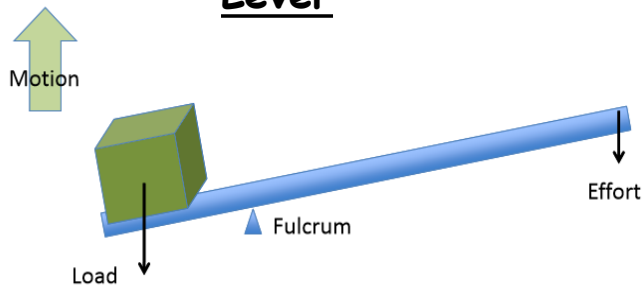


Lever

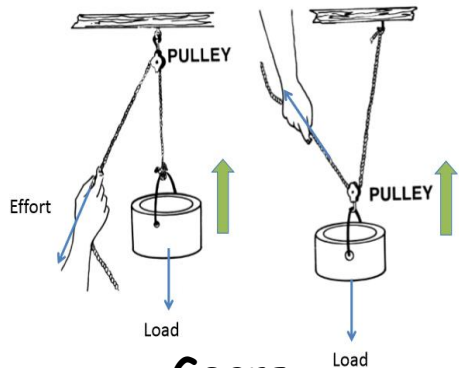


Load: The weight (force) that is being moved
 Effort: The force being used to move the load
 Fulcrum: The point about which the lever pivots

Pulley

Fixed pulley

Moveable pulley



Gears



Gears are toothed wheels that lock together and turn one another. The wheels are usually different sizes so that one gear speeds up to slow down the next gear. Gears are also used to change the direction of movement.

Tier 2 Vocabulary

 specification	describes what a product has to do
 evaluate	to judge if a product meets chosen criteria
 design	a plan or drawing of your ideas

Topic (Tier 3) Vocabulary

 machine	a device with parts that work together to do a job
 load	the amount of something that is carried, moved or put on something
 effort	where the action starts
 fulcrum	the point where a lever turns
 prototype	a quick 3-D model used to check a design
 product	something that is made

National Treasures

Big Ben's Gears



Prior learning

Knowledge on forces from science lessons
(Y3, Y5)

Rights of the Child/Global Goals

Article 13

Every child must be free to express their thoughts and opinions and to access all kinds of information, as long as it is within the law.

Global Goal 9

Industry, innovation and infrastructure

DT Big Ideas

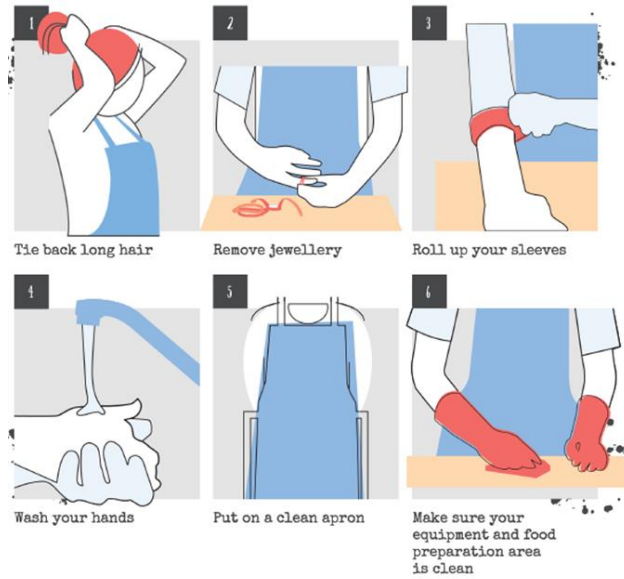
We Are Engineers

Design: we use criteria to design products that do a job for a person or group.

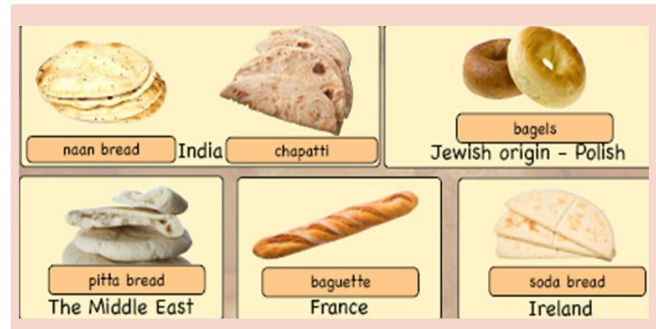
Make: we make products that do a job or solve a problem.

Evaluate: we continually reflect on our work and that of others and we look for ways to improve it.

Technical Knowledge: we apply our understanding to make products that work.



Where does bread come from?



Bread Ingredients

- 500g strong flour
- 1 tsp salt
- 20g butter
- 7g yeast
- 300ml warm water

Tier 2 Vocabulary



describes what a product has to do to judge if a product meets chosen criteria



a plan or drawing of your ideas



Topic Vocabulary



Work moistened flour into dough or paste with the hands.



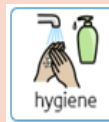
A utensil made of a wire or plastic mesh held in a frame.



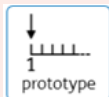
A microscopic fungus.



The feel, appearance, or consistency of a surface or a substance.



Maintaining health and preventing disease, especially through cleanliness.



A quick 3-D model used to check a design



Something that is made

National Treasures

The Great British Bake Off!



Rights of the Child/Global Goals

Article 24

Every child has the right to the best possible health. Governments must provide good quality health care, clean water, nutritious food, and a clean environment and education on health and well-being so that children can stay healthy.

Global Goal 3

Good health and wellbeing

Prior learning

Healthy choices and healthy eating plate
Seasonal food



DT Big Ideas

We Are Engineers







Design: we use criteria to design products that do a job for a person or group.

Make: we make products that do a job or solve a problem.





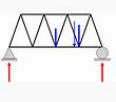

Evaluate: we continually reflect on our work and that of others and we look for ways to improve it.

Technical Knowledge: we apply our understanding to make products that work.

Cooking and Nutrition: we use what we know about food to safely prepare healthy meals.

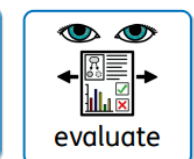
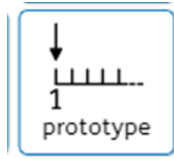
Name of bridge	Location	Type of bridge	Photo
Akashi Kaikyo Bridge	Japan	Suspension bridge	
Clifton Suspension Bridge	England	Suspension bridge	
Chaotianmen Bridge	China	Arch bridge	
Sydney Harbor Bridge	Australia	Arch bridge	
The Forth Bridge	Scotland	Cantilever bridge	
Tower Bridge	England	Combined suspension and bascule bridge	

Topic (Tier 3) Vocabulary

Arch	A vertical curved structure	
Cantilever	A long piece of wood, metal, etc., that sticks out and supports something above it	
Bascule	A movable section of road.	
Pillar	A tall vertical structure of stone, wood or metal	
Truss	A framework used for support.	
Suspension bridge	A bridge in which the weight of the deck is supported by vertical cables.	
Prototype	A quick 3-D model used to check a design	
Product	Something that is made	

Tier 2 Vocabulary

Specification	describes what a product has to do
Evaluation	to judge if a product meets chosen criteria
Design	a plan or drawing of your ideas
Reinforce	to strengthen or support.



National Treasures

Tower Bridge



Prior learning

How to strengthen materials

Working to design criteria

Forces (pushes and pulls) from science lessons

Shape knowledge

Rights of the Child/Global Goals

Article 13

Every child must be free to express their thoughts and opinions and to access all kinds of information, as long as it is within the law.

Global Goal 9

Industry, innovation and infrastructure

DT Big Ideas

We Are Engineers

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Make: we make products that do a job or solve a problem.

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