

High School Level:

An individual student at the high school level should identify a project that is challenging, and one for which no immediate answer is obvious. Topics selected by high school students are often investigations which continue over several years, often with the help of a teacher at the school, a professor at a nearby college or university, or a local community business person. Incorporating computer programming or designing tests using sophisticated experimental techniques may be part of the process at this level. Remember that using the highly technical processes or the high powered computer program alone does not constitute an outstanding science fair project; using these techniques and tools to come to new understandings and findings, however, combined with following the scientific process, and supporting these with sufficient research would constitute an excellent effort.

*topics might include:

Studying a stream or pond near the school or near the student's home for indications of change in the ecosystem caused by an outside agent or force.

Collecting soil samples from a few carefully selected sites for laboratory analysis for evidence of pollution or contamination from pesticides or herbicides.

Designing a computer program to solve a problem faced by the school or a local company.

Developing a hybrid plant species which would tolerate higher levels of acidity on the soil or lower amounts of water.

Studying the effect on the local mosquito population of a concerted effort to encourage the establishment of a local bat population through strategic placement and maintenance of bat houses.