Wisconsin Science

Essential Elements: High School

Physical	I	Make a claim supported by evidence to explain patterns of chemical properties that occur in a substance during a common chemical reaction (e.g., baking soda and vinegar). EE.HS-PS1-2
	II	Evaluate the effectiveness of safety devices and design a solution that could minimize the force of a collision. EE.HS-PS2-3
	III	Investigate and predict the temperatures of two liquids before and after combining to show uniform energy distribution. EE.HS-PS3-4
	IV	Make a claim supported by evidence that shows how some devices use light and sound waves to transmit and capture information. EE.HS-PS4-5
Life	I	Use a model to illustrate the organization and interaction of major organs into systems (e.g., circulatory, respiratory, digestive, sensory) in the body to provide specific functions. EE.HS-LS1-2
	II	Use a model to illustrate how growth occurs when cells multiply. EE.HS-LS1-4
	III	Use a graphical representation to explain the dependence of an animal population on other organisms for food and their environment for shelter. EE.HS-LS2-2
	IV	Defend why reproduction may or may not result in offspring with different traits. EE.HS-LS3-2
	V	Explain how the traits of particular species that allow them to survive in their specific environments. EE.HS-LS4-2
Earth and Space	I	Use a model of Earth and the Sun to show how Earth's tilt and orbit around the Sun cause changes in seasons. EE.HS-ESS1-4
	II	Use a model to show how constructive forces (e.g., volcanoes) and destructive mechanisms (e.g., weathering, coastal erosions) change Earth's surface EE.HS-ESS2-1
	III	Using a model, recognize how the effects of changes in climate can impact human lives. EE.HS-ESS2-4

	IV Construct an explanation based on evidence for how natural hazards have influenced human activity. EE.HS-ESS3-1
	V Construct an argument for a strategy to conserve, recycle, or reuse resources. EE.HS-ESS3-2
	VI Analyze data to determine the effects of a conservation strategy on the level of a natural resource. EE.HS-ESS3-3
Biology	**I** Explain how different organs of the body carry out essential functions of life EE.HS-LS1-1
	II Collect data from an investigation to show how different organisms react to changes (e.g., heart rate increases with exercise, pupils react to light). EE.HS-LS1-3
	III Use a graphical representation to explain changes over time in the population size of an animal species (e.g., currently on the endangered list). EE.HS-LS2-1
	IV Interpret data sets to identify an advantageous heritable trait. EE.HS-LS4-3.
	V Evaluate a strategy to protect a species. EE.HS-LS4-6