

**DT Knowledge Organiser:
Year 3: Autumn Term 2
Textiles:
Stone Age Pouch**

Project: To design and make a small pouch, select a basic running stitch or an over stitch, and select a type of fastening.

This half term you will learn:

- to thread needles with greater independence;
- how to tie knots;
- how to revise a basic running stitch;
- how to sew an over stitch;
- that a 3D textile structure can be made from two identical fabric shapes;
- to design and make a template for a small pouch, applying individual design criteria;
- to refresh sewing skills: practice a basic running stitch on binca;
- to use scrap materials to practice an over stitch;
- to measure, mark and cut fabric using a paper template;
- to select a stitch style to join fabric neatly - select a basic running stitch or an over stitch;
- to evaluate and test a design.

Let Me Introduce You To...



Rachel Boston

Rachel Boston is a modern day jewellery designer, who uses the Stone Age to inspire some of her designs. The jewellery is created in her workshops in East London. Her latest collection features beetle, scorpion and shark teeth designs. Rachel works with diamonds and other gem stones, resulting in unique style jewellery.



Key Knowledge

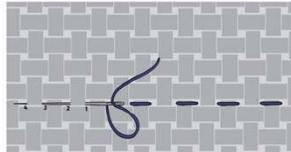
In the Stone Age, people made clothing by hunting animals and then using their coat/fur for clothing. They would scrape the mud and dirt off using Stone Age tools, then wash it. By the **Neolithic** period of the Stone Age, the needle and thread were invented. This meant people could stitch clothes together to help keep them warm in winter. **Weaving** grasses and plant stems was another way people made clothing. Stone Age jewellery has also been found from this time, made from animal bones.



This is a Stone Age **pouch** or purse, between 2,500 and 2,200 BC, that was discovered in 2012 on a burial ground in Germany. It is decorated with over 100 dog teeth, which appears to have been very fashionable in the Stone Age!

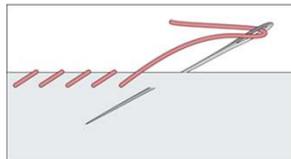


Technical Knowledge



Running Stitch

A simple line of straight **stitches** with the needle going up through a hole, down through the next and continuing. It's a bit like the Loch Ness monster coming up and down out of the water!



Overstitch

This is where the needle comes up through the fabric and then wraps over the edge before coming back up for another **stitch**.

Key Vocabulary

Word	Definition
<i>textiles</i>	any material that is made from fibres or yarns
<i>stitch</i>	a loop of thread made using a needle
<i>template</i>	a shaped piece of rigid material used as a pattern for processes such as cutting out cloth or other material produced by weaving or knitting fibres
<i>fabric</i>	cloth or other material produced by weaving or knitting fibres
<i>Neolithic</i>	the later part of the Stone Age
<i>pouch</i>	a small flexible bag, typically carried in a pocket or attached to a belt
<i>weaving</i>	combining long threads to form a fabric

**DT Knowledge Organiser:
Year 3: Spring Term 2
Mechanisms:
Pop-Up Book**

Project: How can we make a book pop up or have moving parts?

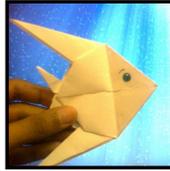
This half term you will learn:

- learn that an input is the motion used to start a mechanism
- learn that an output is the motion that happens as a result of starting the input
- design a pop up or moving parts book for a given audience
- design a pop up or moving parts book which uses a mixture of structures and mechanisms
- name each mechanism input and output
- story board ideas for a book
- follow a design brief to create a book with moving parts that use levers and sliders
- follow a design brief to make a pop up book using slider, pivots or folds to create movement
- make mechanisms and/or structures
- use layers and spacers to hide the workings of mechanical parts

Let Me Introduce You To...

Origami

Paper was first invented in China around 105AD. It was brought to Japan by monks in the sixth century.



Origami is the art of paper folding and developed in Japan, originally for ceremonial and religious purposes. It involves folding a flat square shape of paper into a 3-D sculpture.



Key Knowledge

Pop-up and moveable books have been delighting and engaging readers and non-readers, young and old alike, for nearly 800 years. Using inventive ways to fold paper and create movement (**motion**), pop-up artists and paper engineers transform the printed page from two-dimensional forms to three-dimensional experiences.



Movables have **mechanisms** such as flaps, pull tabs, and wheels (volvelles) that cause movement on the page surface. An **input** starts the **mechanism** and creates the movement (the **output**).



Pop-ups employ various folding devices that cause figures to lift, pop up, rise and unfold, or unfold and extend when a page is opened.

Technical Knowledge

There are lots of different ways to fold, cut and glue paper to change it from a two-dimensional piece of paper to a three-dimensional form, these techniques can be used in a book to make illustrations move or **pop up**.



simple box pop-ups

flaps, wheels

pull tabs/sliders

folds

Key Vocabulary

Word	Definition
<i>mechanism</i>	a system of parts working together in a machine
<i>input</i>	the motion used to start a mechanism
<i>output</i>	the motion that happens as a result of starting the input
<i>motion</i>	the action of moving
<i>pop-up book</i>	a book that has parts that fold and unfold to lift pictures
<i>moveable book</i>	a book that has mechanisms such as flaps and pull tabs to make parts move
<i>paper engineer</i>	an artist who uses various techniques (e.g., cutting, folding, and/or gluing) to make paper illustrations move or pop up