Holy Cross Regional Catholic School Science Fair

Topics Grades 6 – 8

Please choose from one of the following topics. Please do not use live animals in your experiment. Do not use human subjects, even for a survey. Projects involving the testing of antibacterial products or disinfectants, the growth of molds, or the growth of bacteria are prohibited.

Atmosphere & Weather Heat Space / The Universe Light Sound Waves & Pressure Watersheds Cellular Organization Genes & Proteins Adaptation Atomic Structure
Acids & Bases
Chemical Reactions
Simple Machines

Friction

Solutes & Solubility

Additional Topics ** There is no Consumer Product Testing this year. **

Behavioral and Social Sciences

Human and animal behavior, social and community relationships—psychology, sociology, anthropology, archaeology, ethology, ethology, 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.

Botany

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

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Earth Science / Space Science

Geology, mineralogy, physiography, oceanography, meteorology, climatology, speleology, seismology, geography, astronomy, planetary science, 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.

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, probability.

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.

Team Projects

(Two students per team, must be same from same grade, 7^{th} & 8^{th} grades only. One logbook, abstract, and project display per team, however each team member must submit their own research plan, report, and registration forms.)