Fungi	HS.LS1.2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
	Plants	HS.LS1.2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. HS.LS1.4 Use a model to illustrate the role of cellular division (mitosis) and differentiation in producing and maintaining complex organisms.
	Animals – The Invertebrates	HS.LS1.2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
	Animals – The Vertebrates	HS.LS1.2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
	eMind Animalcules	HS.LS1.2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. HS.LS1.3 Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.