



IF YOU WERE an **ENGINEER** WHAT WOULD YOU DO?

- ▶ Open to entries from learners between the ages of 3 and 19yrs
- ▶ 25 Regional awards and exhibitions with winners chosen from each age group entered
- ▶ Every entry read by an engineer and named certificates sent to pupils with a grade (Pass, Merit, Distinction and Shortlisted)



Interacting with engineers

Primary Engineer Programmes
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The screenshot displays a grid of 24 video thumbnails from the Primary Engineer YouTube channel. Each thumbnail includes a video title, a duration, and view/viewer information. The videos cover a wide range of topics, including interviews with industry professionals, educational content for children, and project showcases.

Video Title	Duration	Views / Date
An interview with Masoud Hakimi, Anglia Ruskin...	46:42	19 views • 7 days ago
Fiona Howarth & Claire Miller, Octopus Electric Vehicles	54:00	53 views • 8 days ago
Lorna Slater, Co Leader of the Scottish Green Party	44:49	21 views • 3 weeks ago
Prof. Will Drury Challenge Director at UK Research and...	56:49	25 views • 3 weeks ago
Online engineer interview Keith Scobie-Youngs,...	53:40	198 views • 1 month ago
Online engineer interview with Deiniol Lewis from GK...	42:52	92 views • 2 months ago
Message from Minister Rowley supporting the...	1:18	15 views • 2 months ago
David Ridland #COP26 Online Engineer Interview Special	44:07	31 views • 2 months ago
Colin MacDonald #COP26 Online Engineer Interview...	43:47	65 views • 2 months ago
Naziyah Mahmood #COP26 Online Engineer Interview...	55:29	171 views • 2 months ago
Alana Harrison, Principle Propulsion Engineer at BAE...	44:39	72 views • 3 months ago
Green Zone Stand Video for COP26 v2	13:19	28 views • 3 months ago
If you were an engineer what would you do? Animation...	1:33	397 views • 3 months ago
If you were an Engineer with Scottish Power	2:33	98 views • 3 months ago
Primary Engineer Rail Project with Hitachi	1:06	69 views • 3 months ago
Kary Ho	41:46	29 views • 3 months ago
Andrew Scott, Chief Executive Officer at Orbital...	45:13	53 views • 4 months ago
Dr Vincent Giampietro the Neuroscientist	48:59	46 views • 4 months ago
Chloe the Welder	30:13	93 views • 4 months ago
TEMPLE EWELL PRIMARY SCHOOL STATWARRIORS	1:07	28 views • 4 months ago
ST AGNES PRIMARY SCHOOL STATWARRIORS	2:59	53 views • 4 months ago
Oliver Joris preview of Episode 3	0:36	8 views • 4 months ago
Douglas decribing the flat pack wind turbine	0:27	26 views • 4 months ago
Engineers describing Maisies Water-Sucking Bike	0:39	26 views • 4 months ago

Engineers visiting the classroom

Virtual Interviews

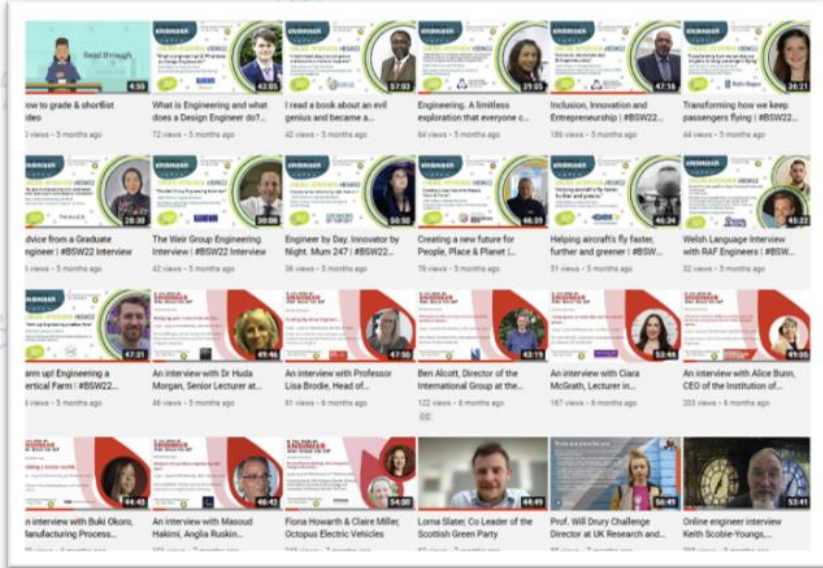
Online Interviews and library of engineers from different sectors and backgrounds



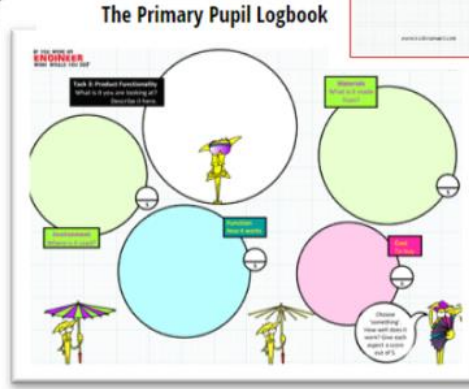
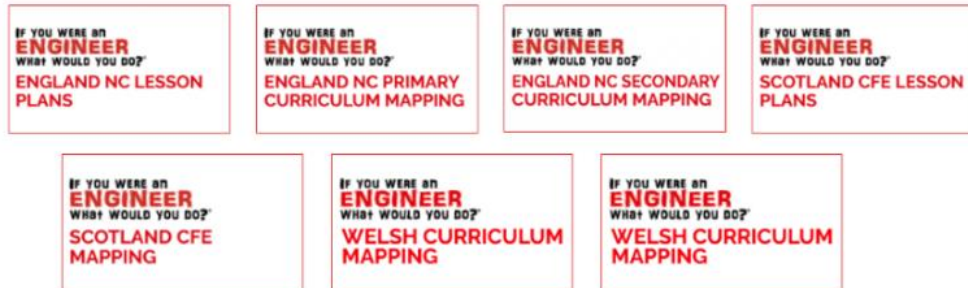
[Primary Engineer YouTube Channel](#)

IF YOU WERE AN ENGINEER
WHAT WOULD YOU DO?

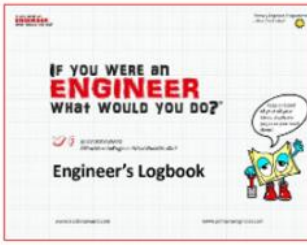
IF YOU WERE an ENGINEER WHAT WOULD YOU DO?



Primary Engineer YouTube Channel Engineer Interviews



The Primary Pupil Logbook

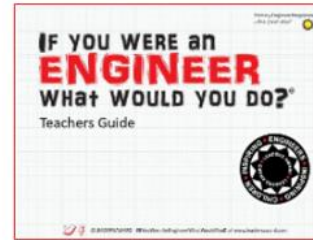
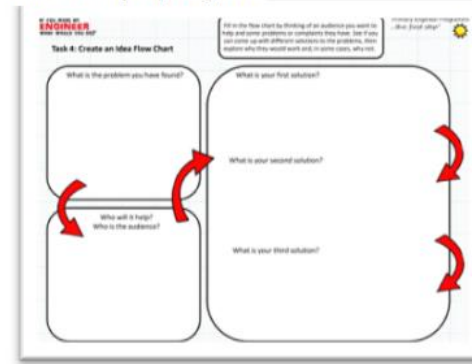


IF YOU WERE AN ENGINEER
WHAT WOULD YOU DO?
Engineer's Logbook



IF YOU WERE AN ENGINEER
WHAT WOULD YOU DO?
Engineer's Logbook

The Secondary Pupil Logbook

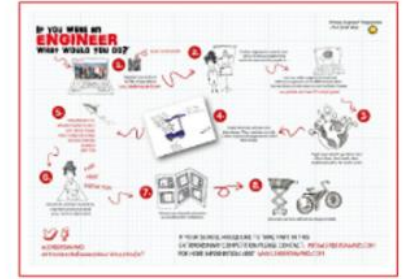


If you were an engineer teacher slides



If you were an engineer classroom slides

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Step-by-Step Flyer



Handbook Competition Guide and Tasks



Resources available in Welsh



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Idea - Satellites with concave mirrors to reflect the sun's light back to Scotland

Scotland has one of the highest rates of multiple sclerosis per head of the population in the world. One factor which makes it so prevalent is a lack of vitamin D, mainly absorbed by the body from the sun's rays. My uncle suffers from this disease and I would like to invent a way of increasing the amount of sunlight we have in Scotland and increase natural vitamin D levels.

The idea is sunlight that passes into space is captured by a series of concave mirrors in satellites that stay over the same point of the earth as they orbit in synchronicity with the earth's orbit.

The mirrors would focus and direct this excess sunlight back to earth - in our case Scotland in a giant torch-like beam. The effect would be we would have similar sunlight levels as the South of France.

To be cost effective the raw materials for the mirror satellite arrays would have to be mined (asteroids) then manufactured in space rather than shipped up to orbit from earth.

SAM GARDNER

Name Finlay

My invention is a rainbow maker it gets a bucket of water and shines light on a mirror you press a button on the back which plays music and sings: Happy birthday THIS sprays the water out side and the mirror shines the light on the water. It makes a rainbow!

'A stick it on' Robot

'You stick the arms on to help you reach the Monkey Bars at the park'



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It's got so busy we got extra tables and chairs! @Leadersaward grading days are so inspiring #engineersinthemaking



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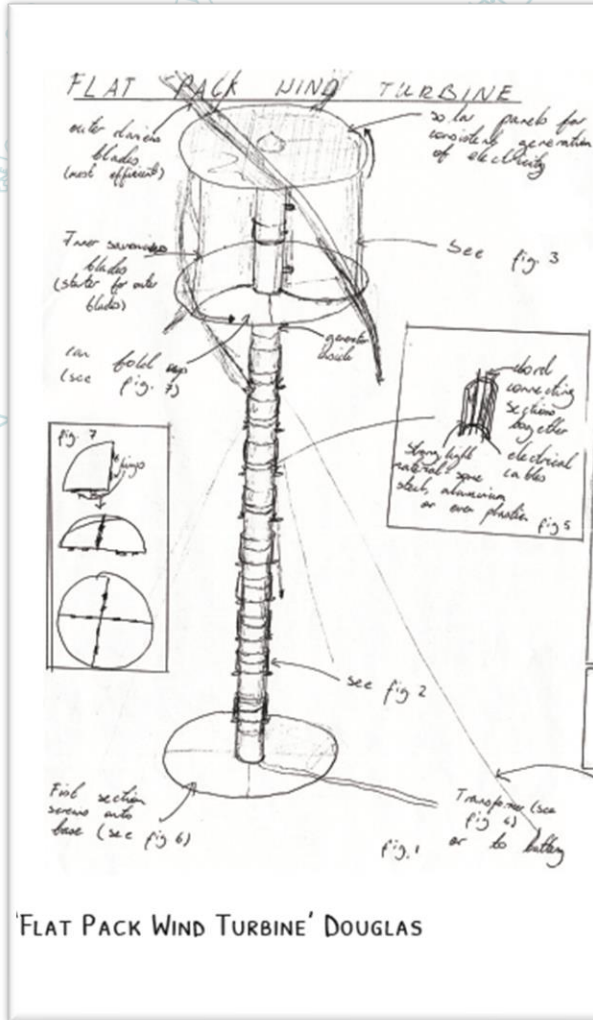


Primary Engineer Programmes ...the first step®



'If you were an engineer, what would you do?'

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Primary Engineer @primar... · 25 Jan ·
There's more prototypes on show at @GCU_SEBE as Charles Berry & Paula Cousins talk with the engineering team about the Hydro Paddle, originally designed by an 11 year old from Ayrshire! @weirgroup @CaledonianNews @Leadersaward



1 4 5



Primary Engineer @primar... · 25 Jan ·
Want to see how it works? One of the lead engineers put this together to show how it all comes together! youtu.be/m7qNXL6sczI

1 3



Primary Engineer @primar... · 25 Jan ·
The Flat Pack Wind Turbine is used to bring power to refugee camps & disaster areas across the world. This was designed by a 15 year old at @Royal_High_Sch and brought to the prototype team at @GCU_SEBE through the @Leadersaward Competition and the support of



Primary Engineer MacRobert Medal 2021

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If You Were An Engineer, Podcast

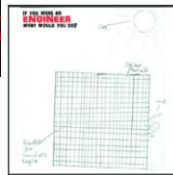
www.leadersaward.com/podcast

Episode 10 The Primary Engineer MacRobert Medal Special



EPISODE 3: OLIVER JORIS; EXTENDING SINK 6000; BUG DETECTOR

He's taken them up mountains, through the desert, and even to the Arctic Circle – Oliver Joris has put Ford's cars to the test under every extreme imaginable.



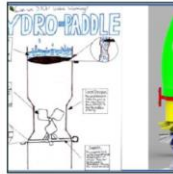
EPISODE 6: LAURA BÜCHELER; ELECTRIC BLANKET; RAF JUDGES

From video games to prosthetic limbs, Laura Bücheler's work offers solutions to problems in all areas of life.



EPISODE 9: SARAH HASLAM; ROAD FLASH; RELAXER 3000 PEBBLE

Her unwavering determination to encourage the next generation of engineers



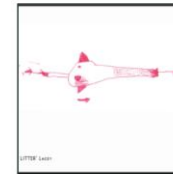
EPISODE 2: ELLA PODMORE; BEACH CLEANER 3000 AND A HYDRO PADDLE

It all began when she was passing car parts around the dinner table, and it culminated in a dream role working for McLaren.



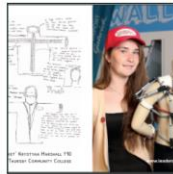
EPISODE 5: VINCENT GIAMPIETRO; FLAT PACK WIND TURBINE; MAGIC KNIFE

Playing video games with your mind – one of the amazing ways Vincent Giampietro finds out what's going on in our brains.



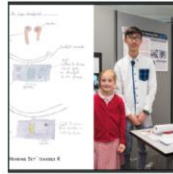
#8: MERRITT MOORE; JAYNE HUNT; WHALE OF LITTER

The quantum physicist that dances with robots – Merritt Moore has done the seemingly impossible...



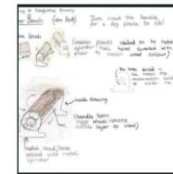
EPISODE 1: MATTHEW DICKINSON, SMA JACKET AND A SHOPPING TROLLEY

It was the second time Matthew Dickinson had been tasked with turning a child's idea into a working prototype, but he never expected what would happen next.



EPISODE 4: IULIA MOTOC; SUPER HEARING SET; THE VIRUS KILLER

At first she was just taking apart her parent's favourite radio, but that curiosity grew into a passion for helping people – through robotics!



EPISODE 7: LUKE BISBY; ROLLOVER BENCH; MECHANICAL BIRD

'The Chair of Fire and Structures', a title straight out of Lord of the Rings!





Primary Engineer Programmes ...the first step®



- ▶ Funded Teacher Training Programmes for STEM, D&T and Engineering.
- ▶ Classroom resource packs, teaching packs and links to engineers.
- ▶ Celebration Events
- ▶ For Early Years Settings, Primary School and Secondary Schools

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Engineers Inspiring Children Inspiring Engineers

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Leaders Award Competition Project Lead: Joshua.Holt@Primaryengineer.com



www.primaryengineer.com
www.leadersaward.com
www.statwarscompetition.com