

This programme is basically a 1:20 scaled down version of real Double A Fueller type drag racing. Balsa is the best wood to use because the children can shape it quickly and get a good finish using sanding sealer before applying spray paint. With an electronic timer kids can time the cars to 1000th of a sec  
 We use standard wheels. As long as the kids stay within the specifications, they can make their cars to any shape, use any type of axle system, material and lubricants.

## TITLE **CO2 DRAGSTERS 'SHINE SHOW AND SPEED'**

		<b>Learning Experiences</b>				
WEEK	ACTIVITY	DESIGNING	MATERIALS	INFORMATION	SYSTEMS	SEDCO ASSESS
1	explain drag racing; show pictures of dragsters; show model; drawing the dragster	outline specifications; thumbnail sketches; designs	balsa block; marking; drilling; bandsawing	what is drag racing?	competition explained; show and shine; speed	<i>Contributing own unique design ideas.</i>
2	Preparing the blank for the car; shaping the dragster		begin shaping; files; rasps; 60, 80 grit; 180 grit' abrasives	placing wheels. Testing for best position by ramp running.	three engineering principles to ensure speed.	
3	shaping the dragster	designing the colour scheme using simple graphics techniques.		Newtons 3rd law of motion; using balloons; co2 gas bulb ... how they work	3 E P: weight; friction; aerodynamics	<i>Learning to use a range of tools for shaping and finishing.</i>
4	finishing the dragster (painting/spraying)		paint application; misting techniques for spray application.	Graphics techniques of simple layout for plans explained		<i>Insight on the effects of weight, aerodynamics &amp; friction on speed.</i>
5	decal decorations and wheel mounts	decal cutting using vinyl	vinyl from the local signwriter.Using a vynil cutter and related software		vinyl cutter as tool for stylish graphics and computer software that backs it.	
6	decal decorations and wheel mounts; testing for friction		ramp	testing on ramp - roll to weight comparison.		<i>Completing projects with craftsmanship.</i>
7	Show and shine; Drag racing	evaluation of vehicle designs students asses each other's work			organising the races; timing systems	<i>Participating with enthusiasm and focus.</i>
<b>E S S E N T I A L</b>	A. Investigate, use and understand products, systems and environments.			<b>INFORMATION</b>		
	B. Develop knowledge of the principles and processes of technology.			<b>WORK &amp; STUDY</b>		
	C. Identify and explore needs and opportunities.			<b>PROB.SOLVING</b>		
	D. Choose and use materials and tools skilfully and safely.			<b>COMMUNICATION</b>		
	E. Design technological solutions.			<b>SELF MANAGEMENT</b>		
	F. Work to agreed specifications and quality standards.			<b>SOC. &amp; COOPERATIVE</b>		
	G. Empower learners with the confidence... technological society			<b>PHYSICAL NUMERACY</b>		
			take increasing responsibility for own learning/work;			
			design and make;			
			convey and receive information, instruction, ideas,			
			manage time effectively;			
			learn to use tools and materials efficiently and safely			
			organise information to support logic and reasoning;			