

## PUNK GLASSES

BASIC PROJECT PROCEDURE: Take a strip of plastic, draw on a design cut and sand the shape, and bend to form glasses.

### GENERAL INFORMATION:

kind of plastic	-----	acrylic
form of plastic	-----	sheet
processing method	-----	hand fabrication
family	-----	thermoplastic
characteristics of process	-----	file, sanding & saw marks

### TOOLS AND MATERIALS:

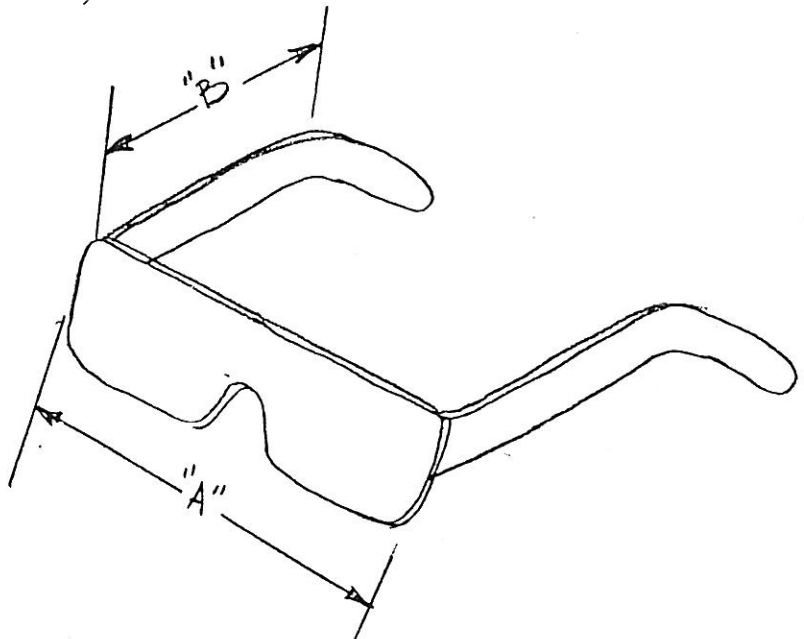
strip of plastic 2" x 18"	files
scroll saw	sandpaper
strip heater	steelwool
machine sander	

### SAFETY PRECAUTIONS:

1. Be very careful in operating machine sander, band and scroll saw
2. Use care to avoid burning yourself on the strip heater.
3. Wear safety glasses when filing sanding, steelwooling , and using the machines..

### PROCEDURE:

1. Check the pattern (glasses) for fit. Have a friend help determine the exact measurements. Distance "A" is between 5-6 inches, While distance "B" is between  $3\frac{1}{2}$  -  $4\frac{1}{2}$  inches.



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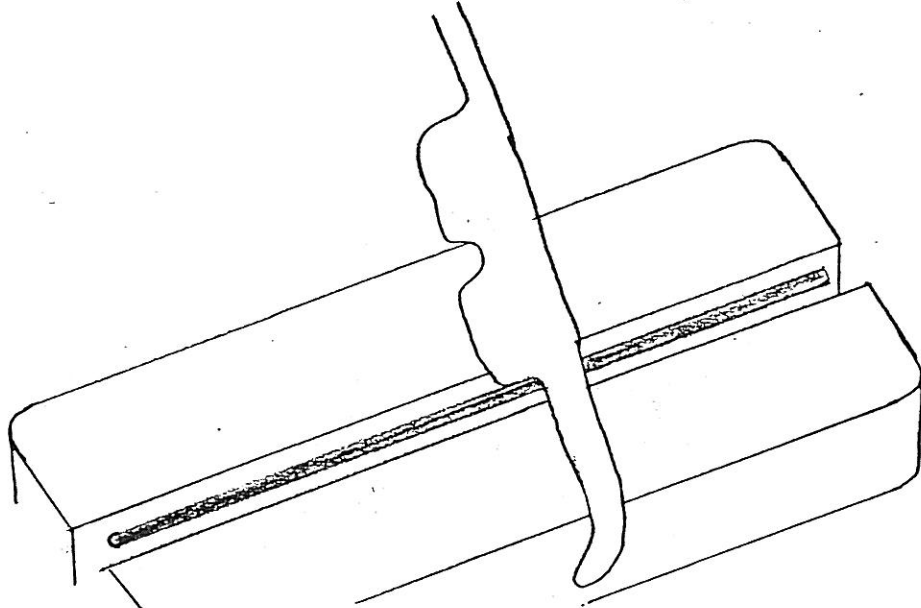
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2. Trace pattern and modify to your sizes. Example, Your "A" measurement may be  $3 \frac{3}{4}$ " while Your "B" measurement may be  $5 \frac{1}{4}$ ".
3. Redesign the pattern and modify it to your sizes.
  - bridge over nose should fit comfortably
  - left lens should be identical to the right lens
  - where the bends are made for the temple will determine if the glasses will fit or fall off.
  - use care to properly locate the curve of the temple (around the ear)
4. Cut your design out of light cardboard and keep it symmetrical.
5. Choose the colored plastic you wish to use and place and trace the pattern. Note: The paper will stay on the plastic until you are ready to bend.
6. Use a scroll saw or coping saw and cut out the shape. Stay outside the line when cutting. Hold the plastic firm against the table when using the scroll saw, and keep the plastic low in the vise when using the coping saw.
7. Machine sand as much as you can. Use care not to over sand.
8. Using files and sanding dowels, smooth down the edges.
9. Use fine sandpaper wrapped around files and dowels to further smooth the plastic.
10. Finish smoothing the plastic by using steelwool. Rub until all marks on the edges are gone.
11. Check with Mr. Norgel when you are through sanding - steelwool and are ready to bend.

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12. Remove the papered plastic and place the location of the bend mark above the rod of the strip heater. Be very careful to bend in the exact location otherwise the glasses will not fit.



13. Periodically test by slowly bending plastic but do not force. If you do force, the plastic will break. When the plastic is soft like licorice, carefully bend to shape. Repeat steps for other temple.
14. When the project is completed, place a piece of tape with your name on it and turn the project in for a grade.

### TIME ALLOCATION:

1 1/2 periods

### GRADES

1.- design  
1 - sanding  
1.- bending  
1.- cutting shape  
1 - uniformness - overall

## Inventions

### Equipment Utilization Activity No. 2

#### Introduction

You are surrounded daily by many different machines in our lab. Each machine has applications that are unique. Since you will be using these machines for some very different types of projects in this class, you should have a very clear understanding of what each machine is capable of doing. You will be introduced to each machine by the instructor, then it is your job to invent a solution to the problem that is stated below.

#### Problem Statement

Invent and design a product costing less than \$5.00 and that requires the use of every machine in the shop. The product should have practical use and aesthetic value.

#### Design Criteria

1. You must make appropriate use of the following machines:
  - Band saw
  - Jig saw
  - Drill press
  - Sander
  - Lathe
2. You may not use more than \$5.00 worth of materials.
3. The product must be functional and have aesthetic value.

#### Evaluation criteria

1. Does it use all machines appropriately?
2. Is it a usable product?
3. Does it look well made and finished with quality in mind?

# NEW BERLIN HIGH SCHOOL TECHNOLOGY EDUCATION PROGRESS REPORT

Student: \_\_\_\_\_

Class: \_\_\_\_\_

Date: \_\_\_\_\_

Satisfactory Needs Improvement

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## ATTITUDE AND COOPERATION

1. Listen to directions and demonstrations.
2. Wear safety glasses and lock lockers.
3. Put projects and tools in proper place.
4. Cooperative safe behavior during class.
5. Keep notebook in order and up to date.
6. Come to class on time.
7. Follow class rules
  - No Jackets
  - No Swearing
  - Respect others
8. Work well with other students
9. Accept Consequences - Time outs  
Detentions and Warnings.

Satisfactory Needs Improvement

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## USE OF TIME DURING WORK PERIODS

1. Steady progress toward a finished project.
2. Amount of work completed per class.
3. Do fair share of clean-up assigned.
4. Meet deadlines set.

Satisfactory Needs Improvement

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## WORKMANSHIP

1. Organized and works accurately
2. Have understanding of what is to be done.
3. Follow correct procedures set by instructor.
4. Awareness of quality and neatness.
5. Project evaluation by instructor.
6. Work independently without relying on  
other students to copy.

Satisfactory Needs Improvement

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## KNOWLEDGE OF SUBJECT

1. Projects/Drawings/Units.
2. Notes taken in class.
3. Demonstrate knowledge of safety rules.
4. Written assignment grades.
5. Test grades and worksheets.

Satisfactory Needs Improvement

Satisfactory Needs Improvement

Absent \_\_\_\_\_

Tardy \_\_\_\_\_

JFKRUMRICH

**EVALUATION** A = 100 - 93, B = 92 - 85, C = 84 - 77, D = 76 - 70, F = 69

SUBJECTIVE GRADING SYSTEM A(100), B+(92), B(88), C+(84), C(80), D(73), F (69)