Design and Technology
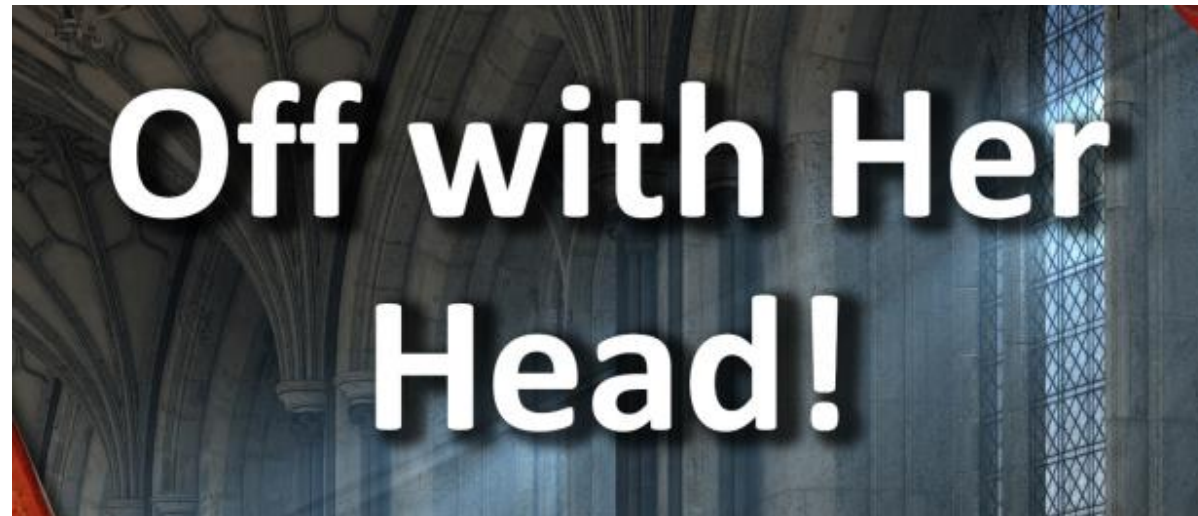
Learning to create a medieval torture device

Place a front cover sheet into your Design and Technology Book

Research | Design and Technology

Learning to create a medieval torture device

Session One:

To research and develop design criteria to inform the design of innovative, functional, appealing product

To investigate and analyse a range of existing products

Let's look at some vocabulary…

Research

To research and develop design criteria to inform the design of innovative, functional, appealing product

To investigate and analyse a range of existing products

What do these words it mean?

Vocabulary:

Torture	**Purpose**
Guillotine	**Structure**
Gallows	**Stiff/Rigid**
Gibbett	**Decorative**
Strengthen	**Reinforce**
Stiffen	**Innovative**
Reinforce	**Function**
Construction	**Appeal**
Specification	**Materials**
joins	**Shape**

Vocabulary Meanings:

Torture	the act of inflicting pain
Guillotine	a device for beheading a person
Gallows	a wooden frame on which to execute people by hanging
Gibbett	a gallows with a protruding arm from which criminals were left suspended
Strengthen	to make something stronger
Stiffen	to become stiff and taut
Reinforce	to add material to make stronger
Construction	to create something
Specification	a detailed description
Joins	when a material comes into contact with another
Purpose	the end use for a design
Structure	something made from different parts
Stiff/Rigid	not able to bend
Decorative	to add extra elements to make it look nice
Innovative	to create something new or a different version
Function	the reason why something has been created
Appeal	to look good – in this case solid / will do the job well
Materials	the equipment you need
Shape	a outline or specific form.

Let's look at some torture devices...

Research

Prior knowledge: What method of torture did Tudors use?

Prior knowledge: What force does a guillotine use?

Discuss these points as you look at each image:

What is <u>innovative</u> about the device?

How does the device <u>function</u>?

What is <u>appealing</u> about the devices?

What types of <u>materials</u> are used in this device?

How do you think this device was <u>joined</u> together?

How can the framework be <u>strengthened</u>?

How can the framework be <u>reinforced</u> or <u>stiffened</u>?

How does the <u>shape</u> of the framework affect its strength?

(Give out mini prompt sheets to match this slide to use with the images)

Off with Her Head!

Punishment: drunkard's cloak

Crime: public drunkenness

Cruelty factor:

In 1551, Parliament passed an official act making public drunkenness a civil offence. Those caught being disorderly or abusive due to excessive drinking were forced to wear a drunkard's cloak in public for a specified amount of time.

The 'cloak' was actually a barrel with one end removed. The other end had a hole big enough to allow the offender's head to go through, and holes were cut on either side of the barrel for the arms.

This punishment was designed to publicly humiliate the drunkard and served to warn others about what would happen to them if they committed the same offence.

Research

Punishment: scold's bridle

Crime: gossiping

Cruelty factor: 😠 😠

This punishment was first recorded in Scotland in 1567 and was used by the English state until the 1800s. Also known as a 'brank's bridle', the device was used to punish badly-behaved, nagging and gossiping women.

The scold's bridle was an iron cage that was placed over the woman's head and fastened with a padlock. A metal plate attached to the bridle was forced into the woman's mouth to hold down her tongue and prevent her from talking. Some mouth plates had spikes or metal strips filed to a point to cause the woman additional pain.
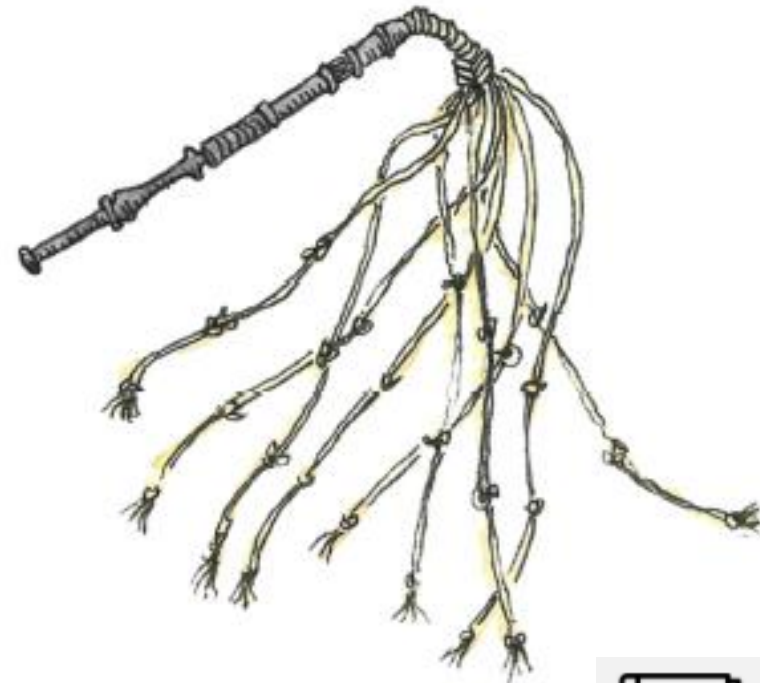
Research

Punishment: whipping

Crimes: begging, homelessness or stealing

Cruelty factor:

In 1530, the Vagabonds Act was introduced to punish poor people with whipping for minor offences. Up until the 1590s, the offender was attached to a cart and forced to walk, whilst having their backs whipped.

During the 1590s, whipping posts were introduced to many towns. The offender would be tied to the post, and the public could watch as the wrongdoer was repeatedly whipped.

The whips came in different forms. They were made of leather or rope and often had a wooden handle. Some were single-tailed whips, while others had many tails to inflict further pain.

Research

Punishment: hanging

Crimes: stealing or murder

Cruelty factor:

Public executions drew in huge crowds and had a carnival feel. Stalls sold food and drink, and performers such as jugglers entertained the audience.

The offender was taken in a horse-drawn cart to the gallows. The noose was placed over the offender's head and tightened around the neck. Once the rope was in place, the horse and cart were driven away, leaving the offender to hang by the neck until dead. Alternatively, the offender climbed a ladder to reach the noose.

The body of the person who had been hanged was often left to rot on the gallows. This reminded others of the severe punishment they would face if they committed similar crimes.

Research

Punishment: boiling

Crime: poisoning

Cruelty factor: 😟 😟 😟 😟

In 1531, Henry VIII passed the Poisoning Act and boiling became a legal punishment. It was a rare form of public execution and drew in tremendous crowds.

The condemned person was placed in a cauldron containing either water, oil, tar, molten lead or wax. The liquid was either already boiling when the person was placed in the cauldron, or heated from cold to gradually increase the level of pain.

Sometimes the offender would be ducked head first into the liquid, or a system of ropes and pulleys was used by the executioner to lower the criminal into the liquid.

Research

Punishment: beheading

Crimes: spying, talking about the government, blasphemy, witchcraft, alchemy or treason

Cruelty factor:

Beheadings were a penalty usually reserved for offenders of 'noble birth' because they were deemed less painful and less dishonourable than other forms of execution.

The offender would climb a raised platform known as a scaffold, then place their neck onto a chopping block. If the executioner was skilled and his axe was sharp, the execution was carried out swiftly. However, a less skilled executioner sometimes took a few swings before the condemned person's head was removed from the body.

The heads of traitors were often put on top of stakes and displayed in public places.

Research

Punishment: burning at the stake

Crimes: treason or heresy

Cruelty factor:

This type of execution was used to punish heretics (people who would not accept the teachings of the Church). Mary I had hundreds of Protestants burned alive, as it was believed that burning cleansed the soul.

Females who had committed acts of treason, or high treason, were also sentenced to this punishment. An act of treason included a woman murdering her husband.

The prisoner was secured to a wooden stake surrounded by wood. The wood was then set alight, and the offender was burned from the feet upwards. Sometimes, as an act of mercy, the prisoner would be strangled before being burned.

Research

Punishment: hanging, drawing and quartering

Crime: high treason

Cruelty factor: 😣 😣 😣 😣 😣

This was a most grisly capital punishment given to men found guilty of high treason (a crime against the King or the government).

There were three stages to this punishment. Firstly, the criminal was attached to a light wooden structure and drawn by a horse from prison to the place of execution. They were then hanged until almost dead. While still on the scaffold, the offender had his stomach cut open to display his intestines, and some body parts were removed. He was then beheaded, and the rest of his body was quartered (chopped up into four parts).

Guy Fawkes had been due to suffer this punishment after plotting to blow up the Houses of Parliament in 1605. However, as he climbed the scaffold, he threw himself off the ladder and died instantly from a broken neck. Lucky escape!

Research

Guillotine

Gibbett

Gallows

Research

Research

Task: Create a research page in your book to show your research

Remember to:

- **Arrange your images on the page**
- **Show the images you have looked at;**
- **Write the vocabulary talked about and it's meaning**
- **Record the answers to the questions we have discussed.**

Have you shown what is innovative, functional, appealing about the product?

Researching my medieval device

I am researching this item because._____

It will have been used to_____

It would have been used by_____

I have researched my ideas by_____

I have found out about ____ different types of medieval devices. They are
1)
2)
3)
4)
The shape of a device affects its strength by

Devices are reinforced by

I have also found out the following:
-
-
-

Based on my research, I am going to design a

Vocabulary

Torture	**Purpose**
Guillotine	**Structure**
Gallows	**Stiff/Rigid**
Gibbett	**Decorative**
Strengthen	**Reinforce**
Stiffen	**Innovative**
Reinforce	**Function**
Construction	**Appeal**
Specification	**Materials**
joins	**Shape**

Use scaffolds / demo

Learning to create a medieval torture device

Session Two:

- To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
- To select from and use a wider range of tools and equipment to perform practical tasks
- To select from and use a wider range of materials and components, including construction materials.

Design

Task: Together as a class, write design criteria.

Remember to consider:
- **Purpose**
- **Innovation**
- **Function**
- **Appeal**
- **Structure**
- **Strength**
- **Moving parts**

Complete a design criteria sheet
All have the same design criteria

My Design Criteria

My design will:
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

Off with Her Head!

Design

My Design Criteria

My design will:

My Design Criteria

My design will:
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

Task: Together as a class, write design criteria.

Remember to consider:
- **Purpose**
- **Innovation**
- **Function**
- **Appeal**
- **Structure**
- **Strength**

Stick the design criteria in with a vocabulary sheet

Off with Her Head!

Design

Task: Plan you medieval torture design

Remember to:

- **Look at materials on offer**
- **Choose a design type**
- **Make a sketch of your design**
- **Label you design parts using a ruler**
- **Decide what materials you will need**
- **Decide how you are going to make your structure**
- **Decide how big your structure will be**
- **Consider any moving parts to your design**
- **Considered how your design is innovative, functional and appealing.**
- **Complete a design sheet**

My Medieval Torture Design

Our Device is
People in my group area:

Materials	
• Wood	• Saw
• Hammer	• Panel pins
• vice	• G clamp
• Strengthening triangles	• Wood glue
• text	• text

Method

Innovative	to create something new or a different version
Function	the reason why something has been created
Appeal	to look good – in this case solid / will do the job well

My Medieval Torture Design

Our Device is

People in my group area:

Materials

- Wood
- Hammer
- vice
- Strengthening triangles
- text
- Saw
- Panel pins
- G clamp
- Wood glue
- text

Method

-
-
-
-
-
-
-
-

Off with Her Head!

Design and Technology

Learning to create a medieval torture device

Session Three:

- To select from and use a wider range of tools and equipment to perform practical tasks
- To select from and use a wider range of materials and components, including construction materials.
- To stiffen and reinforce more complex structures
- To understand and use mechanical systems [for example, gears, pulleys, cams, levers and linkages] in their products
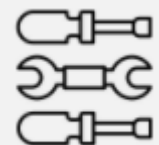
Make

Watch the demonstrations to make sure you stay safe whilst working

Remember to:

- **Watch the demonstration carefully**
- **Measure and mark your wood accurately – it must make a strong structure**
- **Be patient – wood glue doesn't stick instantly**
- **Be careful at all times – tools cause injuries when not used properly**
  Secure wood in the vice before cutting / sawing or hammering
- **Select the correct tool for the job – be patient if you have to wait.**
- **Work at the workstation at all times – not cutting, gluing or sawing on tables**
- **Work safely or you will not be allowed to use the tools**
- **Stiffen your structure using cardboard triangle**
- **Work in pairs or threes**
  - **One to be the health and safety advisor**
  - **One to be the tool operator**
  - **One to be the instructor / read and follow the plan**
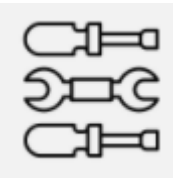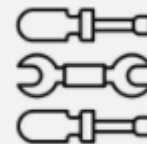
Make
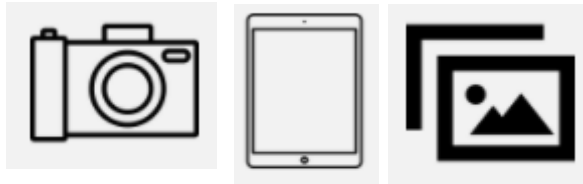
Task: Build your design

Remember to

- **Follow your plan (instructor)**
- **Be safe at all times (health and safety advisor)**
- **Cut carefully (tool operator)**
- **Produce a finished product in the time you have.**
  (Take photographs)

Vocabulary:

Torture	Purpose
Guillotine	Structure
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Gibbett	Decorative
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Reinforce	Function
Construction	Appeal
Specification	Materials
joins	Shape

My Medieval Torture Design

Our Device is
People in my group area:

Materials
- Wood   • Saw
- Hammer   • Panel pins
- vice   • G clamp
- Strengthening triangles • Wood glue
- text   • text

Method
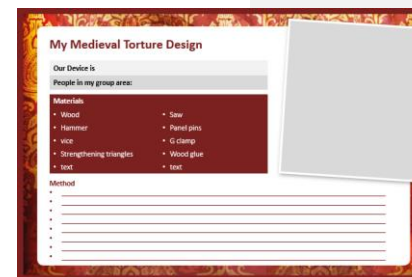
Evaluate | **Design and Technology**

Learning to create a medieval torture device

Session Four:

- To evaluate ideas and products against your own design criteria
- To consider the views of others to improve our work
- To understand how key inventions linked to this era have helped shape the world

Evaluate

Task: Evaluate yours and others' designs.
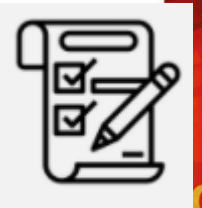
1. **Did it meet your design criteria?**
2. **Tick off if it did**
3. **Complete evaluation sheet**

My Design Criteria

My design will:

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

Evaluating my Medieval Device

I improved my design as I worked by _____

I did/ did not meet my design criteria

My finished product was / wasn't suitable for its user.
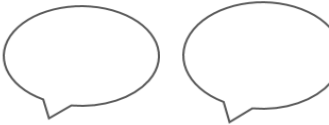
We tested the strength of the shelter by _____
_____

My design was successful because: _____
_____

I would improve my design by _____
_____

I would also _____
_____

Other people's thoughts.

Design

I can research and design a range of interesting, useful and appealing products that are aimed at certain people or groups.	
I can develop and communicate my ideas through discussion.	
I can develop and communicate my ideas through sketches.	
I can develop and communicate my ideas through diagrams.	
I can develop and communicate my ideas through models.	
I can develop and communicate my ideas through patterns.	
I can develop and communicate my ideas through computer-aided design.	

Make

I can select from and use tools and equipment to perform tasks (for example cutting, shaping, joining and finishing).	
I can select from and use a wider range of materials, including construction materials, textiles and ingredients, according to how useful and attractive they are.	

Evaluate

I can explore products, say how good they are and explain how they could be better.	
I can explain how good my own product is, listen to the views of others and explain ways I could make it better.	
I understand how key events and people in design and technology have helped shape the world.	

Technology

I can build structures and explore how they can be made stronger, stiffer and steadier.	
I can explore and use things like gears, pulleys, cams, levers and linkages in my product.	
I understand and can use electrical systems, such as series circuits incorporating switches, bulbs, buzzers and motors in my product.	
I can use computing to program, monitor and control my product.	

Plenary

What have
You achieved
today?

Discuss

Remembering:
How were criminals punished during Tudor times?
Understanding:
Why should we consider the materials we use?
Applying:
Draw diagrams of how we will create moving parts (levers / pulleys)
Analysing:
Compare our design with an authentic device.
Evaluating:
How successful were our designs?
How could we improve our models?
Creating:

Create an instruction sheet for your model.

Vocabulary

Torture	**Purpose**
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Off with Her Head!

pinterest.com ↗

Off with Her Head!

To research and develop design criteria to inform the design of innovative, functional, appealing product
To investigate and analyse a range of existing products

Discuss these points as you look at each image:
What is <u>innovative</u> about the device?
How does the device <u>function</u>?
What is <u>appealing</u> about the devices?
What types of <u>materials</u> are used in this device?
How do you think this device was <u>joined</u> together?
How can the framework be <u>strengthened</u>?
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