



About this Unit:

The [Jewish](#) Festival of Lights is celebrated by lighting a menorah, or a hanukkah, for eight days and exchanging gifts with loved ones. It is also observed by eating a gargantuan amount of delicious, mouth-watering food, much to the delight of celebrants around the world. We will research foods eaten at this time eg: jam-filled doughnuts to chocolate coins, sumptuous potato latkes and more The project will culminate in a Hannukah celebration organised by the children for their parents to attend.

Key Learning:

Evaluation of Products (Existing and Children's own Finished Products)

- I can research and evaluate existing products (including book and web based research).
- I can consider my user and purpose.
- I can identify the strengths and weaknesses of my design ideas.

Focused Tasks

- I can prepare food products taking into account the properties of ingredients and sensory characteristics.

Design

- I can devise step by step plans which can be read/followed by someone else.

Make

- I can select from and use a wide range of ingredients.
- I can produce detailed lists of ingredients / components .



On Hanukkah, the first dark night, Light yourself a candle bright. I'll you, if you will me invite To dance within that gentle light.



Key Questions:

- Research the types of food that are prepared for Hanukkah.
- Create a powerpoint document and share using our Seesaw blog.
- Write a description about each food.

Vocabulary: design, make and evaluate a (product) to (purpose) for (user).
ingredients / components

This unit will provide opportunities for children, parents or members of the local community to sample these dishes and identify which is their favourite; plan and cook appropriate food for festivals of light such as Hannukah; visit a local supermarket or greengrocer to investigate the range of fruit and vegetables on offer, selecting some items of produce that are unfamiliar and learning how to cook and present them as part of a dish for an identified user.

Unit Overview:

Mechanical Systems – Cams, Pulleys and Gears (A Product, for a Stated Purpose and a Stated User) Through an *Iterative* Process

Develop a challenge around product / purpose / user

This will engage the class and fit with other contexts of learning such as:

- A device for demonstrating how the moon orbits the earth – such as an orrery (a mechanical model of the solar system).
- A vehicle which could be powered by a motor using gears.
- A vehicle using gears and pulleys (e.g. a breakdown vehicle with winch)
- A toy using cams.

DESIGN TECHNOLOGY MOVING TOYS

How does my figure move?

How many different parts does it have?

What is linear motion?

We will be researching and investigating moving toys.

Why do we need cams mechanisms?

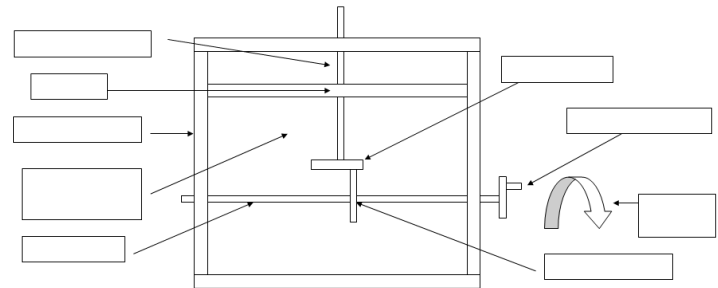
Does the shape of the cam make a difference to the motion?

We will also be learning how to make a moving toy using a cam mechanism for ourselves.

How does circular motion change to linear?

DT MOVING TOYS 2 Investigating Cam Mechanisms name.....

Look at how the cam mechanism works. Label the diagram. Draw a design on top of the mechanism to suit an eccentric cam



Useful words: cam, movement, linear motion, rotary motion, off-centre, crank handle, axle, frame structure, cam mechanism, cam follower

DESIGN AND TECHNOLOGY YEAR 5 SPRING 2 MECHANISMS: GEARS, CAMS AND PULLEYS

MOVING TOYS

Vocabulary:

Develop a technical vocabulary appropriate to the project **pulleys, cams, levers and gears.**

Mechanism, Iterative Process, exploded diagrams cam, movement, linear motion, rotary motion, off-centre, crank handle, axle, frame structure, cam mechanism, cam follower.

YEAR 5 DESIGN AND TECHNOLOGY SUMMER 1
Textiles (A Product, for a Stated Purpose and a Stated User) through an *Iterative* process.

Develop a challenge around product / purpose / user: Amazonian Indigenous Juggling/Badminton Toy



Vocabulary: design, make and evaluate a (product) to (purpose) for (user).

Iterative
storyboard **exploded diagrams** **finishing techniques**

KEY LEARNING:

- ❖ I can research and evaluate existing products; consider my user and purpose and understand how key people have influenced design.
- ❖ I can plan a sequence of work e.g. using a storyboard.
- ❖ I can use exploded diagrams and cross-sectional diagrams to communicate ideas.
- ❖ I can select from and use a wide range of materials.
- ❖ I can cut accurately and safely to a marked line.
- ❖ I can use appropriate finishing techniques for the project.
- ❖ I can give a report using correct technical vocabulary.

