

## AUTO PRODUCTION UNIT

### INTRODUCTION

This is a scope and sequence model which demonstrates the initiation of a creative idea to the designing, manufacturing, and marketing of the idea.

This is a project which students get very involved because they can roleplay, exercise leadership skills, use the design process to find solutions and use problem solving techniques. They must apply concepts in math, science, and technology to create the product and they must apply skills in art, language and business to market the vehicle. The unit takes only 5-10 days and uses materials that can be found in the typical classroom. This unit is appropriate for all ages and skill levels and is to be run in groups of 3-5 students. A marketing display should accompany each auto so that they may be judged by students, teachers, parents, administrators, and guests from industry.

A track can be built with two lanes at a 30 degree incline to test the speed of the autos. The best of each class can race to find the school champ. If other schools in your district or region are doing the same unit you can race for the best school team. We will be holding the state championship races and displays at the Washington Technology Education Association Conference each year. For more information and assistance contact:

Kjell-Jon Rye  
Bellevue High Technology  
601-108th Ave  
Bellevue, WA 98004  
Tel. (206) 455-6146

### TIME TABLE

ONE	TWO
Introduction to Unit	Three View Drawing
Job Responsibilities	Prints/Copies
Rough Sketches	Layouts Drawn
THREE	FOUR
Features Designed	Features Drawn on Parts
Advertising Theme	Ad Layout
Cut Materials	Wheel assembly
FIVE	SIX
Assembly of Auto	Evaluation Day
Set up Display/Advertisement	Vote by Students
Check Weight	Weigh In/Race on Track

## AUTO PRODUCTION UNIT

### RULES

#### MATERIAL:

- Drafting paper
- White Glue
- Wood Dowels for Axles

#### PAYLOAD:

- Must Carry a gum eraser (1-2x1x1 or 2-1x1x1)
- Must be able to remove payload

#### SIZE:

- Under 3" Wide
- Under 8" Long
- Under 60 Grams with Payload
- More than 2 wheels
- Two Working Axles

#### IDENTIFICATION: on vehicle and advertisement

- Name of School and Type of School (K-6, JrHS, HS, Col.)
- Month and Year Completed
- Names of Students in Group (3-5 in a group)
- Teacher's Name
- Period and Group Number on License Plate
- Company Name Clearly Visible on all work
- Town and State Names

#### ADVERTISEMENT: on display

- Anything Goes To Sell the Product
- Should Have A Multi View Drawing
- Should have a Pictorial Drawing on Advertisement

# AUTO PRODUCTION UNIT

## EVALUATION

ENGINEERING	0- NO SHOW	25%
TEST TRACK	1- NO FINISH	
	2- FINISH	
	3- PLAYOFFS	
	4- CLASS CHAMP	
	5- GRAND CHAMP	
MARKETING	0- PURE JUNK	25%
STUDENTS	1- SLIGHT BLUNDER	
	2- NOT BAD	
	3- SUCCESS	
	4- RADICAL	
	5- AWESOME	
MANUFACTURING	0- POOR	25%
GUESTS	1- FAIR	
	2- O.K.	
	3- GOOD	
	4- VERY GOOD	
	5- EXCELLENT	
EMPLOYEE	0- NO HELP	25%
GROUP	1- LIMITED WORK	
	2- O.K.	
	3- GOOD	
	4- VERY GOOD	
	5- FANTASTIC	
		100%

COMPANY NUMBER

STUDENT NAME

# AUTO PRODUCTION UNIT

## JOB RESPONSIBILITIES

COMPANY	DESIGNATED	PERFORMED
NAME _____		
NUMBER _____		
PRESIDENT	_____	_____
ENGINEERING		
DEPT. HEAD	_____	_____
ROUGH SKETCH	_____	_____
MULTI-VIEW	_____	_____
PRINTS	_____	_____
MANUFACTURING		
DEPT. HEAD	_____	_____
LAYOUT		
TOP/BOTTOM	_____	_____
SIDES	_____	_____
WHEELS	_____	_____
DETAILS		
TOP/BOTTOM	_____	_____
SIDES	_____	_____
WHEELS	_____	_____
ASSEMBLY	_____	_____
MARKETING		
DEPT. HEAD	_____	_____
FEATURES	_____	_____
AD SKETCH	_____	_____
AD LAYOUT	_____	_____