**Seton Science Fair Abstract Guidelines**

**Format:**

**1.Heading Outline:** ( See example)

# *Student's Name*

*Project Title*

*Project Category*

*Project Number*

## 2.Word Count:

## 250 Word Abstract

**3.Typed, single spaced, on one side of sheet of paper**

## 4.Grammar:

## 3rd Person, Passive Voice, Past Tense (ex. “A water bath was prepared.” not "I made a water bath.")

## 5.Copies:

## 1 copy of 1st Draft (10 Copies to Science Teacher for Final Draft -These copies are used by the judges who will evaluate your science project.)

**Body (Text) of Abstract**

a*)* **purpose** of the experiment with **hypothesis** *(2-3 sentences)*

b) **experimental design** (Ind Var, Control, Dep Var, # Trials)

c) **procedure** *(2-3 sentences)*

d**) data** *(1-2 sentences)*

e**) conclusions** and **applications** *(2-3 sentences)*

An abstract is a summary that includes a brief summary of the purpose, the hypothesis (preferably identifying the independent and dependent variables (including an identification of the control), an overview of the procedures used, give the key analyzed data (averages, modes, etc), a brief statement of the observations, a brief statement of the conclusions based on the data, and a re-evaluation of the hypothesis in light of the results. It should also include any possible research or practical applications.

Only minimal reference to previous work may be included. The abstract **must NOT include the following**:

*a*) acknowledgments (including naming the research institution and/ or mentor with which you were working), or self-promotions and external endorsements

b) work or procedures done by the mentor

**Note:** For the science fair, one copy of the abstract should accompany the research paper at your project site.

SAMPLE ABSTRACT

**John Smith**

**Does Presoaking Seeds Influence Germination Rates?**

**Plant Sciences**

**PS25** *(Denotes the category* ***Plant Sciences****, and the project number* ***25****)*

When planting seeds, the often long germination time can delay appearance of new sprouts. Can presoaking seeds in water interrupt the seed’s dormancy to begin hydrolysis of starch? The hypothesis of this experiment was: Presoaking seeds in distilled water will speed up their germination rate. The independent variable in the experiment was the time allowed for soaking of the seeds (control set up did not soak the seeds). The dependent variable was the rate of seed germination (time to first sprout) .

50 each radish, bean, and pea seeds were presoaked at predetermined intervals (48 hours, 24 hours, 3 hours, and no soaking) and planted in potting soil. Time to first appearance of new sprouts was recorded.

The average sprouting time for seeds pre-soaked 48 hours was 48 hours, for seeds soaked 24 hours was 60 hours, and for seeds soaked 3 hours or not soaked at all was > 96 hours. Seeds sprouted faster that had been presoaked at least 24 hours. However, there was no difference in the sprouting times of the seeds that were soaked for 3 hours as compared with no soaking. The data suggested that presoaking seeds at least 24 hours did speed up their germination rate. This method may help gardeners speed up the seed germination process. In addition, if only sprouting seeds are planted in a garden, this method may improve the yield of a garden.