



As part of the Design and Technology national curriculum children should be taught the knowledge, understanding and skills needed to engage in the iterative process.

There are many celebrated designers who have engaged in the iterative process showing resilience to achieve their finished product.

'Successes teach you nothing. Failures teach you everything. Making mistakes is the most important thing you can do.'

Sir James Dyson

As one of the most inspirational designers, Sir James Dyson really knows the true meaning of what it is to try and fail, but to never give up, making him one of the wealthiest men in the UK.

As part of the D&T statutory requirements for key stage 2, the children are expected to evaluate 'how key events and individuals in design and technology have helped shape the world.'

Below you will find an example Design and Technology curriculum overview and a list of extraordinary designers linked to topics.

Starting each new D&T topic with a designer who shaped the world will give the children a chance to not only discuss what the iterative process is but see how it has been put into practice in real life.

'I'm never going to put boundaries on myself ever again. I'm never going to say I can't do it. I'm never going to say I don't think I can. I CAN AND I WILL!'

Nadiya Hussain



Design and Technology Inspirational Designers



	Autumn	Spring	Summer
EYFS	Personal, Social and Emotional Development: Be confident to try new activities and show independence, resilience, and perseverance in the face of challenge. Physical Development: Use a range of small tools, including scissors, paint brushes and cutlery. Fine motor skills Begin to show accuracy and care when drawing. Expressive Arts and Design: Safely use and explore a variety of materials, tools, and techniques, experimenting with colour, design, texture, form, and function. Share their creations, explaining the process they have used.		
Year 1	<u>Mechanisms</u> Sliders and levers Greetings card	<u>Textiles</u> Joining and templates Performing puppets	<u>Cooking and nutrition</u> Preparing fruit Fruit smoothie
Year 2	<u>Structures</u> Free standing structure A chair for teddy	<u>Mechanisms</u> Wheels and axels Fire engine	<u>Cooking and nutrition</u> Healthy choices Dips and dippers
Year 3	<u>Structures</u> Shell structure Desk tidy	<u>Mechanical systems</u> Levers and linkages Storybook	<u>Cooking and nutrition</u> Healthy and varied diet Salad and Sandwiches
Year 4	<u>Electrical systems</u> Simple circuit Torch	<u>Textiles</u> Stitching and decorating Reusable shopping bag	<u>Cooking and nutrition</u> Preparing vegetables Minestrone soup
Year 5	<u>Mechanical systems</u> Gears and pulleys Wishing well	<u>Structures</u> Frame structures Bug hotel	<u>Cooking and nutrition</u> Origins of food Banana bread
Year 6	<u>Textiles</u> Attaching a fastener Advent calendar	<u>Electrical systems</u> Complex circuit Electrical board game	<u>Cooking and nutrition</u> Celebrating culture South American cuisine



Designer	Information about the designer
The following designers could link to ELECTRICAL SYSTEMS	
Jamie Siminoff  American	○ Jamie is a lifelong inventor and while working in his garage in 2011, he created the world's first Wi-Fi video doorbell, which is now called 'The Ring Doorbell.' ○ He pitched his doorbell, to America's Dragon's Den in 2013 but rejected the only offer he received. ○ In 2018, Amazon purchased 'Ring' for an estimated value of between £900,000,000 million and £1.3 billion.
Marie Van Brittan Brown  American	○ Marie was the inventor of the first home security system which was inspired by the security risk that her home faced in her neighbourhood. ○ In 1966, the patent for the invention was filed which later influenced modern home security systems that are still used today. ○ Brown's original invention was comprised of peepholes, a camera, monitors, and a two-way microphone and the final element was an alarm button that could be pressed to contact the police immediately.
Garrett Morgan  American	○ Garrett was the son of a slave and came up with several significant inventions, such as a breathing device that became the prototype for the gas mask used during World War I and an improved traffic light. ○ Garret became the first black person in Ohio to own a car and he witnessed a severe car accident at a crossroad. ○ He responded by expanding on the current traffic light system by adding a "yield" component, warning oncoming drivers of an impending stop. His invention was patented in 1924.
Designer	Information about the designer
The following designers could link to STRUCTURES	
Charles & Ray Eames  American	○ Charles and Ray Eames were a married couple who created countless pieces of groundbreaking furniture and made significant contributions to the design world. ○ Their mass-produced furniture is best known for beauty, comfort, elegance, and delicacy. ○ The Eames lounge chair is still a popular chair today and Charles and Ray's designs are still heralded for their innovative material choices.



Frank Lloyd Wright  American	○ Frank was an architect, designer, writer, and educator and he designed more than 1,000 structures over 70 years. ○ He played a major role in the architectural movements of the 20th century, influencing architects worldwide. ○ Frank believed in the philosophy of what he called organic architecture which can be seen in his design, 'Fallingwater.'
Zaha Hadid  Iraq	○ Zaha emerged as one of the most world-renowned architects and became the first woman to win two of architecture's top honours. ○ Known for modern ground making designs that earned her the nickname 'Queen of the curve' and she was made a Dame in 2016. ○ Her buildings include the aquatics centre for the 2012 London Olympics and the Guangzhou opera house in China.
Designer	Information about the designer
The following designers could link to FOOD TECHNOLOGY	
Joe Wicks  British	○ Joe aka 'The Body Coach' began posting fitness content to his YouTube channel. His first video garnered over 6 million views. ○ He has published several cookbooks, inspiring the nation to eat healthily and completed a 24-hour workout challenge which raised over £2 million for Children in Need. ○ 'P.E with Joe' were videos aimed at children to keep fit during the covid pandemic and he was awarded an MBE for services to fitness and charity.
Jamie Oliver  British	○ Jamie aimed to get children eating nutritious food, so began a formal campaign to ban unhealthy food in British schools. ○ His efforts brought the subject of school dinners to the political forefront and changed the types of food served in schools. ○ Jamie was awarded an MBE for services to the hospitality industry.
Ella Mills  British	○ Ella is an award-winning cookery author, entrepreneur and a champion of plant-based living. ○ She started with the popular website, deliciouslyella.com, before writing a best-selling debut cookbook in the UK. ○ With her husband Matthew, they created an app and podcast, opened a café in London, and launched six ranges of plant-based food products into over 7,000 stores.



Ainsley Harriot  British	○ Ainsley is an English chef and television presenter. He is known for his BBC cooking game shows Can't Cook, Won't Cook and Ready Steady Cook. ○ His signature cooking includes couscous, risotto, and soups. ○ Ainsley received an MBE in 2020 for service to broadcasting and culinary arts.
Nadiya Hussain  British	○ Nadiya rose to fame after winning the sixth series of BBC's The Great British Bake Off in 2015 and is a columnist for The Times Magazine and is signed with Penguin Random House. ○ Buckingham Palace commissioned Nadiya to bake Queen Elizabeth II's cake as part of her 90th birthday celebrations. ○ She was awarded an MBE for services to broadcasting and the culinary arts
Francis Mallmann  Argentinian	○ Francis Mallmann is an Argentine chef, known as much for his bohemian, nomadic lifestyle. ○ Francis Mallmann opened his first restaurant at 18. ○ He now owns seven restaurants scattered across the South American continent and beyond.
Designer	Information about the designer
The following designers could link to TEXTILES	
Blake Mycoskie  American	○ In In 2006, Blake visited Argentina and saw the hardships faced by children without shoes, from a lack of basic protection to the inability to attend school. ○ After the visit, Blake founded TOMS shoes and is the brains behind the brand's One for One model. ○ The One for One Model works like this - so for every pair of shoes sold, TOMS provides a new pair to a person in need.
Coco Chanel  French	○ Coco's revolutionary designs have been credited with developing the 'modern woman.' ○ She took inspiration from menswear and her designs released woman from constricting corsets. ○ Women can thank Chanel's influence for such wardrobe staples as women's pants, the little black dress, jersey fabric, the shoulder bag and much more.



Elizabeth Keckley  American	- Elizabeth Keckley used her skills as a seamstress to buy her freedom from slavery. - She carved out a reputation for designing the most elegant dresses when she moved to Washington. - This led to her getting introduced to First Lady Mary Todd Lincoln and subsequently designing all the First Lady's dresses and you can find her influential designs today at the Smithsonian's American History Museum.
Designer	Information about the designer
The following designers could link to MECHANISMS and MECHANICAL SYSTEMS	
Sara Davies  British	- Sara is the founder and owner of Crafter's Companion, a company she started while a university student. - She spotted a gap in the market for a tool that could create bespoke envelopes for handmade cards and, with the aid of a local carpenter, designed a product called The Enveloper. - She was awarded an MBE for services to the economy.
Giorgetto Giugiaro  Italian	- In 1999, a jury of more than 120 journalists from all over the world, named Giorgetto, 'Designer of the Century.' - He studied art and technical design and began sketching cars, presenting some of his work at a student exhibition. - He worked for Fiat design department, and other manufacturers, before setting up his own company.
Sarah Boone  American	- Sarah was born a slave and was one of the first black women in U.S. history to receive a patent. - She improved the original ironing board, in which her additions featured a narrower and curved design, making it easier to iron garments, particularly women's clothing. - Sarah's design would morph into the modern ironing board that we use today.
James Dyson  British	- Sir James Dyson is an inventor, industrial designer, farmer, and business magnate who founded <u>Dyson</u>. - He was appointed a sir in 2007 and Order of Merit in 2016 for achievements in industrial design. 'I made 5,127 prototypes of my vacuum before I got it right. There were 5,126 failures. But I learned from each one. That's how I came up with a solution. So, I don't mind failure. I've always thought that school children should be marked by the number of failures they've had. The child who tries strange things and experiences lots of failures to get there is probably more creative.'