



DOMAIN: Science

NGSS/ Aspire Practices	OCS Code:	Standards and Benchmarks	DOK
Strand: 1. Waves: Light and Sound: 1-PS4 Waves and their Applications in Technologies for Information Transfer			
Practice 3	1-PS4-1.	Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	
	1-PS4-1.1a	Define vibrations	1
	1-PS4-1.2b	Find examples of sounds created by vibrating materials	2
	1-PS4-1.3b	Categorize materials into two groups: those that vibrate and those that do not	2
	1-PS4-1.4d	With prompting and support, plan an investigation to show the effect of vibration on sound	4
	1-PS4-1.5c	With prompting and support, investigate the effects of vibration on sound by following the steps of a very simple experiment	3
Practice 6	1-PS4-2.	Make observations to construct an evidence-based account that objects can be seen only when illuminated.	
	1-PS4-2.1b	Observe objects that can be seen with and without light	2
	1-PS4-2.2b	Create a table which presents data on the appearance of objects seen both with and without light	2
Practice 3	1-PS4-3.	Plan and conduct an investigation to determine the effect of placing objects made with different materials in the path of a beam of light.	
	1-PS4-3.1a	Define transparent, translucent, opaque, and reflective	1
	1-PS4-3.2b	Find examples of materials that are transparent, translucent, opaque, and reflective	2
	1-PS4-3.3b	Categorize different types of materials as transparent, translucent, opaque, and reflective	2
	1-PS4-3.4d	With prompting and support, plan an investigation to show the effect of placing different types of materials in the path of a beam of light	4
	1-PS4-3.5c	With prompting and support, investigate the effects of placing different types of materials in the path of a beam of light by following the steps of a very simple experiment	3
Practice 6	1-PS4-4.	Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.	
	1-PS4-4.1b	Find examples of non-technological devices that use light or sound to communicate between persons over a distance	2
	1-PS4-4.3d	With prompting and support, design a non-technological device that uses light or sound to communicate between persons over a distance	4
	1-PS4-4.4d	With prompting and support, use tools and materials to build a non-technological device that uses light or sound to communicate between persons over a distance	4
Strand: 1. Structure, Function, and Information Processing: 1-LS1 From Molecules to Organisms: Structures and Processes			
Practice 6	1-LS1-1.	Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.	
	1-LS1-1.1a	Name the outer parts of plants and animals that relate to their survival	1
	1-LS1-1.2b	Identify examples of the outer parts of plants that help them grow and survive	2
	1-LS1-1.3b	Identify examples of the outer parts of animals that help them grow and survive	2
	1-LS1-1.4d	With prompting and support, apply one example of an outer part of an animal or plant that can be used by humans to help them survive and grow	4
Practice 8	1-LS1-2.	Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.	
	1-LS1-2.1a	Identify a variety of responses made by animal parents to help their children survive	1



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	1-LS1-2.2a	Identify a variety of responses made by animal children in order to help them survive	1
	1-LS1-2.3b	With prompting and support, compare responses used by different animal parents to help their children survive	2
	1-LS1-2.4b	With prompting and support, compare responses used by different animal children in order to help them survive	2
Strand: 1. Structure, Function, and Information Processing: 1-LS3 Heredity: Inheritance and Variation of Traits			
Practice 6	1-LS3-1.	Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.	
	1-LS3-1.1a	Identify characteristics of both young plants and their parents	1
	1-LS3-1.2a	Identify characteristics of both baby animals and their mothers/fathers	1
	1-LS3-1.3b	With prompting and support, compare the characteristics of young plants or animals to their parents to show how the two are the same or different	2
Strand: 1. Space Systems: Patterns and Cycles: 1-ESS1 Earth's Place in the Universe			
Practice 4	1-ESS1-1.	Use observations of the sun, moon, and stars to describe patterns that can be predicted.	
	1-ESS1-1.1a	Define visibility and location of objects in the skies	1
	1-ESS1-1.2b	Observe the visibility of the sun, moon, and stars in the morning and at night	2
	1-ESS1-1.3b	Observe the location of the sun in the morning, noon, and night	2
	1-ESS1-1.4c	Predict the visibility of the sun, moon, and stars in the morning and night based on observations	3
	1-ESS1-1.5c	Predict the location of the sun, moon, and stars in the morning, noon, and night based on observations	3
Practice 3	1-ESS1-2.	Make observations at different times of year to relate the amount of daylight to the time of year.	
	1-ESS1-2.1b	Observe the amount of daylight over a several day period in the fall, winter, and spring	2
	1-ESS1-2.2c	With prompting and support, graph the amount of daylight to determine changes from fall to spring	3