

NEW

# PRIMARY STEM PROJECT

POWERED BY DENFORD®

Ideal introduction to

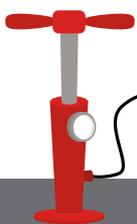
  
in Schools

Make STEM learning exciting and fun  
with this innovative classroom resource!

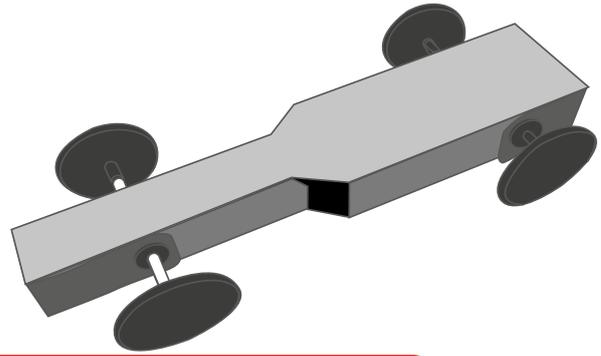
## What students will learn:

- Science applied to the real world
- The process: research, design, make, test, modify, race
- Teamwork
- How to closely follow instructions
- Speaking and listening skills
- Recognising personal strengths and strengths in others

Introduce STEM learning at an early age, with the Denford Primary STEM Project – encouraging your Primary Students to design their own miniature racing car, then go on to test its aerodynamic qualities using the unique roll-out race track, and re-evaluate their designs to produce a winning car!

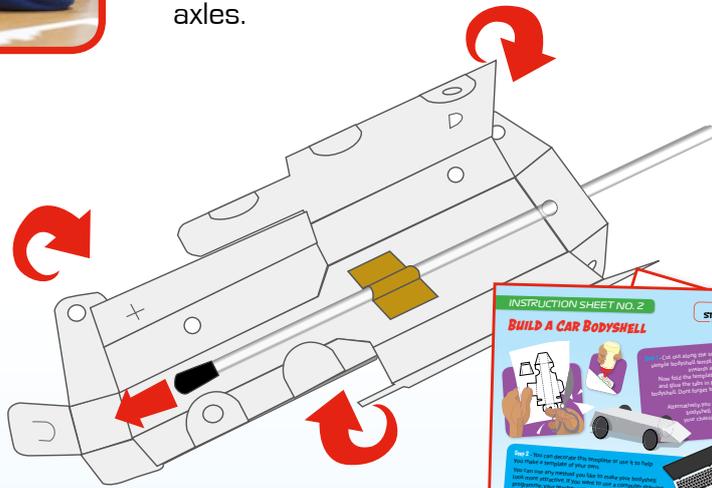
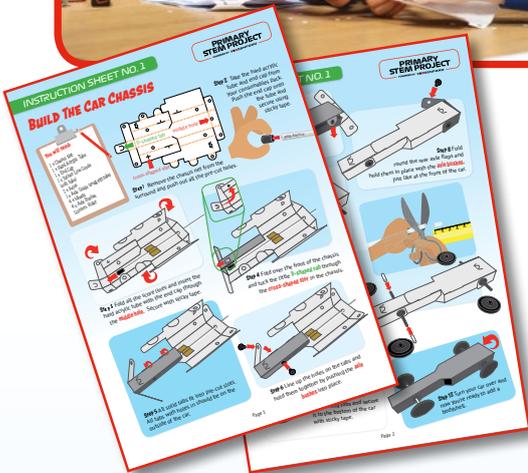


## DESIGN / MAKE



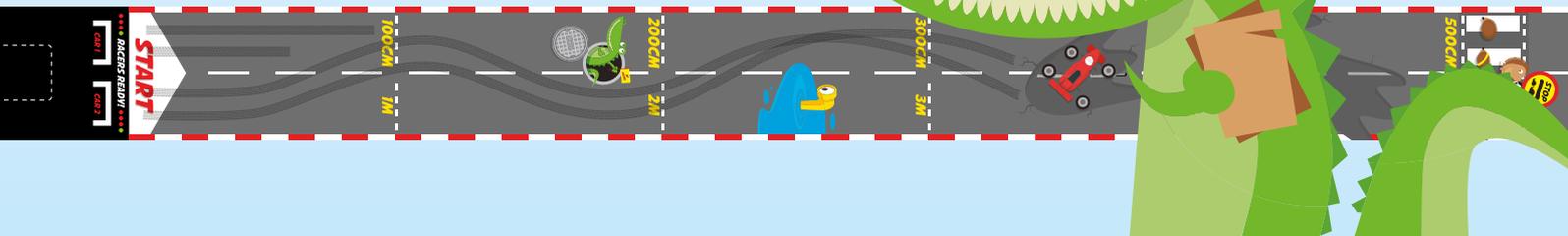
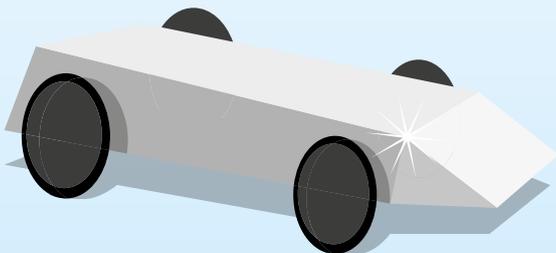
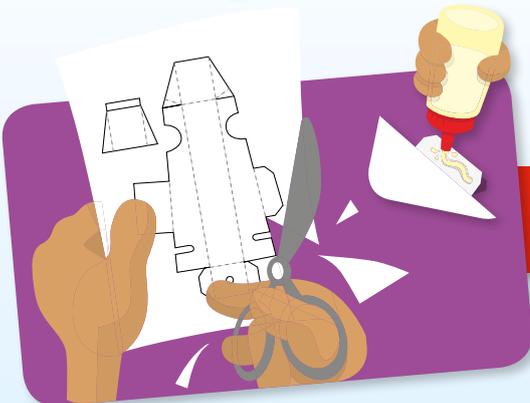
### BUILD A CAR CHASSIS

Students start the process by folding a pre-stamped chassis net, closely following the instructions provided, to make a basic 3D racing car, to which they add wheels and axles.



### DESIGN / BUILD A CAR BODYSHELL

Following research, students go on to design, make and decorate a bodyshell to create their own miniature racing car, using the template provided with the instruction sheet. Their research will be based on scientific knowledge on subjects such as air resistance, gravity and air pressure, which are incorporated into our free of charge Fact/Activity Sheets.





# TEST / RACE

## LET'S RACE!

Once the cars are finished, students are able to test the aerodynamic qualities of their designs, using the Launch System and Race Track to race their cars. In this **exciting** stage of the project, students get to see how their ideas and designs shape up against others.

It's not just about **winning**, but about:

- Seeing ideas come to life
- Developing sportsmanship



## TEST, EVALUATE & MODIFY

After racing, students can start to think about how they could improve their designs to produce an even faster car! They need to consider what forces are acting on the car when it races down the track - helping them to make informed decisions on the shape, size and weight of their car and how these will affect its performance.

*Aerodynamic means having a shape which reduces the drag from air moving past*



### Primary STEM Project Equipment

#### Primary STEM Project Pack: ARCP02

- Supplied in storage box with lid
- Includes:
- Primary STEM Project Chassis Nets (Pack of 100)
  - Propulsion Tubes (Pack of 50)
  - Propulsion Tube End Caps (Pack of 50)
  - Axle Guides (Pack of 50)
  - Tether Guide Tubes (Pack of 50)
  - Primary Project Wheels (Pack of 100) x 2
  - Axle Bushes (Pack of 100) x 2
  - Axles (Pack of 100)

Items can be purchased separately

#### Primary STEM Project Launch System: F1AR001000A

- Includes:
- Air Launch Control Box
  - Air Launch Pump - up to 8 bar
  - Loading Pins
  - Tether Block Assembly
  - Tether Guide Line 0.6 mm dia

#### Primary STEM Project Roll Out Race Track 10m: F1AR/0900



## RESOURCES & ACTIVITIES



The Denford Primary STEM Project brings real-life applications of STEM to your classroom in a fun and exciting way. Classroom Activity Sheets are available free of charge to inspire students and help them develop their STEM skills through practical, hands-on activities, encouraging creativity, problem-solving, communication, confidence and teamwork.



Free downloadable materials are available to help you to deliver inspirational and interactive lessons for STEM-related subjects and more:-

- Curriculum Resources, mapped to the Primary National Curriculum, covering Science, Technology, Engineering and Maths
- Instruction Sheets
- Fact Sheets
- Classroom Activities
- Videos



**Building life skills, not just STEM...**

The Project also lends itself to teaching a wide range of subject areas across the curriculum, including Art & Design, English, Geography, History, PE and Nutrition.

[primarystemproject.com](http://primarystemproject.com)