## **OLA Statement of Impact:**

## **Design Technology**

Throughout each topic teachers should check that content has been learned and remembered, including content from previous years, to prevent it from being forgotten. Retrieval practice is built into each lesson to interrupt the forgetting curve and secure construct in long term memory.

At the end of each unit, teachers will assess the main creative task for each unit against the relevant Mastery Key for that unit to decide whether the child is working at Age Related Expectations by the end of each academic year.

By the time pupils leave Key Stage 2, they will:

- ✓ Have developed creativity, innovation, and self-expression through hands-on designing and making
- ✓ Have built **technical skills**, including the accurate use of tools, materials, and techniques
- ✓ Have gained a strong understanding of design processes, from initial research to final evaluation
- Apply design technology skills to support learning across the curriculum (e.g., creating historical models, building scientific prototypes, designing solutions to real-world problems)
- Show problem-solving, critical thinking, and resilience when planning, adapting, and improving their projects
- Understand the importance of functionality, aesthetics, and sustainability in design
- Be increasingly able to evaluate, reflect on, and refine their work to achieve purposeful outcomes

Our goal is to inspire innovation and confidence in Design Technology, empowering pupils to develop a lifelong love of creativity, practical problem-solving, and design thinking.



## **Mastery Skills**

Reception	Y1	Y2	Y3	Y4	Y5	Y6
Talk about what they want to make and plan how to do it using simple materials.	Can design and make a model that moves using levers and sliders.	Can design and make a pouch with evenly sized running stitches.	Can design and make a toy using a pneumatic system to operate a moving part.	Can make a functioning object which lights up and switches on and off.	Can design and make a stuffed toy with appendages and using evenly spaced blanket stitch.	Can design and make a waistcoat that meets the design criteria and has a range of evenly spaced sewing stitches.
Can use a range of tools safely and with increasing control (e.g. scissors, glue spreaders, hole punch).	Can design and make a moving vehicle with wheels and axles.	Can design and make a model with levers and pivots and neatly assembled components.	Can design and make a cushion, decorating it using applique and cross stitch and ensuring it is visually pleasing.	Can adapt a recipe and create a biscuit that is appealing to a target audience.	Can design and create a pop-up book with a different mechanism on each page using levers,, sliders, pivots and spacers which would be visually appealing to young children.	Can research a recipe from books or the Internet to adapt and follow a suitable recipe for a meal.
Can handle construction materials and malleable resources to shape assemble and build models.	Can design and make a functioning windmill with a stable structure.	Can design and create a healthy balance wrap by chopping, grating and spreading foods effectively.	Can design and make own castle, using a variety of 3D shapes with at least one created from a net.	Can program a micro:bit to create a timer and adapt the program according to feedback.	Can design and make a truss bridge, using mitred corners that they have cut with a saw to create a stable, strong structure.	Can create a functioning game with a buzzer and a high quality finish.



