

Design Technology Curriculum Map

Term	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn	<p><u>Structures: Explore/Introduction to Junk Modelling</u> Play and explore tools and ways to create structures; scissors, glue, etc. (Kapow)</p>	<p><u>Structures: Constructing Cars</u> Junk modelling – using recycling to make and design a car.</p> <p><u>Textiles: Making Puppets</u> Design your own toy/puppet through sewing using a running stitch. (Kapow)</p> <p>Extra topic</p> <p><u>Structures: Designing a Christmas Wreath ornament</u> Use wire, fabric and knot tying skills to create a Christmas wreath.</p>	<p><u>Structures: Building a Tudor House</u> Construct a Tudor house by designing a net and using recyclable materials.</p> <p><u>Textiles: Making Ornaments</u> Sewing felt Christmas decorations using a running stitch or whip stitch. (Kapow)</p>	<p><u>Structures: Constructing a Stone Age Weapon</u> Construct your own stone age weapon by designing the 3D object on every angle then creating it by using recycle materials.</p> <p><u>Cooking and Nutrition: Balanced Diet Menu Making</u> Learn about healthy meal planning and design a balanced diet menu.</p>	<p><u>Mechanical Systems: Slingshot Car</u> Making a Model of a movable car by slingshot. Students will need to choose shapes/nets that increase or decrease speed as a result of air resistance. (Kapow)</p> <p><u>Textiles: Christmas Tree Decoration</u> Students will make either felt stockings or ornaments with the buttonhole stitch. Students will be challenged to attempt creating fastenings on their project. (Kapow)</p>	<p><u>Structures: Mayan Worry Dolls</u> Making Mayan Worry Dolls that require fine motor skills and precision to work on small structure.</p> <p><u>Structures: Bridges and Houses</u> Using only 3 materials, metal, wood and paper, students need to create a model that is strong enough to hold itself up and added weight when receiving external pressure (Kapow).</p>	<p><u>Structures: Design and Build a Playground</u> Make roughly three different structures from their plans using the materials available.</p> <p><u>Textiles: Waistcoats</u> Learn to measure 3D objects, mark, cut out and design a waistcoat.</p>

Spring

Cooking and Nutrition: Looking at Food and making Soup.
Discussing types of food, healthy food, and making a class soup. (Kapow)

Cooking and Nutrition: Fruits and Vegetables
Understand the nutritional value of fruits and vegetables.
Design and make your own fruit salad. (Kapow)

Extra Topic:
Mechanical Systems: Moving Story Book
Create movements through sliders, pivots, folds and other mechanisms to make stories have a moving effect. (Kapow)

Cooking and Nutrition: A Balanced Diet
Discover what makes a balance diet and experiment with making healthy meals.

Extra Topic:
Structures: Functional Jewelry Making
Design and make functional African jewelry while developing fine motor skills.

Digital World: Design a Digital Poster
Barcelona topic
Research and design a digital poster demonstrating students' knowledge on Barcelona.

Extra Topic:
Mechanical Systems: Creating Pneumatic Toy
Design and make a toy containing or operated by air or gas under pressure. (Kapow)

Structures: Pavilions
Researching creative pavilions to inspire design work. Using net designing, measurement and accuracy, paper weaving, junk modelling to create a pavilion. (Kapow)

Digital World: Monitoring Devices
Exploring and learning about devices that help human's monitors homes, health, streets, etc. Students are to design a device to be used for monitoring something. (Kapow)

Extra Topic:
Mechanical Systems: Making a Pop Up Book
Create movements through sliders, pivots, and folds while using measuring, thin-lined sketching and accuracy skills to make stories have a moving effect. (Kapow)

Digital World: Navigating the World
To learn navigation skills, tools and language. Finished by creating a product pitch. (Kapow)

Extra Topic:
Structures: Ancient Greece
Greek masks or vases made of papier-mâché. Must include net, greek architectural design and patterns, along with being functional to use as a finished product.

Summer

Structures: Boats

Looking at waterproof material, floating and sinking, design and testing boats. (Kapow)

Structures and Mechanical Systems:

Construct a seaside lighthouse with a moving light. Incorporating wheels and axles to move the light.

Mechanical Systems:

Fairground Wheel
Using wheels and axles to create a functioning Ferris wheel. (Kapow)

Textile: Cross Stitch

Egyptian Art
Design your own Egyptian Cushions or Collar using a catchstitch technique. (Kapow)

Extra Topic:
Structures:
Constructing a Castle
Working with 2D and 3D shapes, nets and structures and design.

Cooking and Nutrition: Growing our Own Food

Class will grow and nurture an indoor Edible Garden. They will also keep a log of the plants life. They will then make pasta and pesto from grown ingredients. (Ongoing process)

Extra Topic:
Electrical Systems:
Making Torches
Making a torch with a working electrical circuit and switch. (Kapow)

Cooking and Nutrition: What could be healthier?

Students explore healthier choices and adapt a recipe to make it healthier. (Kapow)

Extra Topic:
Electrical Systems:
Doodlers
Looking at circuits, motors and axles to create a doodler machine controlled by a fan. (Kapow)

Cooking and Nutrition: Come Dine with Me

How to follow, write, adapt and make three recipes.

Extra Topic:
Electrical and Mechanical Systems:
Carousel
Design and make a moving carousel using axles and circuits to control the objects movement.