

# ■ ■ ■ DENFORD

## PROUD FOUNDERS & SPONSORS OF...



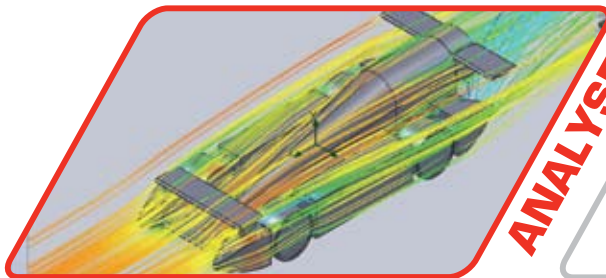
**BUSINESS PLAN**

**NEW! F1 IN SCHOOLS CURRICULUM RESOURCE**  
SEE PAGES 68-69

Working in teams of between 3 and 6, each student is assigned roles. The team prepares a **business plan**, develops a budget and raises sponsorship. Teams are encouraged to collaborate with Industry and forge business links.

Using 3D CAD (Computer Aided Design) software, the team **designs** a Formula One™ car of the future.

**DESIGN**



**ANALYSE**

Aerodynamics are **analysed** for drag coefficient in a virtual reality wind tunnel using Computational Fluid Dynamics Software (CFD)



**MAKE**

Using 3D CAM (Computer Aided Manufacture) software, the team evaluates the most efficient machining strategy to **make** the car.

Aerodynamics are **tested** in wind and smoke tunnels.

**TEST**



**RACE**

Teams are judged on car speed, as well as supporting evidence of their design, verbal presentation and marketing display stand in "the pits".

[www.f1inschools.co.uk](http://www.f1inschools.co.uk)

# INNOVATIVE EDUCATIONAL PROJECTS

The F1 in Schools Technology Challenge encourages students to explore a variety of engineering and manufacturing processes by using CAD/CAM and CNC technology to produce their own model F1 Car of the Future. As founding partners of the F1 in Schools Technology Challenge, Denford supply a wide range of equipment and training to get you to the starting line. In addition, Denford also support the 4x4 in Schools Technology Challenge and the Jaguar Primary School Challenge.



This National Challenge offers an exciting opportunity to encourage the development of our engineers of tomorrow, to engage young people in the complexities and challenges of design engineering, and to demonstrate the rewards of choosing engineering as a career.

Sponsored by:

Land Rover, The IET,  
JCB, Denford, and SEMTA.

[www.4x4inschools.co.uk](http://www.4x4inschools.co.uk)



## JAGUAR

Primary School Challenge

F1 in Schools - Jaguar Primary School Challenge engages with Primary School Students and Teachers across the UK in the same way as the Secondary School Challenge.



The challenge is open to pupils aged 5-11 years old (key stages 1 & 2) and involves designing and manufacturing the fastest car possible in either the 2D or 3D challenge, emulating the design and engineering processes employed by real engineering companies, such as Jaguar Cars.

Sponsored by:

Jaguar Cars, and Denford Limited

[www.f1inschools.co.uk/primary](http://www.f1inschools.co.uk/primary)

To get you up and running, Denford also offer a range of CNC Routers, Lasers, Milling Machines and Lathes, together with tooling packages, workholding kits and courseware.

Total Commitment to Manufacturing Technology in Education and Training Worldwide. ISO9001 compliant.

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