

National Technology Day

Year 5 STEM Day Enrichment Form – Egg Drop Challenge 6th May 2025



At Wren Park, Year 5 students participated in an exciting STEM Day focused on engineering and problem-solving through an Egg Drop Challenge. This hands-on activity was designed to introduce students to scientific principles, material properties, and structural design in a fun and engaging way.

The day was divided into two sessions, with one class participating in the morning and another in the afternoon. Each session followed a structured approach:

1. Introduction to STEM

- Led by guest presenters, students learned what STEM is, its real-world applications, and how it plays a crucial role in engineering at Rolls Royce.
- Discussion on engineering and its importance, highlighting how designs help solve real-world problems.

2. The Egg Drop Challenge Brief

- Explanation of the task goal: designing a protective structure to keep an egg safe during a fall.
- Overview of available materials and their properties.
- Importance of design efficiency, encouraging students to use minimal materials for maximum protection.

3. Design & Make Phase

- Students worked in teams of 4–6, brainstorming and sketching potential structures before constructing their designs.
- Emphasis on teamwork, creativity, and problem-solving.

4. Testing & Evaluation

- Eggs were dropped from a height.
- Success required an undamaged egg at the end of the fall.
- A judging panel selected the winning team based on effectiveness and innovation.

5. Reflection & Learning

- Students discussed key takeaways, including the importance of materials in engineering and design.
- Exploration of how STEM shapes careers and contributes to technological advancements.

“Today was really fun and we learnt a lot about engineering,” Isaac C (5G) “The visitors really helped us today by giving us lots of top tips and ideas- and our design actually worked!” Martha (5P)

The STEM Day successfully reinforced critical thinking, teamwork, and resilience, demonstrating real-world STEM applications in a creative and interactive way.

