



Design Technology



DT Curriculum Map

Design Technology - Our Why?

The aim of Design Technology at Discovery Academy is to develop creative, technical, and practical skills that are required to perform everyday tasks confidently and participate successfully in an increasingly technological world. Build and apply a repertoire of knowledge, understanding of skills that will enable them to evaluate, design and make high quality prototypes and products that are suitable for a wide range of users. Knowledge and skills through the grades and steps driven by topic every half term that uses the 4 corners of Engage, Develop, innovate and Express to embed learning. .

Big Ideas connected to our DT curriculum



Substantive Concepts of our DT Curriculum

Design		develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
Make		To build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
Evaluate		Understand historical concepts such as continuity and change, cause and consequence, similarity, difference and significance, and use them to make connections, draw contrasts, analyse trends, frame historically valid questions and create their own structured accounts, including written narratives and analyses..
Technical Knowledge		To know the origin of materials and the sustainability of it.



U3, 4 & 5 : Off with her Head
Portraits; Sketching Tudor fashions; 3-D modelling



U3, 4 & 5 :States of Matter
Using different materials and different states of matter.



U3, 4 & 5 : Environmental Artists - engineers RM

Bridge and engineers
Features of bridges



U3, 4 & 5 : Darwin's Delights
Use the theory of evolution to create different beak prototypes



U3, 4 & 5: Revolution
T-shirt Printing/dyeing techniques. Designers past and present. Tie dye technique printing techniques traditional and modern methods



U3, 4 & 5: MI7
Design and make a Torch.
Identify component parts of a circuit
Undercover Spy require undercover gadgets.

**U3,
U4
&
U5**



U1 & U2 Rocks, relics and rumbles RM/SY
Lava Lamp
Design and make a lava lamp based on a theme of your choice suitable for a child's bedroom



U1 & U2 : Blood Heart
Tools and equipment; Recipes; Packaging; Working models



U1 & U2 : Road Trip USA
Totem pole
Card and board manipulation
Explore materials
Structures



U1 & U2 : Eat well cook well
Mixed Media Menu design



U1 & U2 : Gods and Mortals
3-D sculpture; Greek art and design



U1 & U2: Spirit
Design a new logo for the Olympics using a range of materials

**U1
&
U2**



L4 & L5: Alchemy Island
Design jewellery. Select and use appropriate materials tools and techniques to form and manipulate shapes. Decorate and enhance



L4 & L5: Coastline
Renewable energy Research and explore Hydropower and how it has been used both past and present. design and make a water wheel that could potentially be used to create renewable energy. Test and evaluate.



L4 & L5: Muck, Mess and Mixtures
Creation of cauldrons, potions and scientific apparatus.



L4 & L5: Towers Tunnels and Turrets Structures
Where does metal come from? what's the difference between ferrous and non ferrous metal? identify metals and their uses. Design and make a small souvenir from pewter. Explore the pewter casting process. Learn how to fine shape and finish, test and evaluate.



L4 & L5: Gallery Rebels
Designers past and present
Explore and experiment with fabric dyes and paints



L4 & L5: Misty Mountain, winding River GR/RM
Creating a river bed and water cycle model

**L4
&
L5**



L3: Paws claws and whiskers
Mechanisms and motions- Moving animals Working with a range of materials to create NETs and construct 3D shapes. Understand simple mechanisms and motions.



L3: Our Wonderful World (GR)
Structures Identify and understand Natural and manmade structures Recognise 2D and 3D Build complex structures from geometric shapes



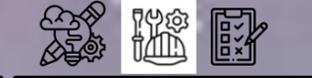
L3: Rio Da Vida (TXT)
Head dress/masks
Pattern cutting and creating
Decorative techniques such as applique
Joining and finishing techniques



L3 Enchanted woodland (txt)
Traditional and modern printing and mark making techniques using finds from the woodland area



L3: Memory box (GR Work/RM)
Working tools and equipment



L3: TEAM
Develop design of a football team merchandise

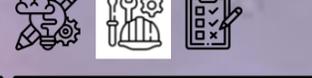
L3



L2: Amazing Animals
Research different reptiles, look closely at features of interest



L2: Peculiar Plants
The creation of a bug hotel. Use of plants and woodwork skills.



L2:On The Beach
Design and make your own rockpool in a jar



L2: Puppet Show
Explores the different sounds of instruments.
Make music. by making musical instruments



L2:Winter Wonderland
Working with a range of materials tools and equipment. Design a purposful and meaningful product -Dried Fruit Garland./wreath

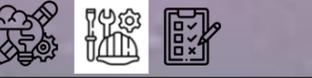


L2: Built it Up
Look different example of robots that have been created both past and present.

L2



L1: Lets Explore
Explore the photographer William Kass. Exploring textures and pattern



L1: Sunshine and Sunflowers
Brighten someone's day with a sunflower
Paper/card craft
Creating sunglasses



L1: Ready, Steady Grow
Looking at farm Animals
Plant pots
Mould own plant pot



L1: Shadows and reflection RM
Design and make a sun dial
Creating silhouettes from shadows construction



L1: Chop slice and Mash TXT/GR
Explore a range of Printing techniques exploring food and chocolate
2D and 3D Structure
Simple Joining techniques used in textiles



L1: Stories and Rhymes
Begin to build and construct structures for someone who has helped you.

L1