Category Descriptions

Biological Science Categories

Biology: The study of living organisms, including the study of animals (zoology), plants (botany) and microorganisms (microbiology). Projects which should be entered into the biology category examine the structure, function, growth, origin, evolution and distribution of living things.

Health/Medicine: The study of health and disease in humans or animals, including disease diagnosis, causes of disease, ways of treating disease, medical procedures, alternative therapies for diseases, or the way in which the human or animal body functions normally.

Environmental Science: The study of the interactions among physical, chemical and biological components of the environment, including pollution (land, air and water), ecology, biodiversity, sustainability of the environment and causes of environmental degradation related to human activities.

Behavioral Science: The study of human and animal behavior through systematic observation and experimental intervention. Behavioral sciences investigate the decision processes and communication strategies within and between organisms in a social system.

Physical Science Categories

Chemistry: The study of the nature and composition of matter and the laws governing it – physical chemistry, organic chemistry, inorganic chemistry, materials, plastics, fuels, pesticides, metallurgy, soil chemistry, food chemistry, etc.

Physics: The study of the universal laws that govern matter, energy, space and time, including solid state, optics, acoustics, particle, nuclear, atomic, plasma, superconductivity, fluid and gas dynamics, thermodynamics, semiconductors, magnetism, quantum mechanics and biophysics.

Math/Computer Science: The study of formal logical systems, patterns, and numeric computations, and the application mathematical principles to the world. The study and development of computer software and hardware and associated logical devices.

Earth/Space Science: The study of physical subjects related to the earth or space, including geology, mineralogy, physiography, oceanography, meteorology, climatology, astronomy, speleology, seismology and geography.

Engineering: The study of the application of scientific principles to manufacturing and other practical causes, including civil, mechanical, aeronautical, chemical, electrical, photographic, sound, automotive, marine, heating and refrigeration, and transportation engineering.