

DESIGN TECHNOLOGY NEWSLETTER

2024-2025



Design. Make. Evaluate.



Year 3 Cushions (Textile)

For the cushions project, we used a cross-stitch to join two pieces of fabric together. We followed a design and cut the template for our cushions. We used a running stitch and appliqué to decorate a cushion face. We used stuffing to fill our cushions.



Year 4 Torches (Electrical Systems)

We created suitable torch designs that fit a given criteria. We created functioning torches with a switch following our own design. We were able to identify electrical products and explain why they are useful. We even got to take our torches home!



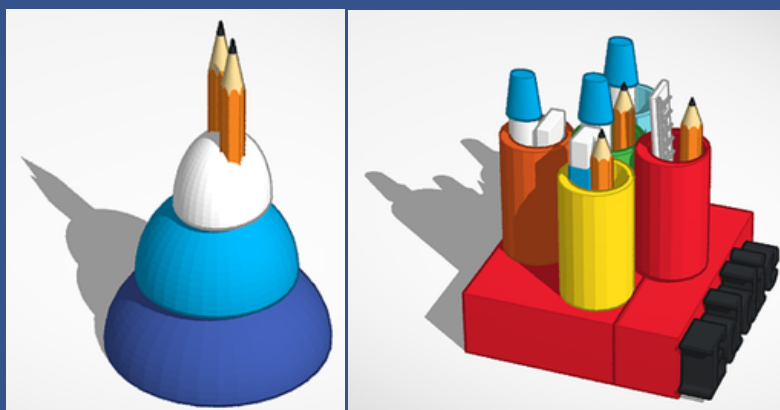
Year 5 Tudor Houses (Structure)

In year 5, we designed wooden structures of Tudor houses. To start with, we made prototypes out of spaghetti with the focus of triangulation. We worked collaboratively to select appropriate tools and equipment for the task. We exceeded the challenge of building a secure, sturdy and robust frames and roofs by using triangles to reinforce the structure.



Year 6 Tinker CAD (Digital World)

We have been designing 3D Digital Models for name badges, pencil cases and building our 'dream property' using a variety of shapes and technology tools such as Shrinking, grouping and cutting holes through objects to get the desired outcome.



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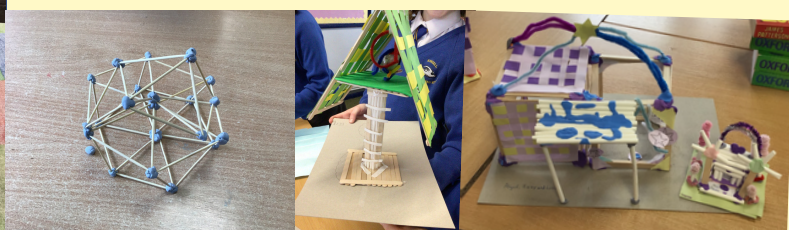
Year 3 Pneumatic Toys

children explored pneumatic toys unit. They began by designing their toy, considering movement mechanisms, air pressure systems, and aesthetic appeal. Next, they made their toy by assembling materials, constructing a pneumatic system using syringes, balloons and tubing and ensuring the mechanism functions correctly. Finally, they evaluate their finished product; testing its movement, assessing durability reflecting on improvements. This structured approach encourages problem-solving, engineering skills, and creativity while fostering an understanding of mechanical systems and air-powered motion.



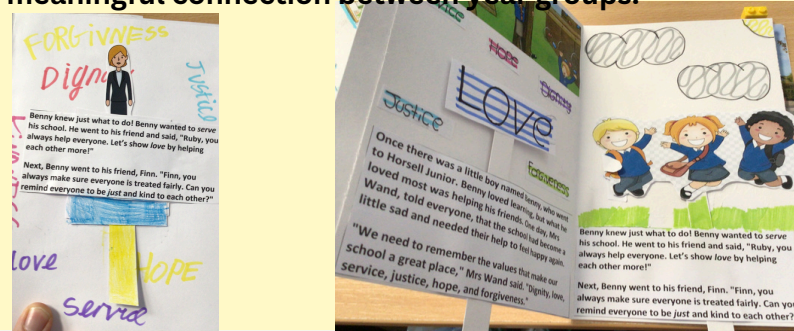
Year 4 Pavilions

We created pavilions in year 4 We explored and considered the structural stability, materials and its aesthetic appeal. We then made pavilions by constructing a frame structure, reinforcing joints, and applying decorative elements to enhance its visual impact. Finally, we evaluated the finished product, testing its strength, assessing design effectiveness and reflecting on improvements. This structured approach encourages problem-solving, engineering skills, and creativity while fostering an understanding of architectural design and structural integrity.



Year 5 Pop up Books (Structure)

children explored pop-up books mechanisms. They began by designing their own books, carefully planning a story, pop-up mechanisms and how the themes align with Horsell Junior's school values. Next, they made their books by assembling pages, constructing interactive elements using folds, levers, and layers and ensuring the mechanisms function smoothly. Finally, the children evaluated their finished product, tested durability, assessing the effectiveness of the pop-ups, and reflecting on how well the story conveys our school values. The books are then shared with the new upcoming Year 3, who will be their buddies next year. This unit fostered collaboration, creativity, and a meaningful connection between year groups.



Year 6 Upcoming projects in Summer term:

Over the summer term, the children in year 6 will be exploring the following projects:

Cookery - 'Come Dine With Me' where they will be designing and cooking a three course meal, researching ingredients, considering nutritional balance, and planning a presentation. Next, they will make their dishes by following recipes, applying cooking techniques, and ensuring accurate measurements for flavour and consistency.

Steady Hand Game -designing their game, considering the circuit components, handle shape, and overall theme. Next, they make their game by constructing a stable base, assembling a functioning electrical circuit with a buzzer, and ensuring the wire loop mechanism works correctly.

Summer Fate -entrepreneurial project. Children will design a game or product for their stall, considering elements of engagement, mechanisms, and visual appeal. They will also create posters to market their stall by applying design visuals and persuasive language. Next, they make their game using variety of materials, assembling resources and maximising impact through making posters and displaying them around the school grounds. They then deliver a presentation, communicating their business concept to all the classes.