

Year 6: Food and Nutrition  
Can street foods save us?



**Core content:**

Study and make street foods from different cultures.  
Consider their own diet and snacks and how they might be improved.

**Technical vocabulary:**

**Street food** – food prepared or cooked and sold by vendors in a street or other public location for immediate consumption.



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



**Snack** – a small portion of food, generally eaten between meals.



**Nutrient** – a substance that provides nourishment essential for the maintenance of life and for growth.



**Prove** – to swell (become larger or rounder) before being baked because of the action of yeast.



**Fry** – to cook something in hot fat or oil.



**Techniques:**



finely dicing



kneading



folding and shaping

Year 6 Food and Nutrition  
Can street foods save us?

What do I already know?

I can identify some traditional dishes and ingredients of different cultures.

I can make, roll and cook flatbread.

I can prepare a range of vegetables and present to a high standard.

I can explain the nutritional value of a range of foods.

What am I going to find out?

I will know how what street foods are.

I will know how snacks can be good foods to eat.

I will be able to make and roll bread dough.

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

Street food



Culture



Snack



Nutrient



Prove



Fry



Year 6: Mechanisms  
How do pulleys and gears let you see the world?



**Core content:**

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

**Technical vocabulary:**

**Pulley** – a wheel with a grooved rim around it which holds a cord, belt or rope.



**Movable pulley** – a simple pulley where the wheel can both move and rotate.



**Fixed pulley** – a fixed pulley is one which has a rotating wheel that is attached to a stationery object such as a beam.



**Block and tackle** – a lifting mechanism consisting of ropes, a pulley block and a hook.



**Rack and pinion** – a device for converting rotary into linear motion and vice versa.



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



**Driven gear** – a gear wheel that moves in the opposite direction to the gear that is driving it.



**Connections:**

The London Eye (completed 2000)



Year 6 Mechanisms

How do pulleys and gears let you see the world?

What do I already know?

- I can explain what a gear is and how it works.
- I can identify different types of gears and their applications.
- I know how direction and speed of movement is changed by using a system of gears and pulleys.
- I can construct a simple pulley system to lift a load.

What am I going to find out?

- I will know types of pulley systems and gears and their uses.
- I will know how pulleys and gears can create simple mechanisms and change direction of movement.
- I will be able to design and make a model Ferris wheel powered by gears.

Working as a Designer

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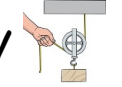


Key Vocabulary

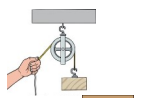
Pulley



Movable pulley



Fixed pulley



Block and tackle



Rack and pinion



Driver gear



Driven gear



Year 6: Food and Nutrition  
Does food affect the way you feel?



**Core content:**

Learn how to cook foods that are often pre-made and processed.  
Learn and apply techniques to make dishes designed to help improve energy levels, mood and future health.

**Technical vocabulary:**

**Translucent** – allowing light to pass through but not completely clear.



**Sauté** – to cook over heat, in fat or oil.



**Dice** – to cut food into small squares.



**Carbohydrates** – sugars that provide the body with energy and essential nutrients.



**Simple carbohydrates (quick release)** – broken down by the body quickly and found in natural foods such as fruit in processed food.



**Complex carbohydrates (slow release)** – found in starchy foods such as pasta and bread.



**Staple** – food that is a common part of a region's everyday diet and that can be stored.



**Nutrient** – a substance needed by organisms to stay alive and healthy.



**Techniques:**



dicing



ribboning



sautéing

Year 6 Food and Nutrition  
Does food affect the way you feel?

What do I already know?

I can explain what humans need to stay healthy.

I can identify the main food groups.

I can hold and use utensils correctly.

What am I going to find out?

I will know the difference between slow release and quick release carbohydrates.

I will know how food can improve my mood and energy levels.

I will be able to dice, slice, peel, grate and cook a range of vegetables.

I will be able to make a sauce and a stock.

Key Vocabulary

Translucent



Sauté



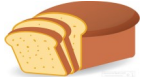
Dice



Carbohydrate



Simple Carb.



Complex Carb.



Staple



Nutrient



Working as a Designer

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Make

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Evaluate

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Apply

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## Year 6: Structures

How strong is a piece of spaghetti?



### Core content:

Test the strength of spaghetti.  
Construct a tower that is at least three levels tall.

### Technical vocabulary:

**Guyed mast** – a tall, thin, vertical structure that depends on guy lines for stability.



**Flying buttress** – an architectural support that bears the load of roofs or vaulted ceilings.



**Load** – the amount of weight that is pressing down on something.



**Aesthetic** – connected with beauty and art and the understanding of beautiful things.



**Edifice** – a large, impressive building.



**Constraints** – restrictions or limitations.



### Connections:

*Blackpool Tower*  
by architects  
James Maxwell  
(1838 – 1893) and  
William Charles Tuke  
(1843 – 1893)



## Year 6 Structures

How strong is a piece of spaghetti?

### What do I already know?

- I know which 2D shapes have strength and stability.
- I can explain why cylinders are capable of bearing weight.
- I can create a truss, using a series of triangles.

### What am I going to find out?

- I will know that structures can be supported with guy lines and flying buttresses.
- I will be able to construct a flying buttress to support a tower.
- I will be able to use appropriate lengths of spaghetti to increase stability and strength.

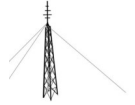
## Working as a Designer

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## Key Vocabulary

Guyed mast



Flying buttress



Load



Aesthetic



Edifice



Constraints



Year 6: Electrical Systems  
Can switches perform more than one function?



**Core content:**

Learn how switches can be combined with electrical components in different ways to change the functionality of a product.

**Technical vocabulary:**

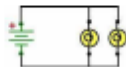
**Switch** – a device for making or breaking the connection in an electrical circuit.



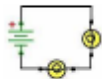
**Component** – one of the parts of an electrical circuit.



**Parallel circuit** – electrical components are connected alongside one another, forming extra loops. If a component is disconnected from one parallel wire, the components on different branches keep working.



**Series circuit** – components are connected in one loop. If a component is disconnected, the circuit is broken and all the components stop working.



**Functionality** – the purpose that something is designed for or expected to perform.



**Multi-function** – having many different functions.



**Brief** – a written description of what a new project or product should do, what is needed to produce it, how long it will take etc.



**Simultaneous** – happening or being done at the same time.



**Connections:**

Albert Sadacca (1901 – 1980)  
American inventor of Christmas tree lights



Year 6 Electrical Systems

Can switches perform more than one function?

What do I already know?

I can construct simple electrical circuits and name the components.

I know that a switch opens and closes a circuit.

I know how components function in a circuit.

I can recognise symbols in a simple circuit.

What am I going to find out?

I will know more than one switch can be used to change the functionality of a product.

I will be able to use switches to adapt a product in response to a design brief.

Working as a Designer

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Key Vocabulary

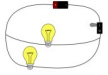
Switch



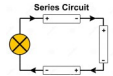
Component



Parallel Circuit



Series Circuit



Functionality



Multi-function



Brief



Simultaneous



## Year 6: Textiles

How can we reduce, recycle and repurpose?



### Core content:

Learn how to reduce waste by recycling and repurposing snack packets and plastic bags into useful items.

### Technical vocabulary:

**Recycle** – to collect and treat used objects and materials in order to use them again.



**Reduce** – to become or to make something smaller in terms of size, degree of importance or quantity.



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



**Chain** – a crochet stitch where connected loops of yarn or thread form a chain.



**Seal** – to fasten or close securely.



**Skein** – a loosely coiled length of yarn.



### Connections:

Isatou Ceesay  
(born 1972)  
Gambian activist and  
social entrepreneur



## Year 6 Textiles

How can we reduce, recycle and repurpose?

What do I already know?

I know how to make a chain from yarn.

I know properties of materials and how these determine their uses.

What am I going to find out?

I will know that plastic waste can be recycled and repurposed into practical items.

I will be able to make a crochet hook out of a chopstick.

## Key Vocabulary

Recycle



Reduce



Repurpose



Chain



Seal



Skein



## Working as a Designer

Design

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Make

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Evaluate

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Apply

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