CALIFORNIA STATE SCIENCE FAIR
2001 PROJECT SUMMARY

Your Name (List all student names if multiple authors.)
Alexandra N. Fesunoff

Project Title (Limit: 120 characters. Those beyond 120 will be ignored. See pg. 9)
Improving Recycled Paper

Science Fair Use Only

J1008

Division
_X_ **Junior (6-8)** _ **Senior (9-12)**

Preferred Category (See page 5 for descriptions.)
10 - Materials Science

Abstract (Include Objective, Methods, Results, Conclusion. See samples on page 14.)
Use no attachments. Only text inside these boxes will be used for category assignment or given to your judges.

This science project is about how recycled paper can be improved by adding materials. While working on this project, several batches of paper were made. Each sheet of paper had either polyester, grass, cotton or tree bark added to them. Tests were performed on the batches of paper for strength, surface quality and brightness. During the second phase of this experiment, more tests on the paper were conducted. Using a densitometer determined more accurately the paper' brightness providing new and more conclusive information on the paper. In my experiment, research also was done on the subject of recycled paper. It was found in many books that cotton is preferred when making fine quality paper. In the first set of tests, cotton turned out to be the most favorable additive. After further review, using a densitometer, which is more subjective, the polyester turned out to be the best all around additive.

Summary Statement (In one sentence, state what your project is about.)
Adding commonly found materials might improve the quality of recycled paper.

Help Received in Doing Project (e.g. Mother helped type report; Neighbor helped wire board; Used lab equipment at university X under the supervision of Dr. Y; Participant in NSF Young Scholars Program) See Display Regulation #8 on page 4.
Father's work loaned the densitometer. Mom helped with some of the typing.