

LARKSPUR SCHOOL DISTRICT
 CALIFORNIA SCIENCE ACADEMIC CONTENT STANDARDS
 GRADE LEVEL: THREE

Introduce Develop Master	Content Standards	Assessment	Instructional Strategies	Instructional Resources
	<p>Physical Sciences</p> <p>1. Energy and matter have multiple forms and can be changed from one form to another. As a basis for understanding this concept:</p>			
M	a. Students know energy comes from the Sun to Earth in the form of light.	Teacher observation	Discussion	Classroom library Teacher books
M	b. Students know sources of stored energy take many forms, such as food, fuel, and batteries.	Teacher observation	Discussion Video	IMC video Science textbook
D/M	c. Students know machines and living things convert stored energy to motion and heat.	Teacher observation	Discussion Video	IMC video Science textbook
I/D	d. Students know energy can be carried from one place to another by waves, such as water waves and sound waves, by electric current, and by moving objects.	Teacher observation	Discussion	Science textbook
M	e. Students know matter has three forms: solid, liquid, and gas.	Worksheets	Experiments Discussion	GEMS guides Naturescope Teacher book
M	f. Students know evaporation and melting are changes that occur when the objects are heated.	Teacher observation	Experiments Discussion	GEMS guide
M	g. Students know that when two or more substances are combined, a new substance may be formed with properties that are different from those of the original materials.	Student lab sheet Class discussion	Experiments	GEMS guide

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I/D/M	h. Students know all matter is made of small particles called atoms, too small to see with the naked eye.	Teacher observation	Discussion	Chemistry textbook
	i. Students know 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.	Teacher observation	Discussion Periodic Table	Periodic Table Chemistry textbook
	<p>Life Sciences</p> <p>2. Adaptations in physical structure or behavior may improve an organism's chance for survival. As a basis for understanding this concept:</p>			
D/M	a. Students know plants and animals have structures that serve different functions in growth, survival, and reproduction.	Reports – written and oral	Animal report/research	Life Lab curriculum Gardens
D/M	b. Students know examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands.	Reproducibles Teacher observation	Discussion	Social Studies Landforms – H.M
D	c. Students know 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.	Reports Teacher observation	Animal report Endangered Species activity	Endangered Species Human Society Naturescope
I/D	d. Students know when the environment changes, some plants and animals survive and reproduce; others die or move to new locations.	Teacher observation	Discussion	Life Lab Environmental Science lesson plans
D/M	e. Students know that some kinds of organisms that	Teacher observation	Discussion	Video IMC

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	once lived on Earth have completely disappeared and that some of those resembled others that are alive today.			
	3. All organisms need energy and matter to live and grow. As a basis for understanding this concept:			
D/M	a. Students know plants are the primary source of matter and energy entering most food chains.	Teacher observation	Project Wild activity	Life Lab Project Wild Naturescope lessons
D/M	b. Students know producers and consumers (herbivores, carnivores, omnivores, and decomposers) are related in food chains and food webs and may compete with each other for resources in an ecosystem.	Teacher observation	Food Chain activity Web of Life Predator – prey simulation	Project Wild Naturescope
I/D	c. Students know decomposers, including many fungi, insects, and microorganisms, recycle matter from dead plants and animals.	Teacher observation	Mold experiment Discussion of mushrooms, soil	Life Lab Social Studies – Woodlands unit Picture book
	Earth Sciences			
	4. Objects in the sky move in regular and predictable patterns. As a basis for understanding this concept:			
I/D/M	a. Students know 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.	Student work	Drawing and identifying constellations	Planetarium Student books Naturescope
D/M	b. Students know the way in which the Moon's appearance changes during the four-week lunar cycle.	Student work	Moon phases poster Art, Poetry Chart for HW	Moon Journals book Classroom calendar Models of earth and moon
I/D/M	c. Students know telescopes magnify the	Teacher observation	Visiting astronomer	Planetarium

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	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.		presentation	Visiting astronomer
M	d. Students know that Earth is one of several planets that orbit the Sun and that the Moon orbits Earth.	Student drawings	Planet simulation video	Models Videos
D	e. Students know the position of the Sun in the sky changes during the course of the day and from season to season.	Teacher observation	Chart direction discussion	<u>Seasons</u> book Video
	Investigation and Experimentation 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. Students will:			
D	a. Repeat observations 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.	Teacher observation Charting results	Class participation Experiments & discussion Comparing results	Teacher-created lessons ETF kits EEMS guides
D	b. 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.	Teacher observation Written summary – fact vs. opinion	Discussion	Current events Math – likely, unlikely Social studies
D	c. Use numerical data in describing and comparing	Worksheets	Reassuring experiments	Math text

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	objects, events, and measurements.	Charts	Chart Weather	Life Lab
D	d. Predict the outcome of a simple investigation and compare the result with the prediction.	Student labsheet	Experiments and discussion	Life Lab Science kits
D	e. Collect data in an investigation and analyze those data to develop a logical conclusion.	Student labsheet	Experiments and discussion	Life Lab Science kits