



Dear Teachers,

Thank you for providing students with an opportunity to design and carry out a science fair project. This process helps students learn and apply the scientific method through the practice of inquiry. It will also help to support transition into Next Generation Science Standards and “doing science” rather than







## **Example: Outline of a Beginning Project**

**Question:** Do bean seeds have a top and bottom – does it matter how they are planted?

**Hypothesis:** I think that people who grow large gardens or farmers planting large numbers of bean plants don't have time to look at each seed and make sure it is planted in the correct position. This makes me think that it doesn't matter in which position beans are planted. If so, then bean seeds planted with one side up will grow equally well as those planted with the other side up.

**Experiment**

## **Areas of Focus:**

Categories in the WCCUSD Science Fair for secondary schools, as well as in the Bay Area Science Fair include:

- Behavioral
- Biological
- Physical
- Math/Computers

At the elementary level, it may be appropriate to judge projects in categories, or simply all together. Students should feel free to investigate and experiment on any topic that is of interest to them.

Evaluation should be done after comparing a given student's project with all other experiments in the class and also with regard to absolute standards of quality and excellence, keeping the skills and knowledge appropriate for a given grade level in mind. Guiding questions to consider are as follows:

### Project Components:

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When checking projects into the fair, make sure the student's name only appears on the back of the project board. Assign each project a number and keep a master list with student name, grade level, teacher's name, and project number in order to ensure impartiality during the judging process. Group projects by grade level so that judges can easily be assigned a set of projects within the same grade level to evaluate.

As a general rule of thumb, each project should be evaluated independently by multiple judges. Average the scores for final results. In cases where there is a large discrepancy between two judges' scores, a third judge should evaluate the project before averaging the results.

When recruiting judges, consider the following sources:

- Fellow teachers at your site
- Retired teachers or friends of teachers
- Parents – especially those who may work for or know others who work for science or technology companies
- Students from a high school science class
- College students in a science major

On the next few pages are some examples of judging forms and rubrics that can be used to evaluate projects.









## Science Fair Judging Rubric

Grade: \_\_\_\_\_ Project #: \_\_\_\_\_ Room #: \_\_\_\_\_ Teacher: \_\_\_\_\_