

Musically Aligned: Science Songs 3

PHYSICAL SCIENCE		Song #	Song Title	Check
1	Energy and matter have multiple forms and can be changed from one form to another.	1	Sunlight as Energy	
1a.	Energy comes from the Sun to the Earth in the form of light.	1	Sunlight as Energy	
1c.	Machines and living things convert stored energy to motion and heat.	2	Motion and Heat	
1d.	Energy can be carried from one place to another by waves, such as water waves and sound waves.	3	Energy Waves	
1e.	Matter has three forms: solid, liquid, and gas.	4	Solid, Liquid, Gas Groove	
1f.	Evaporation and melting are changes that occur when the objects are heated.			
1g.	When two or more substances are combined, a new substance may be formed with properties that are different from those of the original material.	5	Mixtures	
1h.	All matter is made of small particles called atoms, too small to see with the naked eye.	6	Atoms	
1i.	People once thought that earth, wind, fire, and water were the basic elements that made up all matter. Science experiments show that there are more than 100 different types of atoms, which are presented on the periodic table of the elements.	7	Periodic Table of Elements	
2	Light has a source and travels in a direction.	8	Direction of Light	
2a.	Sunlight can be blocked to create shadows.	8	Direction of Light	
2b.	Light is reflected from mirrors and other surfaces.	8	Direction of Light	
2c.	The color of light striking an object affects the way the object is seen.			
2d.	An object is seen when light traveling from the object enters the eye.	8	Direction of Light	

LIFE SCIENCE		Song #	Song Title	Check
3	Adaptions in physical structure or behavior may improve an organism's chance for survival.	9	Growth, Survival, and Reproduction	
3a.	Plants and animals have structures that serve different functions in growth, survival, and reproduction.	9	Growth, Survival, and Reproduction	
3b.	Students know examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands.	9, 10	Growth, Survival, and Reproduction + Biomes	
3c.	Living things cause changes in the environment in which they live: some of these changes are detrimental to the organism or other organisms, and some are beneficial.	11	Environment Change	
3d.	When the environment changes, some plants and animals survive and reproduce; others die or move to new locations.	11	Environment Change	
3e.	Some kinds of organisms that once lived on Earth have completely disappeared and that some of those resembled others that are alive today.	11	Environment Change	

Reference to the California Department of Education Science Content Standards

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EARTH SCIENCE		Song #	Song Title	Check
4	Objects in the sky move in regular and predictable patterns.	12	Sky Objects	
4a.	The patterns of stars stay the same, although they appear to move across the sky nightly, and different stars can be seen in different seasons.	12	Sky Objects	
4b.	Students know the way in which the moon's appearance changes during the four-week lunar cycle.	13	Lunar Cycle	
4c.	Telescopes magnify the appearance of some distant objects in the sky, including the Moon and the planets. The number of stars that can be seen through telescopes is dramatically greater than the number that can be seen by the unaided eye.	14	Telescopes Magnify	
4d.	The Earth is one of several planets that orbit the Sun and that the Moon orbits the Earth.	15	Orbiting Planets	
4e.	The position of the Sun in the sky changes during the course of the day and from season to season.	15	Orbiting Planets	

INVESTIGATION AND EXPERIMENTATION		Song #	Song Title	Check
5	Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations.	16	O.Q.H.P.E.A.D. Scientific Method	
5a.	Repeat investigations to improve accuracy and know that the results of similar scientific investigations seldom turn out exactly the same because of differences in the things being investigated, methods being used, or uncertainty in the observation.	16	O.Q.H.P.E.A.D. Scientific Method	
5b.	Differentiate evidence from opinion and know that scientists do not rely on claims or conclusions unless they are backed by observations that can be confirmed.	16	O.Q.H.P.E.A.D. Scientific Method	
5c.	Use numerical data in describing and comparing objects, events, and measurements.			
5d.	Predict the outcome of a simple investigation and compare the results with the prediction.	16	O.Q.H.P.E.A.D. Scientific Method	
5e.	Collect data in an investigation and analyze those data to develop a logical conclusion.	16	O.Q.H.P.E.A.D. Scientific Method	