



Wonderfully Weird World of Sponges

Learning about how wonderful sponges are and become an expert on sponge anatomy.

Grade level	Academic Standards			
	Performance Expectation	Sci. & Engineering Practice	Disciplinary Core Idea	Crosscutting Concept
K-2	K1-LS1-1 Animal adaptations that solve human solutions	Constructing explanations and designing solutions: Constructing explanations (science) and designing solutions (engineering)	Constructing explanations and designing solutions: Constructing explanations (science) and designing solutions (engineering) STRUCTURE AND FUNCTION All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air. . Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. (LE.LS1A.a) INFORMATION PROCESSING Animals have body parts that capture and convey different kinds of information needed for growth and survival. Animals respond to these inputs with behaviors that help them survive. Plants also respond to some external inputs. (LE.LS1D.a)	PATTERNS STRUCTURE AND FUNCTION
3-5	3-3- LS4-2 Physical Characteristics help survival 4-4-LS1-1 Structure supports function	Constructing explanations and designing solutions: Support an explanation using evidence (e.g., measurements, observations, patterns). Construct an explanation using evidence (e.g., measurements, observations, patterns). Use a model to support an argument.	NATURAL SELECTION Sometimes the differences in characteristics between individuals of the same species provide advantages in surviving, finding mates, and reproducing. (UE.LS4B.a) STRUCTURE AND FUNCTION Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction. (UE.LS1A.a)	PATTERNS STRUCTURE AND FUNCTION SYSTEMS AND SYSTEM MODELS A system can be described in terms of its components and their interactions.
6-8	MS-LS1-4 Animal Structure and function as applies to reproduction and defense	Construct an explanation that includes qualitative relationships to predict and describe a phenomena.	Within every population, there are variations of organisms.. (MS.LS4B.a)	PATTERNS STRUCTURE AND FUNCTION CAUSE AND EFFECT Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described using probability.
9-12	HS-LS1-2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms	Developing and using models: Develop, revise, and/or use a model based on evidence to illustrate and/or predict the relationships between systems or between components of a system.	Multicellular organisms have a hierarchical structural organization, in which any one system is made up of numerous parts and is itself a component of the next level. (HS.LS1A.b)	SYSTEMS AND SYSTEM MODELS Models (e.g., physical, mathematical, computer models) can be used to simulate systems and interactions—including energy, matter, and information flows— within and between systems at different scales.

Can be paired with activities: Squid Anatomy Scramble, Sponge Hunt, ZooPlankton Anatomy/ Identification