

Category Descriptions

Elementary Categories

1. Life Science:

Biology, botany, zoology, animal behavior, environment/ecology, health/medicine, food/nutrition, and social sciences such as anthropology and psychology.

2. Earth Sciences:

Geology, mineralogy, physiography, oceanography, meteorology, climatology, astronomy, geology, speology, seismology, geography, etc.

3. Physical Science:

Examines the nature and interaction of energy and/or non-living matter. This includes fields such as: engineering, physics, chemistry, etc.

4. Consumer Science: Only one project per school or OST program

The testing and comparison of consumer products for their intended use.

5. Team Projects: Only one team project per school or OST program

All disciplines—multidisciplinary or interdisciplinary. Projects consist of 2 or 3 team members.

Secondary Categories

1. 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.

2. Biochemistry:

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

3. Botany:

Study of plant life—agriculture, agronomy, horticulture, forestry, plant taxonomy, plant physiology, plant pathology, plant genetics, hydroponics, algae, etc.

4. 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.

5. Computer Science:

Study and development of computer software and hardware and associated logical devices.

6. Earth and Space Sciences:

Geology, mineralogy, physiography, oceanography, meteorology, climatology, astronomy, geology, speology, seismology, geography, etc.

7. 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.

8. Environmental Sciences:

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

9. Mathematics:

Development of formal logical systems or various numerical and algebraic computations, and the application of these principles— calculus, geometry, abstract algebra, number theory, statistics, complex analysis, and probability.

10. Medicine and Health:

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

11. Microbiology:

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

12. 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.

13. Zoology:

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

14. Team Projects: Only one team project per school or OST program

All disciplines—multidisciplinary or interdisciplinary. Projects consist of 2 or 3 team members.

15. Consumer Science: 7th/8th Grade Only

The testing and comparison of consumer products for their intended use.