

PROJECT CATEGORIES AND DESCRIPTIONS

These project categories will be used for the LAUSD Secondary Science Fair. Each school may send 15 winning projects from their school science fair.

Site Science Fair Coordinator should please use these descriptions when selecting the category for the student projects.

CATEGORY DESCRIPTIONS

Behavioral and Social Sciences

Human and animal behavior, social and community relationships-psychology, sociology anthropology, archaeology, ethology, ethnology, linguistics, learning perception, urban problems reading problems, public opinion surveys, educational testing, etc.

Biochemistry

Chemistry of life processes - molecular biology, molecular genetics, enzymes, photosynthesis, blood chemistry, protein chemistry, food chemistry, hormones etc.

Chemistry

Study of nature and composition of matter and laws governing it-physical chemistry, organic chemistry (other than biochemistry), inorganic chemistry, materials plastics, fuels, pesticides, metallurgy, soil chemistry, etc.

Computer Science

Study and development of computer hardware, software engineering, internet networking and communications, graphics (including human interface), simulations / virtual reality or computational science (including data structures, encryption, coding and information theory).

Earth Science

Geology, mineralogy, physiography, meteorology, meteorology, climatology, speleology, seismology, geography, etc.

Engineering

Technology; projects that directly apply scientific principles to manufacturing and practical uses-civil, mechanical, aeronautical, chemical, electrical, photographic, sound, automotive, marine, heating and refrigerating, transportation, environmental engineering, etc.

Environmental Science

Study of pollution (air, water, and land) sources and their control; ecology

Marine Biology

Study of marine ecosystem, phycology, invertebrate zoology, ichthyology, marine biotechnology, aquaculture, oceanography, marine conservation, fisheries science.

Medicine and Health

Study of diseases and health of humans and animals-dentistry, pharmacology, pathology, ophthalmology, nutrition, sanitation, dermatology, allergies, speech and hearing, etc.

Microbiology

Biology of microorganisms - bacteriology, virology, protozoology, fungi, bacterial genetics, yeast, etc.

Physics

Theories, principles, and laws governing energy and the effect of energy on matter-solid state, optics, acoustics, particle, nuclear, atomic, plasma, superconductivity, fluid and gas dynamics, thermodynamics, semiconductors, magnetism, quantum, mechanics, biophysics, etc.

Space Science

Astronomy, planetary science, etc.

Zoology

Study of animals—animal genetics ornithology, herpetology, entomology, animal ecology, paleontology, cellular physiology, circadian, rhythms, animal husbandry, cytology, histology, animal physiology, invertebrate neurophysiology, studies of invertebrates, etc.

Botany

The scientific study of plant life. As a branch of biology, it is also called plant science(s), phytology, or plant biology. Botany covers a wide range of scientific disciplines that study plants, algae, and fungi including: structure, growth, reproduction, metabolism, development, diseases, and chemical properties and evolutionary relationships between the different groups.