Learning Aims and Curriculum Intent:

Design and Technology offers a broad and inclusive curriculum that has been meticulously designed for Year 7 to gain the foundational skills to be curious and inventive designers and problem solvers. Pupils receive three Design and Technology lessons a fortnight, which they study in a block and then rotate at two set times in the year with Art and Design and Food Preparation and Nutrition. In Michaelmas they might study Design and Technology, in Lent Art and in Trinity Food Preparation and Nutrition. During a Design and Technology rotation pupils will focus on a Pop-up Book project and undergo a design process; analyse, research, design, plan, make, test and evaluate. They will then develop their manufacturing skills in a focussed practical task, specifically looking and paper engineering. During the rotation, pupils will complete four assessed, extended writing tasks that is an amalgamation of class work and homework, pursuing the theoretical principles and technical knowledge of design, whilst including cross curricular links and wider contexts involving culture and society.

Term	Content, Key Questions and Knowledge	Skills	Assessment
Rotating Carousel	**What is Graphic Design?** **1) How can we communicate without words?** • An introduction to Graphic Design • An introduction to how we communicate and present ideas • The different styles of typography • An introduction to why and how we analyse existing products **2) Can we use paper engineering to make learning fun?** • An introduction into paper engineering and prototype testing and evaluating prototypes • Iterative design – how and why do we develop our ideas? • Prototyping – developing ideas into three-dimensional form • Communicating a final design idea and presenting work effectively **What are resistant materials and how are toys made?** **3) What is Health and Safety in Design and Technology?** • An introduction into health and safety • What does health and safety look like in the workshop? • What is meant by risk and risk assessments? • An understanding of the Student Safety Record. **4) How do we cut and shape wood accurately?** • An introduction into wood and its properties • An introduction to marking and measuring with accuracy • An introduction to workshop machinery • Shaping wood using machinery and hand tools.	▪ Visual Communication ▪ Annotation explaining ideas ▪ Analysing the successes and negative aspects of existing products ▪ Peer assessment against a criteria (brief) ▪ Learning how to engineer paper to make moving mechanisms ▪ Developing design ideas using an iterative process ▪ Colour rendering in design ▪ Annotating ideas using key technical terminology and referring to research ▪ Selecting and using specialist tools and equipment to make a successful product. ▪ Marking and measuring ▪ Using a coping saw to cut wood ▪ Using a disc sander to shape wood ▪ Using a pillar drill ▪ Applying a suitable finish.	▪ Product analysis ▪ Pop-Up prototype testing ▪ Iterative design developments ▪ Final front cover design ▪ Safe use of workshop machines ▪ Accuracy of using tools ▪ Manufacturing diary ▪ Evaluation of a final product

Examples of Homework	Creating a mood board on a chosen theme, evaluating prototypes, creating a story board with illustrations of the pop-up mechanisms
Key terminology	Aesthetics, Target Market, Iteration, Typography, Visual Communication, Annotation, Manufacture, Prototype, Testing, Analysis, Development, Mechanism, Ergonomics, Resistant Materials
Super-curricular enrichment and scholarly extension	**Read:** *One Red Paperclip – Kyle Macdonald* **Watch:** *Dengineers – BBC iPlayer* **Listen:** *Smash Boom Best - Spotify* **Visit:** *The Museum of Brands (Notting Hil)l, The Design Museum (Kensington)*
Useful websites	technologystudent.com ROBERT SABUDA - Home GCSE Design and Technology - AQA - BBC Bitesize

Who can I contact?	**Head of Design and Technology**	Mr H Ibrahim, hi@forest.org.uk
	Teachers	Ms R Ghabaee, rg@forest.org.uk Mr J Luton-Nicholas, jln@forest.org.uk Ms S Johnson, srj@forest.org.uk