

DT- Baking: Gingerbread Christmas Decorations (Food)

(Focus on making)

Sticky Knowledge

A Healthy and Varied Diet

Food Groups

There are five main food groups:

- Fruit and vegetables:** e.g. apples, tomatoes, lettuce. They contain vitamins and minerals.
- Carbohydrates:** e.g. starchy foods like bread and pasta. They give us lots of energy!
- Proteins:** e.g. beans, fish, eggs, meat. They help us to build muscle.
- Dairy:** e.g. milk, butter, cheese. They contain calcium for our bones.
- Fats and Sugars:** Add fat storage for energy.



Varied Diet

- In order to stay healthy, it is important that we eat a balanced diet of foods from each of the five food groups.
- We should aim to eat 5 portions of fruit and veg per day.
- To build strong bones and muscles, we should eat enough proteins and dairy.
- Try to avoid eating too many fatty or sugary foods. They can make you unhealthy and can damage your teeth.



Key Vocabulary

Food

Nutrition

Equipment

Ingredients

Recipe

Food Group

Balanced Diet

Food Source

Mixing

Weighing

Baking

Grilling

Health & Safety

Preparing and Cooking Processes

Preparing Processes

Preparing processes are the different ways that we get food ready to be eaten.

-**Mixing:** to blend ingredients together, using a spoon, blender, or whisk.



-**Weighing/measuring:** to get the right amount of an ingredient, using scales, tablespoons, or teaspoons.

Cooking Processes

Cooking processes are the different ways that we heat food before it is eaten.

-**Baking:** to cook food in a heated oven. Make sure that you select the right temperature!



-**Grilling:** to cook food by putting it under a hot grill (like a radiator in a cooker).

From Source to Plate

-In order for us to get food, we need to grow it, raise it, or catch it.

-**Grow it** – We can grow fruit plants and vegetable trees;

-**Raise it** – We can raise animals for meat and eggs.

-**Catch it** – We can catch fish from the sea, or forage fruits and vegetables from wild plants.



Health and Safety

-Remove any jewellery and tie back long hair.

-Wear an apron and roll up your sleeves.

-Wash your hands with hot water and antibacterial soap.

Washing your hands should be done before, during and after preparing food.

Use different chopping boards and knives for raw meat & other foods.

Check that food is cooked right the way through.

Check the dates on food, and check for allergies of those eating.

Make sure that you clean up properly after yourself.

DT- Wild thing masks (Textiles)

(Focus on design process)

Overview	
Textiles	
Textiles are flexible materials woven from fibres	
-Textiles are used to make clothing, sheets, towels, linen, carpets, rugs and a wide variety of other products.	
-Lots of materials are considered as textiles, for example wool, silk, cotton, nylon, felt and polyester.	
-Textile production is <u>one of the largest industries</u> in the world – huge factories make millions of textiles each year.	
-However, lots of small textiles producers still exist. Many still produce textiles by hand.	

Example Textiles	
	Blankets and Quilts Made with cotton Decorated using appliqué templates -Blankets and quilts are often made with cotton. It is an appropriate material for this purpose because it is soft and is a good insulator (it holds heat in well). -Appliqué templates have been used to create the decorations. Appliqué is a sewing technique where fabric shapes are attached onto the main fabric. Templates can be made from many materials (e.g. card) and can be formed around everyday objects, e.g. coins, coasters, bottles.
	Children's Clothes Made with cotton/ polyester Decorated using appliqué templates -Children's clothes are also often made using cotton, or with polyester (a man-made fibre that is strong and durable). -In order to decorate clothes, the appliqué technique is often used. In this example, the designer has used appliqué to add the snow and reindeer to this green Christmas dress. They need to be attached securely!

Sticky Knowledge

Designing	Key Vocabulary
Designers of textile products need to think about the <u>purpose</u> (what does it do?) and the <u>user</u> (who will use it?)	Textiles
Materials -Different materials have different properties (characteristics) which make them good for different purposes. For example, cotton is soft, polyester is durable, and PUL is waterproof.	Fibre
Templates -Templates should be used to cut around, producing accurate shapes and patterns. They can be made out of card, paper, cardboard and other materials.	Woven
Joining – There are lots of different ways of joining fabrics together (see below). Some joins are quicker (e.g. stapling, safety pin) whilst some are more secure (e.g. sewing, gluing). Some joining techniques are easier to hide.	Cotton
	Thread
	Needle
	Appliqué
	Template
	Seam
	Sew
	Design
	Make
	Evaluate

Making & Evaluating	
Making -Read your plan carefully. Make sure that you are properly prepared. -Use masking tape or pins to attach your template, or use chalk/pastel to draw around it. If you are sewing, think about the type of stitch you will use (e.g. running stitch) in order to create your seam. -Think about finishing techniques – for example glitter/ raised textile paints, adding sequins and shiny fabrics, or using fabric crayons. -Remember your purpose – does it work?	Evaluating -How does your textile look? Would your user like it? Why or why not? How could you improve the way it looks? -Are your attached fabrics secure? How did you achieve this? How could they be joined more securely? -Which materials did you choose? Why? How could you improve your product?

Health and Safety

-Remove any jewellery and tie back long hair.	-Walk safely and calmly around the classroom/ workshop.	-When using a needle, keep your fingers well clear. Use a thimble where available.	-When you are not using your needle, keep it in the same safe place.	Follow the teacher's cutting instructions carefully.	Make sure that you are wearing the correct equipment for tasks.	If you need to move around with scissors, hold around the closed blades, facing down.	Report any accidents & clean up properly after yourself.
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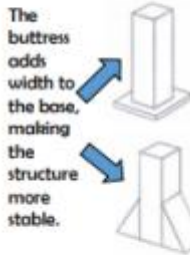
DT- Blackpool Tower (Structures)

(Focus on Evaluation)

Sticky Knowledge

Overview	
Freestanding Structures Structures are things that are built for a purpose. -Structures can be large (e.g. buildings and bridges) or small (e.g. chairs and tables). -<u>Freestanding structures</u> are structures that can stand up without being attached to something else. -Freestanding structures need to <u>support</u> their own weight and also the weight of the things/people using them. So that they can do this, freestanding structures need to be well-designed: <u>strong, rigid and stable</u>.	  

Example Structures		
	Name: Burj Khalifa	-The Burj Khalifa is the <u>tallest freestanding structure</u> in the world.
	Location: Dubai, United Arab Emirates	-It has an extremely <u>wide base</u> , and is very <u>narrow at the top</u> .
	Height: 828m	-The steps down the sides help to protect the structure from the wind.
	Floors: 163	-It has deep <u>foundations</u> in the ground.
	Built in: 2010	-It is made of <u>strong, rigid materials</u> – over 330,000m³ of concrete and 40,000 tonnes of steel reinforcement!
	Name: Forth Bridge	-The Forth Bridge is a <u>long railway bridge</u> in Scotland, across the Firth of Forth.
	Type: Railway Bridge	-It is made of <u>strong materials</u> : it was one of the first bridges made of <u>steel</u> . The steel <u>frame is built into triangles</u> (a <u>wide base</u> and narrow top. It also has <u>strong, stable concrete arms supporting on either side</u> .
	Location: Scotland	
	Length: 2,528m	
	Built in: 1890	

Designing – What makes a strong, stable, rigid structure?		Key Vocabulary
<u>A structure that is stable is less likely to fall over.</u> -Structures are more stable when they have a <u>wider base</u>. -<u>Buttresses</u> can also make a structure more stable. A buttress is something that is built against a structure to give it more stability.		Structures
The buttress adds width to the base, making the structure more stable.  <u>A structure that is strong and rigid is able to support more weight.</u> -Some <u>materials</u> are stronger and more rigid (stiffer) than others, e.g. card is stronger and more rigid than paper. -Structures can also be made stronger and more rigid by making sure that parts and materials are properly <u>joined together</u>, e.g. with <u>glue or tape</u>.		Freestanding
<u>-Folding and layering</u> (adding an extra layer) of materials can also be used to <u>strengthen and stiffen</u> structures.		Support
		Weight
		Strong
		Rigid
		Stable
		Base
		Materials
		Layering
		Design
		Make
		Evaluate

Making & Evaluating	
Making -Read your plan carefully. Make sure that you are <u>prepared</u>. -Think about the <u>skills</u> you will need to use (e.g. cutting, assembling/sticking) and the <u>tools</u> that you will need for them (e.g. scissors, glue). -Think about finishing techniques (e.g. adding buttresses/extra layers for strength, or colour to make your structure look well presented!) -Remember your <u>purpose</u> – does it work?	Evaluating -How well does your structure work? Does it meet its <u>purpose</u>? -How did you make your structure <u>stable</u>? How could you make it more stable? -How did you make your structure <u>strong and rigid</u>? How could you make it more strong and rigid? 



Health and Safety

-Remove any jewellery and tie back long hair.

-Wear an apron and roll up your sleeves.

-Walk safely and calmly around the classroom/workshop.

Keep your work area and floor area clear – keep your belongings well clear.

Follow the teacher's cutting instructions carefully.

Make sure that you are wearing the correct equipment for tasks.

If you need to move around with scissors, hold around the closed blades, facing down.

Report all spillages & clean up properly after yourself.