

## Exploring Science

The "Exploring Science" IP is an interest project from the Girl Scouts of San Diego-Imperial Council. Do seven activities including all starred activities. It is recommended the project be done in conjunction with someone familiar with at least one field of science.

\*1. The broad subject of science incorporates many fields of interest. In this requirement you will become familiar with three of those areas by exploring them in depth. From the suggested list below pick three areas that interest you and learn more about them. Suggested activities are: looking in the local library for books or magazines on science, talking with your science teachers, visiting a place of business or laboratory and talking to scientists working in one or more of the fields.

! computer science

! engineering

! math

! geology

! biology

! medicine

! chemistry

! psychology

! physics

! oceanography



For the rest of the interest project choose one area from the list above to specialize in.

\*2. Explore your chosen area in more detail to find out about the many sub-disciplines it encompasses. Find out about the careers available in this area, the types of problems being studied, the tools used for the research, and the questions being asked.

3. Women have made many contributions to science. Find out about one woman in your chosen field. What were her contributions to the field and when were they made? What was her background?

\*4. The first step in undertaking any scientific investigation is writing a proposal for the project you would like to study. Write up a proposal for a science project that interests you in your chosen area. The proposal should include: background information (what has already been done that is related to your idea), a hypothesis, a description of the proposed experiment, and a list of equipment and resources needed. Show the finished proposal to a teacher, scientist, or your consultant on this project for their approval.

\*5. The most important part of science is analyzing an experiment and figuring out what can be concluded from the results. (An experiment does not have to be successful to be meaningful. Some important discoveries were made from failed experiments.) Here you should attempt to carry out the project described in activity #4. Write a summary of the results and a conclusion. Discuss your project with the person who approved it.

\*6. A second important part of all scientific work is sharing the results and knowledge you have gained with others. In this spirit, present your project to a group of people. This can be in the form of a science fair, in a troop meeting or to your science class.

7. Discover more about other areas of science by attending a science fair or visiting a science/technology museum.

(Example: The Greater San Diego Science Fair, National Chemistry Expo.)

8. Visit a place in your community involved in some aspect of science and technology. Find out what problems they are trying to solve and methods they use to study their problems. List some of the positions available and the educational requirements for them.

9. Help a younger group of girls (or children) with a science activity. Suggestions are: holding a science day, helping Junior Girl Scouts earn a science badge, or Brownie Girl Scouts earn a Try-It, or if you are a Senior Girl Scout, helping a young group of Cadette Girl Scouts start on this interest project.

Approved by Board of Directors 1/12/89

Program links:

Brownie Girl Scout Try-Its: Science in Action, pg. 126; Science Wonders, pg. 130

Junior Girl Scout Handbook: Science Discovery, pg. 200; Science in Everyday Life, pg. 204; Science Sleuth, pg. 208

## **See also**

[List of Council's Own Interest Projects](#)

## **External Links**