Y5 Design Technology – Celebrating Culture & Seasonality
Design Brief – Making Healthier Choices

Essential Knowledge

What is salsa?
Salsa is a common ingredient in Mexican cuisine, served as a condiment with tacos, stirred into soups and stews, or incorporated into dough fillings.
Salsa is a superfood, as it is made from vegetables with high levels of vitamins and antioxidants that can help to improve our immune system (the system in our bodies that stops us from getting sick).

What makes a good salsa?
Salsa is a part of South American cuisine. It is mostly used as a *condiment* to accompany other dishes.
We will test and rate different salsas on their texture, smell and taste.

How can I prepare and make salsa?
Salsa requires chopping of vegetables. To safely cut with a knife, always:

- hold the knife in your strongest hand
- keep your fingers and thumbs tucked away
- choose the correct hold
- place the knife down safely when you have finished

Project Process

Salsa Recipe

Ingredients

- 4-6 medium tomatoes, peeled and finely chopped
- ½ red onion, finely chopped
- 1 small garlic clove, chopped
- ½ lime, juiced
- ½ bunch of coriander, roughly chopped

Method

1) Chop and prepare the ingredients, as listed.
2) Combine all ingredients into a bowl and stir well.
3) Eat with tortillas or other vegetables.

The Eatwell Plate

Key Vocabulary

balanced diet	a diet with the right amount of nutrients to keep bodies healthy
cuisine	a style or method of cooking that is linked to a particular country or place
condiment	a substance that is used to add flavour to food
finely chopped	to cut into very small pieces

Aspirational Knowledge and Skills

Salsa can be traced back to the Mayans in Central and South America.

Salsa means ‘sauce’ in Spanish.

There are six different types of salsa, including a sweet salsa made from fruit.

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Key Knowledge

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Salsa is a common ingredient in Mexican cooking, served with tacos, stirred into soups and stews, or added into dough fillings.
Salsa is a superfood, as it is made from fruits and vegetables.

What makes a good salsa?
Salsa is a part of South American cooking. It is mostly used as a *condiment* on the side of other meals.
We will test and rate different salsas on their texture, smell and taste.

How can I prepare and make salsa?
Salsa requires chopping of vegetables. To safely cut with a knife, always:

- hold the knife in your strongest hand
- keep your fingers and thumbs tucked away
- choose the correct hold
- place the knife down safely when you have finished

Project Process

The Eatwell Plate

Key Vocabulary

salsa		a type of vegetable dish
ingredient		food that is added together to make a meal
healthy		something that is good for our bodies
chop		to cut with a knife into small pieces

Salsa Recipe

Ingredients (What food do I need?)

- 4-6 medium tomatoes, peeled and finely chopped
- ½ red onion, finely chopped
- 1 small garlic clove, chopped
- ½ lime, juiced
- ½ bunch of coriander, roughly chopped

Method (What do I do?)

1) Chop the ingredients.
2) Mix all ingredients in a bowl and stir well.
3) Eat with tortillas or other vegetables.

Y5 Design Technology – Mechanisms: Cams

Design Brief – Can you make a collection of mechanical animals for the WWF to raise awareness about endangered animals?

Essential Knowledge

How might cams be used to create different movements?
Circular cams have an off-centre pivot that makes the follower move up and down smoothly. **Pear cams** stay still for half a turn, then rise and fall gently. **Snail cams** stay still for half a turn, rise slowly, then drop suddenly. A **cross-section design** shows what the inside of a mechanism looks like.

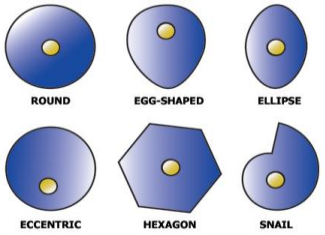
What are your design criteria and how will your design meet each one?
The design criteria: to create a collection of appealing, moving mechanical animal models that will captivate people's interest.

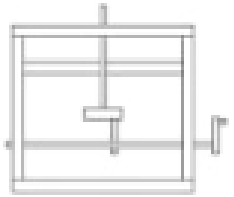
How can you make a mechanism to make your endangered animal move?
The mechanism needs to be made using the correct wooden cam which is attached within the box using the hot glue gun. The hot glue gun is used safely with an adult.

How can you adapt and improve your product?
I need to look at my product and think about whether it meets the design criteria, what does not work and how I would change or adjust it to make it work.

Does your product meet your design criteria?
The mechanism needs to be evaluated using the questions:

- *Why did you make your mechanical animal?*
- *Is your product the same as your design? If not, why not?*
- *What went well?*
- *What would you change next time?*
- *What new skills have you learnt?*
- *Does your product meet your design criteria?*





Key Vocabulary

cam	a wheel attached to a shaft
follower	a bar that touches the cam and follows the shape, moving up and down
axle	a rod or spindle (either fixed or rotating) that goes through the middle of a wheel(s)
guide	a guide helps to keep the follower in place
crank	an arm attached at a right angle to a rotating shaft to create a rotating movement
mechanism	parts that work together in a machine
cross section	a diagram to show each part of the product

Aspirational Knowledge and Skills

A linear motion is a movement in a straight line.
A rotary motion is a movement that goes round.

Project Process

Y5 Design Technology – Mechanisms: Cams

Design Brief – Can you make a collection of mechanical animals for the WWF to raise awareness about endangered animals?

Key Knowledge

How do cams make things move?
Circular cams make things go up and down slowly.
Pear cams stop for a bit, then go up and down gently.
Snail cams stop, then go up slowly and drop quickly.
A **cross-section** shows the inside of how something works.

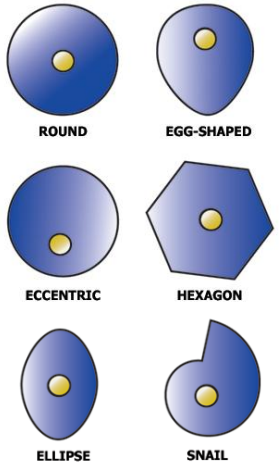
What does your product need to have?
The Design Criteria is: To create a collection of appealing, moving mechanical animal models that will captivate people's interest.

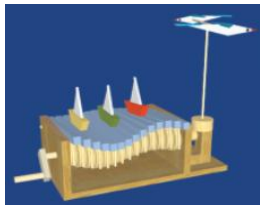
Can you make your model move?
Use the right wooden cam to make the mechanism. Stick it inside the box with a hot glue gun. Always use the glue gun safely with an adult.

How could you make your product better?
I need to look at my product and think about whether it meets the design criteria and if I need to make anything better.

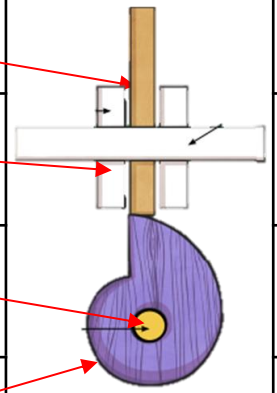
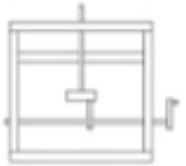
How good is your model?
The mechanism needs to be evaluated using the questions:

- *What went well?*
- *What would you change next time?*
- *Does your product meet your design criteria?*





Key Vocabulary

follower		a wheel attached to a shaft
guide		a bar that touches the cam and follows the shape, moving up and down
axle		a rod passing through the centre of a wheel or group of wheels
cam		a guide helps to keep the follower in place
cross section		a diagram to show each part of the products

Project Process

Y5 Design Technology – Structures
Design Brief – Can you create a model of a house?

Essential Knowledge

What did traditional style houses look like and what were they made from?
Traditional houses were made mostly from wood, with thatched roofs (made of straw). They had white walls with decorative black and brown wooden beams.

How do I make and strengthen a cuboid structure?
A wooden structure will be needed to form the base of a house.

How can I use a saw safely and accurately?
When using a saw, always hold the handgrip (pistol grip) safely. Drawing the saw backwards a few times creates a guide notch in the wood. We use a holding device (a bench hook) when cutting wood. A bench hook should be clamped to the table using a G-clamp.

How can I join and reinforce my structure?
Using PVA glue is an effective way to join pieces of wood and card as it dries quickly. Too much glue will make cardboard soggy and fall apart. Use the glue sparingly!

How can I construct and decorate my house?
Looking at images of different houses, I can decorate my own house structure to create a house of my choosing.

How successful was my house?
I can evaluate my model by answering these questions:

- *The successful parts of my house construction were…*
- *I was most proud of…*
- *The areas I could improve were…*
- *If I were to make another model, I would…*

Key Vocabulary

structure	a building or other object constructed from several parts.
frame	a rigid structure that surrounds something such as a picture, door, or windowpane.
construct	build or make (something, typically a building).
reinforce	strengthen or support (an object or substance), especially with additional material.
joint	a point at which parts of an artificial structure are joined.

Aspirational Knowledge and Skills

When resting the index finger along the saw (pistol grip), the pointed finger helps with accuracy and reduces side to side movement.

Project Process

Y5 Design Technology – Structures
Design Brief – Can you create a model of a house?

Key Knowledge

What did traditional style houses look like and what were they made from?
Traditional houses were made mostly from wood, with thatched roofs (made of straw). They had white walls with decorative black and brown wooden beams.

How do I make and strengthen a cuboid?
A wooden structure will be needed to form the base of a house.

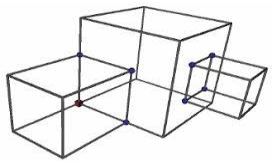
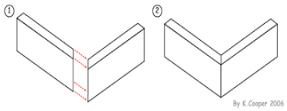
How can I use a saw safely?
When using a saw, always hold the handgrip safely. Drawing the saw backwards a few times creates a guide notch in the wood. We use a bench hook when cutting wood. A bench hook should be clamped to the table using a G-clamp.

How can I make my house strong?
Using PVA glue is a good way to join pieces of wood and card as it dries quickly. Too much glue will make cardboard soggy and fall apart. Use a small amount of glue!

How can I decorate my house?
Looking at images of different houses, I can decorate my own house structure to create a house of my choosing.

How good was my house?
I can evaluate my model by answering these questions:
- *The best parts of my house were…*
- *I was most proud of…*
- *The areas I could do better at were…*
- *If I were to make another model, I would…*

Key Vocabulary

structure		an object made from more than one part
construct		to build or make something
reinforce		to make something stronger
joint		when two points are joined

Project Process