

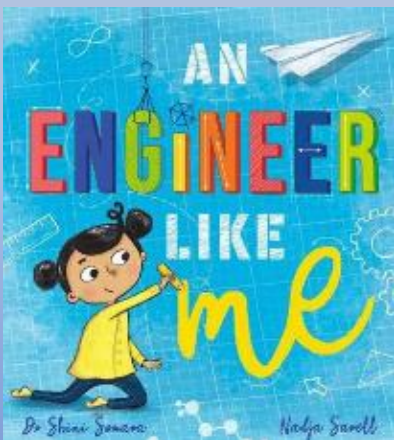


# Design Technology

## Year 3 Structures

**Key Terms:** Design Purpose, Design criteria, Evaluation, Product, Design brief, User/Client

### Exciting Books



### Concepts - Sustainability

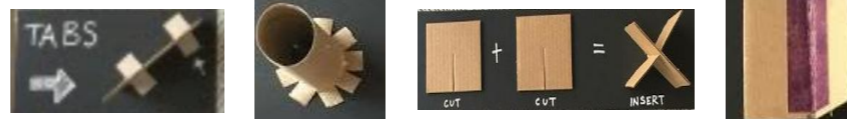
Legacy

### Aspirational Person

Patrick J. Hanratty conceived computer-aided design and computer aided manufacturing, making him renowned as, "The Father of CAD/CAM". It is widely believed that over 70% of all 3-D mechanical CAD/CAM systems available today trace their roots back to Hanratty's ideas.



★ There are a range of joining techniques used to make structures.



★ The flange and tabs joining technique are used to make something more stable.

★ The L-Brace technique can be used to make something stronger and stiffer when joined.

★ Lines can be scored with scissors to make cardboard easier to fold.

★ For all techniques, accurate measurements should be made to ensure stability and neatness.

★ Different types of adhesive materials are needed for different parts of a structure.

★ When using Tinkercad, we create new shapes by dragging them from the right hand pane.

#### Structure

A building or other object constructed from several parts

#### Stable

Something that is fixed and steady.

#### Adhesive

A substance that is able to hold two materials together.

#### Joining technique

A way for two or more materials to be joined together

#### Scoring

is the process of scribing, or even partly cutting through, the material along the line to be bent or folded.

**Computer aided design (CAD)** the use of computer software to help create, change or improve designs.

#### Tinkercad

The computer programme we use to help us with CAD.

### Sticky Knowledge

### Subject Specific Vocabulary



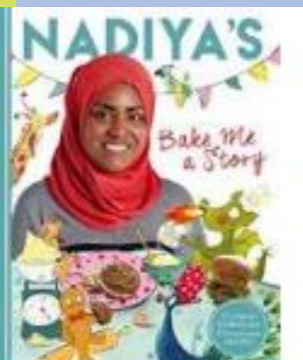
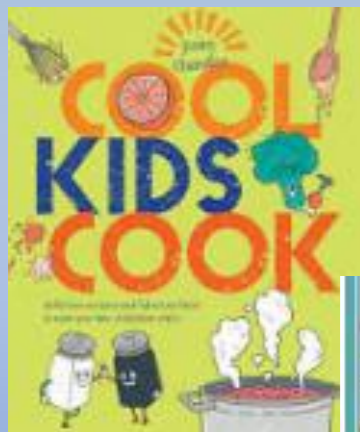
# Design Technology

## Year 3

### Cooking and Nutrition



# Exciting Books



## Concepts -

Climate

Legacy

Equality

Sustainability

Identity

### Cottom brothers

After leaving the army, John Cottom started the business at the back of his mother's house and as he didn't have a fridge at that time, he used the cellar to keep things cool. Not long after, Arthur (brother and former prisoner of war) joined the business. Sausage and Black Puddings were made in a building in the backyard. Pork Pies were made in the kitchen.

### Healthy, varied diet

Eating a wide variety of foods from the different food groups

#### Peeler

A tool that removes the peel or skin from fruits and vegetables. They have a steel blade attached to a handle made of steel, metal, rubber or plastic

#### Slowcooker

A large electric pot used for cooking food very slowly.

#### Preparation

Food preparation refers to the process of acquiring raw ingredients and making them ready for consumption.

#### Savoury

Food that fits into the salty/spicy category rather than sweet.

#### Sweet

having the pleasant taste like the taste of sugar or honey

#### Appealing

Something that is nice, attractive or interesting

- ✦ You must always wash your hands before handling food.
- ✦ Chopping boards need to be used when peeling to keep the vegetables from slipping.
- ✦ Slowcookers are used to bake warm, low prep meals over several hours
- ✦ You must always hold a peeler with your writing hand.
- ✦ Vegetables cut into smaller pieces cook faster than bigger pieces.
- ✦ Mixing ingredients together in the slowcooker will make a new product – hotpot.
- ✦ Cooked food should be stored in sealed containers and kept in the fridge once it has cooled down.

## Sticky Knowledge

## Subject Specific Vocabulary



### Exciting Books

MY BIG BOOK OF SEWING  
OVER 60 FANTASTIC PROJECTS TO STITCH AND SEW

TEDDY BEARS  
A HISTORY AND COLLECTOR'S GUIDE  
LORRAINE HITCHINGS

## Concepts -

- Climate
- Legacy
- Equality
- Sustainability
- Identity

- ✦ The over stitch can be used to join two pieces of material together securely.
- ✦ A pattern piece makes sure that the sewer cuts the fabric to the correct size for their product.
- ✦ Needles should be matched to fabric – thinner needles for lighter fabric, thicker needles for thicker fabric.
- ✦ Always pull the needle away from yourself when sewing.
- ✦ Stitches need to be close together to make sure that the product is secure.
- ✦ Magnets can be dangerous if eaten so the magnet must be secure inside my product.
- ✦ Evaluation is needed to constantly improve designs.

**Sticky Knowledge**

## Aspirational People

Margarete Steiff (1847 –1909) was a German seamstress who in 1880 founded Steiff, a maker of stuffed toys. Margarete overcame many challenges, such as contracting polio and needing to use a wheelchair. Her company created the first teddy bear in 1902.



### Over stitch

a stitch made over an edge or over another stitch.

### Pattern piece

A type of template used in sewing to show the size and shape on paper which is used to help cut out the fabric.

### Annotated Sketch

A drawing with labels

### Fabric Scissors

Sharp scissors designed for cutting fabric

### Stuffing

A soft material used to fill things like soft toys, cushions and bedding

### Secure

Something that can not be opened/fall apart/become loose

### Magnetic

If something will stick to a magnet it is magnetic

**Subject Specific Vocabulary**