

SCIENCE, TECHNOLOGY, ENGINEERING AND MATH (STEM) CENTER TECHNICIAN

DEFINITION

Assists in the development of instructional materials, assists a teacher in the demonstration and use of such materials by participating in instructional activities, and performs work involved with the care and maintenance of a regional science, technology, engineering and math (STEM) centers.

TYPICAL DUTIES

- Builds, assembles, maintains, and replaces science, technology, engineering and math (STEM) teaching aids, such as kits on conservation, electricity, flying creatures, machines and energy, planetariums, plants, woodland habitats, aquariums, terrariums, and similar instructional aids.
- Makes minor repairs on incubators, brooders, cages, mathematics and science kits, and other equipment used for mathematics and science purposes.
- Assists in setting up and maintaining STEM rooms that display a variety of kits, charts, and instructional materials.
- Maintains a stock of mathematics and science instructional aids and equipment, fills requisitions, and arranges distribution.
- Maintains in orderly condition a stockroom, workshop, kit assembly room, and/or limited ground areas associated with center activities.
- Provides information to teachers regarding STEM material and explains the functions and operation of science, technology, and math equipment.
- Provides instructional assistance to a teacher by helping in student utilization of kits designed to demonstrate scientific principles in a classroom or by serving as resource naturalist to students who are observing and learning in a plant, animal, or ecology demonstration area.
- Fills and checks requisitions from elementary and secondary schools for mathematics, science, and technology instructional materials and kits, plants, and animals.
- Installs computer software and sets up peripheral equipment specific to STEM center applications.
- Makes minor repairs to computer software and hardware.
- Confers with teachers on orders for animals and furnishes information regarding their proper care.
- Feeds, waters, and cares for animals.
- Inspects animals for general physical condition and symptoms of disease.
- Assists in locating and purchasing materials and equipment to be used in the development or maintenance of science kits.
- Shares in the responsibility for the care of a STEM center in the absence of certificated personnel.
- Assists in conducting field trips and tours while disseminating information about the STEM center resources.
- May propagate, fertilize, irrigate, transplant, plant, and cultivate and weed planting areas, using a variety of hand and power tools.
- May prepare soil and compost for science programs using a variety of hand and power tools.
- May deliver materials to schools or other STEM centers.
- Performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS AMONG RELATED CLASSES

A Science, Technology, Engineering, and Math Center Technician builds and repairs mathematics and science materials, provides instructional assistance in science classes, and assists in the care and maintenance of a regional mathematics, science, and technology center.

A Life Science Laboratory Technician prepares a variety of life-science specimens by ordering, culturing and processing biological laboratory material; and maintains laboratory equipment, inventory, and specimen records.

An Instructional Aide I or II assists a teacher or other certificated employee by presenting instructional materials and activities related to an area in which the incumbent has expertise derived from advanced education or specialized training or experience.

SUPERVISION

General supervision is received from a resource teacher, or other certificated personnel. Supervision may be exercised over student aides or volunteers.

CLASS QUALIFICATIONS

Knowledge of:

- Proper methods of operating and maintaining a stockroom for instructional kits, materials, supplies, and equipment for use in STEM instructional programs
- Characteristics and nursery propagation of plants
- Pest control of plants and soils
- Soils and fertilizers
- Incubator and brooder operation
- Habits, diseases, and food and water needs of animals and poultry
- Methods, techniques, and application of simple veterinary care
- Safety practices in the use of hand and power tools
- Use of an office computer
- Check out procedure for math and science materials

Ability to:

- Use hand tools in fabricating and repairing articles used in science instructional programs
- Operate power tools such as jigsaw, table saw, band saw, sander, and drill press
- Operate power garden equipment such as a cultivator
- Care for plants and animals
- Work effectively with District employees and students
- Communicate effectively on the telephone and with visitors

Special Physical Requirements:

- Safely lift and carry supplies weighing up to 50 pounds
- Manual dexterity to operate hand and power tools

SPECIAL NOTE

Employees in this class may be requested to work weekends and holidays.
May travel to and work at various LAUSD science centers as needed.

ENTRANCE QUALIFICATIONS

Education:

Graduation from high school or evidence of equivalent educational proficiency, preferably supplemented by courses in science, engineering, mathematics, botany, horticulture, or computer science.

Experience:

One year of experience that involved general maintenance or repair work and required use of hand tools

or

completion of nine semester units or the equivalent number of quarter units in college level math or science courses such as biology, geology, botany, zoology, physical science, chemistry, astronomy, marine science, or meteorology

or

an equivalent combination of college level courses and experience listed above.

Special:

A valid California Driver License.
Use of an automobile.

The class description is not a complete statement of essential functions, responsibilities, or requirements. Entrance requirements are representative of the minimum level of knowledge, skill, and /or abilities. To the extent permitted by law, management retains the discretion to add or change typical duties of a position at any time, as long as such addition or change is reasonably related to existing duties.

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