Engineering | Lancaster University



FREE STEM Workshops for KS2

Introduce your pupils to the exciting world of engineering. Bring science, technology, engineering and mathematics to life with real world challenges.

Provide pupils with opportunities to enrich their STEM learning. practice STEM skills, collaboration and communication.

For Y5/6

Engineering for Space Exploration (1 day of challenges for Y5/6)

Do your Y5/6 pupils have the Curiosity and perseverance to launch into this space Odyssey? Discover the engineering stories of space exploration past, present and future, including Apollo 13 and Curiosity Rover landing on Mars. "All the children were so involved and it was good to see them so happy and willing to think" Dolphinholme Y5/6 teacher



Marvellous Moving Machines (1 day of challenges for Y5/6)

Discover and explore simple machines. Accept the challenge to combine them to create a ridiculous pointless machine powered by gravity and marbles. "Lots of fantastically modelled engineering, explained and reinforced. Children very excited to be engineers." Bowerham Primary Y5 teacher

Catching the Wind (1 day of challenges for Y5/6)

Explore the invisible resource of Morecambe Bay and use engineering thinking to catch it and transform it into useful energy.

No supermarket squish (1 day of challenges for Y5/6)

Discover what difference engineering can make to improving lives. Pupils must use their budget carefully to plan, build and test their prototypes to safely transport farm produce to market to change lives for the better.





Engineering Olympics (1/2 day of challenges for Y5/6)

Pupils will work together in small teams to develop their communication and collaborative teamwork skills as they solve challenges to transport their robot Olympian fastest, furthest and highest.

Engineering Fairy tales for Y3/4 (2 hours of story related challenges)

There are three tales to choose from. Your pupils could be protecting Jack's (borrowed, not stolen) golden egg, designing and building a robust home for 3 small pigs or rescuing 2 children from an edible house.



"Children engaged with the sessions and came up with some imaginative responses to the challenges and adapted their ideas as needed." Quernmore Primary Y3/4 teacher