

Year 5: Food and Nutrition  
Why are our diets so different?



**Core content:**

Learn about Middle Eastern and Danish diets.  
Learn how to make flatbreads.  
Use techniques to make food appetizing.

**Technical vocabulary:**

**Culture** – the customs and beliefs, art and way of life of a particular country or group.



**Presentation** – modifying, arranging or decorating food to enhance its visual appeal.



**Variety** – several different sorts of the same thing.



**Fibre** – the part of food that keeps the bowels working.



**Knead** – to press something, especially a mixture for making bread, firmly and repeatedly with the hands and fingers.



**Smørrebrød** – a Danish open sandwich.



**Flatbread** – a type of bread that is thin and flat and made without yeast.



**Mezze** – a variety of dishes designed to stimulate your appetite.



**Unleavened** – made without any yeast, or other substance that would cause the bread to rise.



**Techniques:**



rolling



claw



ribboning

Year 5 Food and Nutrition  
Why are our diets so different?

What do I already know?

I know how to use a knife safely to prepare a range of vegetables.

I know how to knead, roll and shape dough.

I know how to use the claw and bridge cutting techniques.

What am I going to find out?

I will know some foods and ingredients from other cultures.

I will know how other cultures' food can be nutritious.

I will be able to make, roll and cook a flatbread.

I will be able to prepare a range of vegetables.

I will be able to present foods to a high standard.

Key Vocabulary

Culture



Presentation



Variety



Smørrebrød



Flatbread



Mezze



Fibre



Knead



Unleavened



Working as a Designer

Design

I will decide how something will look or how it will work.



Make

I will create something by combining materials or putting parts together.



Evaluate

I will form an opinion of the quality of my creation after careful thought.



Apply

I will use my creation in a real life context.



## Year 5: Systems

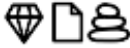
How can we keep ourselves safe on the road?





### Core content:


Design and make a road safety belt.  
Fulfil a design brief.  
Write a simple program for a micro-bit.


### Technical vocabulary:


**Properties** – qualities or characteristics that something has. 


**Fastener** – a button, zip or other device used for temporarily joining together parts of items. 


**Algorithm** – a process or set of rules to be followed in operations, especially by a computer. 

**Fluorescent** – appearing very bright and can be seen in the dark. 

**Reflective** – capable of throwing back light, heat or sound from a surface. 

**Attachment point** – the point which one thing joins to another. 

**Debug** – to look for and remove faults in a computer program. 

**Programming** – writing and testing computer programs. 

### Connections:

Emily Brooke  
Inventor of the Laserlight  
bike light projector



## Year 5 Systems

How can we keep ourselves safe on the road?

### What do I already know?

- I can describe properties of materials.
- I can identify and attach fastenings.
- I can understand and use simple algorithms.
- I can design and debug simple programs.

### What am I going to find out?

- I will know that technology can be used to program and control a product.
- I will be able to combine elements of my design knowledge to fulfil a brief.

## Working as a Designer

Design	Make	Evaluate	Apply
I will decide how something will look or how it will work.	I will create something by combining materials or putting parts together.	I will form an opinion of the quality of my creation after careful thought.	I will use my creation in a real life context.



## Key Vocabulary

Properties 

Fastener 

Algorithm 

Fluorescent 

Reflective 

Attachment point 

Debug 

Programming 

## Year 5: Textiles

Which fabric is ideal for creating a functional and hardwearing lunch bag?



### Core content:

Explore the durability of fabrics.  
Design and make a functional and hardwearing lunch bag.  
Create fair tests to investigate the properties of a range of fabrics and explore insulation and waterproofing.

### Technical vocabulary:

**Durability** – the quality of being able to last for a long time without breaking or becoming weaker.



**Repurpose** – to change something slightly in order to make it suitable for a different purpose.



**Beeswax** – a yellow sticky substance that is produced by bees.



**Swatch** – a small piece of cloth used to show people what a larger piece would look or feel like.



**Insulate** – to protect something with a material that prevents heat, sound, electricity etc. from passing through.



**Functional** – practical and useful.



### Connections:

Levi Strauss (1829 – 1902)  
German-born American  
businessman and  
clothing manufacturer



## Year 5 Textiles

Which fabric is ideal for creating a functional and hardwearing lunch bag?

### What do I already know?

I can use a range of stitches to join fabric.

I can make simple fastenings.

I can explain the concept of wax resist.

I can identify properties of everyday materials,

### What am I going to find out?

I will know how to waterproof cotton fabric.

I will know which fabrics are both functional and hardwearing.

I will be able to use beeswax to waterproof cotton fabric.

I will be able to repurpose a pair of jeans.

## Working as a Designer

### Design

I will decide how something will look or how it will work.



### Make

I will create something by combining materials or putting parts together.



### Evaluate

I will form an opinion of the quality of my creation after careful thought.



### Apply

I will use my creation in a real life context.



## Key Vocabulary

Durability



Repurpose



Functional



Beeswax



Swatch



Insulate



Year 5: Food and Nutrition  
What can you learn from different cultures' diets?



**Core content:**

Look to different countries to see what can be learnt from different cultures.  
Learn how certain foods can contribute to good health and wellbeing.  
Learn that the UK diet is influenced by a range of different cultures.

**Technical vocabulary:**

**Culture** – the customs and beliefs, art, way of life and social organisation of a particular country or group.



**Migration** – the movement of people to a new country or area in order to find work or better living conditions.



**Spices** – one of the various types of powder or seeds that come from plants which are used in cooking.



**Medicinal** – helpful in the process of curing illness or infection.



**Fragrant** – having a pleasant smell.



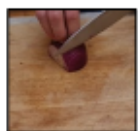
**Stir-fry (noun)** – a hot dish made by frying small pieces of meat, fish and / or vegetables.



**Stir-fry (verb)** – to fry (meat, fish or vegetables) rapidly over a high heat while stirring briskly.



**Techniques:**



slicing



ribboning



stir-frying

Year 5 Food and Nutrition  
What can you learn from different cultures' diets?

What do I already know?

I can use a range of techniques to prepare and cook vegetables.

I know that good nutrition keeps the body healthy.

I know some advantages and disadvantages of eating pre-prepared food.

I can describe aromas, flavours and textures of food.

What am I going to find out?

I will know how foods can be used as medicines.

I will know how eating food from different countries can help us be healthy,

I will be able to roll and shape ingredients.

I will know how to slice and ribbon vegetables.

I will know how to stir fry vegetables.

Working as a Designer

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Key Vocabulary

Culture



Migration



Spices



Medicinal



Fragrant



Stir-fry



Year 5: Structures  
How are frames strengthened, reinforced and made rigid?



**Core content:**

Explore a range of ways that frames are reinforced to make them stable.  
Identify joints and supports.  
Create a model shelter based on what they have learnt.

**Technical vocabulary:**

**Frame** – the supporting structure of a piece of furniture, a building, a vehicle etc. that gives it its shape.



**I-beam** – a girder which has the shape of an I when viewed in section.



**Struts** – rods or bars forming part of a framework and designed to resist compression.



**Brace** – a device that holds things together or holds and supports them in position.



**Mitre** – a joint made between two pieces of wood or other material at an angle of 90°, such that the line of junction bisects this angle.



**Gussets** – brackets used to strengthen joints of a structure.



**Connections:**

Abraham Darby III  
(1750 – 1789)  
English ironmaster and Quaker



Year 5 Structures  
How are frames strengthened, reinforced and made rigid?

What do I already know?

I can identify shapes suitable for adding strength to a structure.

I can identify some methods used to provide structural stability.

What am I going to find out?

I will know that engineers use a range of methods to strengthen and reinforce structures.

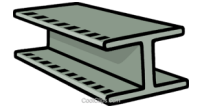
I will be able to identify and describe ways that frames are strengthened and reinforced.

Key Vocabulary

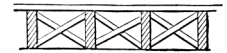
Frame



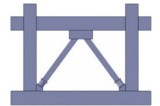
I-beam



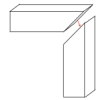
Struts



Brace



Mitre



Gussets



Working as a Designer

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Year 5: Mechanisms  
How can you lift a car onto a roof?



**Core content:**

Investigate how pulleys and gears work.  
Design and make pulleys and gears products.  
Select and use a variety of modelling materials.

**Technical vocabulary:**

**Gear** – a toothed wheel that works with others to transfer rotational movement.



**Pulley** – a wheel with a grooved rim around it which holds a cord, belt or rope. Pulleys are used to change the speed, direction or magnitude of a force and can be used to raise heavy loads.



**Mechanism** – a system of parts working together in a machine.



**Gear train** – a system of gears which transmits motion from one shaft to another.



**Driver gear** – a gear wheel that causes other wheels to rotate.



**Idler** – a gear used for support or guidance instead of power transmission.



**Connections**

George Washington Gale Ferris Jnr. (1859 – 1896)  
American civil engineer



The London Eye

Year 5 Mechanisms  
How can you lift a car onto a roof?

What do I already know?

I can give examples of simple mechanisms such as levers and linkages.

I can cut and join a range of materials.

I can identify ways in which to make a structure more stable and rigid.

What am I going to find out?

I will know types of gears and pulleys and their common uses.

I will know how pulleys and gears can change the direction of movement.

I will be able to design, make and evaluate a product that uses pulleys and gears to lift loads.

Working as a Designer

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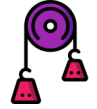


Key Vocabulary

Gear



Pulley



Mechanism



Gear train



Driver gear



Idler

