

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

Subject/Course Science Grade Level 3 Standard #(s) 29 Standard(s) (What students should be able to do) Identify and describe physical concepts of force, motion, and energy as demonstrated by the use of objects such as playground equipment and toys. (Physical Science)

District Elementary Course of Study (Concepts) or Secondary Guidelines for Instruction (Instructional Unit) Physical Science

Developed by Jackie Sackheim; Kristina Sunness School Wilshire Chrest; Hazeltine Avenue Cluster # 11; 7 Phone (213) 938-5291; (818) 781-1040

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?
Create an electric circuit that works and explain why it might be useful in an electrical village. Write a report describing the circuit as one component of an electric village; identify the component as a usable real-world device.	The circuit and report: 4: Demonstrate the ability to invent and create an electrical circuit component that works; explain how the circuit can be used to power a real-world object that has utility in an electric village; explain how it is powered. 3: Demonstrate a working circuit; explain how the circuit can be used to power a real-world object but object may have limited utility in an electric village; may not be clear on how it is powered. 2: Do not “work”; do not explain the purpose of the device; are unrelated to a real-world object; make an attempt to explain the circuitry but is unclear. 1: Cannot explain the concept of circuits and how they are used to power real-world objects; cannot explain the circuitry or the utility of the object.	<ul style="list-style-type: none"> ▪ Review photographs of different types of real-world objects which make use of electricity. ▪ Experiment with flashlights which have been disassembled. In groups, students reassemble flashlights to complete the circuit. Draw the circuits and write in journals about the process. ▪ Discuss characteristics of energy transformation as a class. ▪ Classify and list electrical devices that have utility in the real world (recreational, household, transportation, etc.) ▪ Bring an electrical gadget to share with the class. ▪ Prepare circuit boards, in groups. ▪ Determine which circuits will work and which will not. 	20 min 50 min 15 min 30 min 15 min 40 min 20 min	Batteries. Bulbs. Bells. Motors. Polaroid batteries. Flashlights. 1 ½ volt batteries. 6 volt batteries. 9 volt batteries. Teacher-made electric village (using crayons, pencils, milk cartons, popsicle sticks).

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