

LOS ANGELES UNIFIED SCHOOL DISTRICT
 “Standards-Based Instruction Model”*

Subject/Course Science Grade Level 7 Standard #(s) #23 and #20 Standard(s) (What students should know and be able to do) Identify relevant evidence, reason logically, and create scientific questions; distinguish between fact and opinion when analyzing explanations of natural phenomena (Scientific Thinking); Observe and describe the behavior of matter with respect to motion, force, and energy transformations and relate findings to Newton’s Laws of Motion; predict the effects of gravity, density, and electromagnetism on the behavior of matter. (Physical Science)

District Elementary Course of Study (Concepts) or Secondary Guidelines for Instruction (Instructional Unit) Physics
 Developed by Leonard Goldberg School Olive Vista Middle School Cluster # 4 Phone # (818) 367-1071

CULMINATING TASK/ASSIGNMENT What will the individual student produce to demonstrate achievement of the standard(s)? Begin the task with a verb.	ASSESSMENT What criteria will be used to evaluate/score student work/performance of the culminating task? The statement of the product to be scored is followed by a verb.	INSTRUCTIONAL ACTIVITIES What learning activities will the student be involved in to acquire content knowledge and skills to achieve the standard? Consider alternative strategies and modifications to promote equal access for all learners. Begin each learning activity with a verb describing what the student is to do.	TIME How much time will be required for the student to complete each of the activities?	RESOURCES What materials, textbooks, supplies, documents, etc., will support the student doing each instructional activity?
Make a symbolic drawing of simple, parallel, and series circuits with a legend and title; orally predict the flow of energy and explain how and why the circuits operate. Then produce an actual model of each.	The drawings and/or models: 4: Have circuits that produce the desired effects; are accurately drawn and all parts of the model are labeled correctly, listed in a legend and have an appropriate title; are clearly explained. 3: Have circuits that produce the desired effects; are generally accurately drawn, but all parts may not be labeled correctly or explained in legend; include an appropriate title; are adequately explained. 2: Have a circuit that is flawed and does not produce the desired effects; are inaccurately drawn and have few labels; are not fully explained. 1: Demonstrate little or no concept of how circuits work; do not produce the desired effect; are inaccurately drawn, unlabeled, and missing many parts; are not explained.	<ul style="list-style-type: none"> ▪ Review the concepts of energy and energy transformation. ▪ Review the technology of energy harnessed for useful purposes (light bulb). ▪ Review diagrams of simple circuits, parallel circuits, and series circuits. ▪ Study in groups the process of constructing circuit boards. ▪ Review symbolic drawings of circuits. 	20 min 20min 30 min 1 hr 50 min 30 min	Kits from the Department of Water and Power. FOSS Electricity-Magnet Unit. Videotapes on electromagnetism. Batteries, wires, bulbs, switches for each group of students. Prime Science. TEAMS.

*Model developed, refined, and field-tested by Task Force on Standards-Based Instruction