Design and Technology Long-Term Map 2025/2026

The design and technology curriculum at Birchwood Junior School

Our design and technology strands

Development Question · Design Inspiration · Technical Knowledge · Practical Knowledge · Design Process · Evaluate

	Autumn · Terms 1 and 2	Spring · Terms 3 and 4	Summer · Terms 5 and 6
Year 3	**Term 1: design and technology** · Term 2: art and design **Cookery** **Question:** How can parents create family meals with more vitamin rich ingredients? **Item to develop:** Volcano potato **Design inspiration:** Chef focused on healthy and fun meals – Joe Wicks **Outcome:** A volcano potato meal with a higher nutritional value.	**Term 3: design and technology** · Term 4: art and design **Textiles** **Question:** Can a character be portrayed through sewing? **Item to develop:** Character pouch **Design inspiration:** Based on story time within the classroom **Outcome:** A sewn pouch that can be used by a character from the story	**Term 5: design and technology** · Term 6: art and design **Mechanical Systems** **Question:** Can mechanisms be used in a book to engage a reader whilst providing knowledge? **Item to develop:** Educational book **Design inspiration:** Based on videos, images and mood boards **Outcome:** A pop-up book showing the life cycle of a plant
Year 4	**Term 2: design and technology** · Term 1: art and design **Electrical Systems** **Question:** What impact does an electrical circuit have on a card? **Item to develop:** Christmas card **Design inspiration:** Based on images and mood boards **Outcome:** A Christmas card that can easily be mass produced for sale	**Term 4: design and technology** · Term 3: art and design **Cookery** **Question:** How can a pizza recipe be adapted to make it healthy? **Item to develop:** Healthy pizza with a high nutritional value **Design inspiration:** Neapolitan flatbread pizzas **Outcome:** A healthy pizza suitable for mass production in a restaurant	**Term 6: design and technology** · Term 5: art and design **Textiles** **Question:** How can we make the school library more comfortable? **Item to develop:** Cushion **Design inspiration:** School library and existing comfort libraries **Outcome:** A cushion which uses cross stitch that can be used in our school library
Year 5	**Term 2: design and technology** · Term 1: art and design **Structures** **Question:** Which features improve the structure of a bridge? **Item to develop:** Architectural models of bridges **Design inspiration:** Local studies of different bridges **Outcome:** An architectural model of a bridge with focus on the structure	**Term 4: design and technology** · Term 3: art and design **Mechanical Systems** **Question:** How can a mechanism be used in a toy to create an illusion? **Item to develop:** Toy with moving parts **Design inspiration:** Wooden moving toys **Outcome:** A moving wooden toy that can be mass produced for sale	**Term 6: design and technology** · Term 5: art and design **Cookery** **Question:** How can a breakfast recipe provide energy? **Item to develop:** Healthy breakfast product **Design inspiration:** Current breakfast bars on the market **Outcome:** A healthy breakfast bar for KS2 children
Year 6	**Term 1: design and technology** · Term 2: art and design **Electrical Systems** **Question:** How can an electrical system be used in a game? **Item to develop:** A steady hand game **Design inspiration:** Mood boards and product images **Outcome:** A steady hand game using complex electronic circuits	**Term 3: design and technology** · Term 4: art and design **Cookery** **Question:** How can a burger be adapted to be suitable for a vegan? **Item to develop:** Plant based burger **Design inspiration:** Chef focused on vegan food – Tal Ronnen **Outcome:** A healthy meat free burger	**Term 5: design and technology** · Term 6: art and design **Structures** **Question:** How do structural models help within design and architecture? **Item to develop:** A 3D model of a new park design for our community **Design inspiration:** The local Western Growth Corridor development **Outcome:** A 3D model of a park with various structures to encourage [sentence incomplete in the source]

Design and technology alternates with art and design. Each year group teaches one design and technology unit and one art and design unit in each pair of terms.