BENCHMARK REPORT
SCIENCE GRADE 3

ARCHDIOCESE OF CHICAGO

DOMAIN: Science			
NGSS/ Aspire Practices	**OCS Code:**	**Standards and Benchmarks**	**DOK**
Strand: 3. Forces and Interactions: 3-PS2 Motion and Stability: Forces and Interactions			
Practice 3	**3-PS2-1.**	**Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.**	
	3-PS2-1.1a	Define balanced and unbalanced forces, direction of a force, and motion of an object	1
	3-PS2-1.2d	Plan an investigation to show the effects of balanced and unbalanced forces on the direction of an object	4
	3-PS2-1.3c	Investigate the effects of balanced and unbalanced forces on the direction of an object by using a fairly simple experiment	3
Practice 3	**3-PS2-2.**	**Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.**	
	3-PS2-2.1b	Measure the weight of an object and the amount of distance it travels when a constant force is applied	2
	3-PS2-2.2c	Create a chart of the weight of an object and the amount of distance it travels when a constant force is applied	3
	3-PS2-2.3c	Predict the distance an object will travel if more or less weight were to be added	3
Practice 1	**3-PS2-3.**	**Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.**	
	3-PS2-3.1a	Define the properties of magnets	1
	3-PS2-3.2c	Ask questions about the changes in force of two magnetic objects which are placed at different distances from each other	3
	3-PS2-3.3c	Determine reasons that the force of two magnetic objects changes when placed at different distances from each other	3
Practice 1	**3-PS2-4.**	**Define a simple design problem that can be solved by applying scientific ideas about magnets.**	
	3-PS2-4.1b	Find several examples of how magnets are being used to solve a practical problem	2
	3-PS2-4.2b	Gather information on scientific ideas about how magnets work	2
	3-PS2-4.3c	Formulate a practical problem that can be solved by using one or more magnets	3
Strand: 3. Interdependent Relationships in Ecosystems: 3-LS2 Ecosystems: Interactions, Energy, and Dynamics			
Practice 7	**3-LS2-1.**	**Construct an argument that some animals form groups that help members survive.**	
	3-LS2-1.1a	Identify reasons that animals living in groups are better able to survive	1
	3-LS2-1.2b	Locate examples of specific animals that live in groups	2
	3-LS2-1.3c	Cite reasons that specific animals are better able to survive in groups	3
Strand: 3. Interdependent Relationships in Ecosystems: 3-LS4 Biological Evolution: Unity and Diversity			
Practice 4	**3-LS4-1.**	**Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.**	
	3-LS4-1.1b	Describe the characteristics of marine animals using data from fossils during a specific time period	2
	3-LS4-1.2b	Categorize the characteristics of marine animals found in fossils during a specific time period	2
	3-LS4-1.3d	Analyze the characteristics of marine animals found in fossils to describe the marine environment that would be needed for their survival	4
Practice 7	**3-LS4-3.**	**Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.**	
	3-LS4-3.1a	Define habitat	1

Code consists of Grade (K-8), NGSS Code, Benchmark Number, and DOK Complexity (a, b, c, d).

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	3-LS4-3.2a	Identify the conditions that animals need to survive in a particular habitat	1
	3-LS4-3.3b	Find examples of many animals that survive well and not so well in a particular habitat	2
	3-LS4-3.4c	Cite reasons that animals survive well and not so well in a particular habitat	3
Practice 7	**3-LS4-4.**	**Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.**	
	3-LS4-4.1d	Create a food web which includes the sun	4
	3-LS4-4.2d	Evaluate the consequences of increased heat from the sun on the food web	4
	3-LS4-4.3d	Analyze the effects of one solution that has been used to decrease the amount of heat from the sun	4
Strand: 3. Inheritance and Variation of Traits: Life Cycles and Traits: 3-LS1 From Molecules to Organisms: Structures and Processes			
Practice 2	**3-LS1-1.**	**Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.**	
	3-LS1-1.1a	Identify the parts of a life cycle	1
	3-LS1-1.2d	Create a life cycle for a flowering plant, a land animal, and a marine animal	4
	3-LS1-1.3b	Compare the similarities and differences in the life cycles of a flowering plant, a land animal, and a marine animal	2
	3-LS1-1.4d	Create a diagram that shows the parts of a life cycle that are common between a flowering plant, a land animal, and a marine animal	4
Strand: 3. Inheritance and Variation of Traits: Life Cycles and Traits: 3-LS3 Heredity: Inheritance and Variation of Traits			
Practice 4	**3-LS3-1.**	**Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.**	
	3-LS3-1.1a	Recognize the characteristics of inherited traits and how they can vary	1
	3-LS3-1.2b	Find several examples of similar types of plants with their offspring	2
	3-LS3-1.3b	Categorize the physical traits of several plant parents and their offspring	2
	3-LS3-1.4b	Create a table showing the physical traits of pairs of example parent plants and their offspring	2
	3-LS3-1.5d	Analyze data from example parent plants and their offspring to determine the extent to which parents and their offspring have similar physical traits	4
	3-LS3-1.6c	Draw a conclusion about the extent to which different kinds of plants have similar physical traits	3
Practice 6	**3-LS3-2.**	**Use evidence to support the explanation that traits can be influenced by the environment.**	
	3-LS3-2.1a	Identify the inherited traits of animals that can be changed by the environment they live in	1
	3-LS3-2.2b	Find several examples of animal traits that have been changed by the environment they live in	2
	3-LS3-2.3c	Cite evidence to support the statement that "animal traits can be changed by the environment they live in"	3
Strand: 3. Inheritance and Variation of Traits: Life Cycles and Traits: 3-LS4 Biological Evolution: Unity and Diversity			
Practice 6	**3-LS4-2.**	**Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.**	
	3-LS4-2.1a	Define species and variations in characteristics	1
	3-LS4-2.2b	Identify animal characteristics that provide advantages to the survival of a group of animals that are similar and can produce young animals in a desert ecosystem	2

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	3-LS4-2.3b	Show variations in animal characteristics that have occurred over time to help animals in a desert ecosystem survive	2
	3-LS4-2.4c	Cite evidence that explains how variations in characteristics help animals to survive in a desert ecosystem	3
Strand: 3. Weather and Climate: 3-ESS2 Earth's System			
Practice 4	**3-ESS2-1.**	**Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.**	
	3-ESS2-1.1b	Measure the outside daily temperature during a particular season	2
	3-ESS2-1.2a	Calculate an average weekly temperature during a particular season	1
	3-ESS2-1.3b	Create a bar chart of the average weekly temperature during a particular season	2
Practice 8	**3-ESS2-2.**	**Obtain and combine information to describe climates in different regions of the world.**	
	3-ESS2-2.1a	Define climate, temperature, precipitation, wind speed	1
	3-ESS2-2.2b	Find the temperature, precipitation, and wind speed in three different places throughout the world	2
	3-ESS2-2.3b	Create a table which includes the temperature, precipitation, and wind speed for three different places throughout the world	2
Strand: 3. Weather and Climate: 3-ESS3 Earth and Human Activity			
Practice 7	**3-ESS3-1.**	**Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.**	
	3-ESS3-1.1b	Find examples of different ways that are used to reduce river flooding	2
	3-ESS3-1.2c	Describe the design of one specific solution that has been used effectively to reduce river flooding	3
	3-ESS3-1.3c	Cite evidence that shows the effectiveness of one specific solution to reduce river flooding	3