This lesson plan is part of a series of 4 lesson plans focussed on teaching archaeology to young children. It is aimed at pre-school, and junior and senior infant classes in primary schools. This project is a joint initiative between the Heritage Office of Kilkenny County Council, the Kilkenny County Childcare Committee and Kilkenny Education Centre, and co-funded by the Heritage Council. For further information see www.kilkennycoco.ie/eng/Services/Heritage

Learning objectives

- To help children explore what clothes we wear today, and compare them to the clothes that were made and worn in times past, and to understand the differences between them.
- To build a concept of time passing through relating it to clothes the children wore in the past.
- To build awareness that the clothes we wear are made by people, and where they come from.

Learning context

The first clothes
Before people understood how to make woven cloth (in the Palaeolithic (Old Stone Age c. 10,000 BC, c. 3,000 years before the first people arrived in Ireland), they used animal skins for making clothing. Carved figurines from Russia show humans wearing fur parka and leggings. Other finds show that hunter-gatherers used sewing needles (made from animal bone) to make skins into clothing.

Linen manufacturing in Kilkenny
Louis Crommelin, a Hugenot refugee, helped established the first linen manufacturing in Ireland at Lisburn. His brother William helped the Marquis of Ormond establish a similar industry at Kilkenny in the early eighteenth century. The business seems to have proved unsuccessful but had closed by 1709. In 1763 a weaving school was established on Greens Hill in which boys were taught linen weaving, reading and writing and were instructed in the Protestant faith. It ceased producing linen in 1839. Bleach greens, used for bleaching the raw materials, were established on both sides of the river and illustrations of Kilkenny show linen drying in the grounds of Kilkenny College. The Bleach Road in Kilkenny gets its name from the bleach greens that once were located here.

Wool manufacturing in Kilkenny
Frieze, a rough heavy woollen cloth, was manufactured at Kilkenny during the seventeenth century. Competition with the manufacturing centre of Carrick-on-Suir meant that the weavers were forced to produce worsted cloth, a finer quality fabric. The woollen industry and blanket manufacturing in particular was the city's main source of employment in the eighteenth century. At the end of the eighteenth century the Castle Mills, which had been in existence as a corn mill since the early thirteenth century, was converted into a woollen mill. The Maudlin Mills was also converted in the 1790s. At the turn of the nineteenth century there were 50 working looms in the city providing employment for nearly 800 people (5% of the population of the city at this time). Woollen manufacturing continued to thrive in the nineteenth century. A number of woollen mills are recorded on the River Nore, including Archibald’s, Comerford’s and Bibby’s. There were additional woollen mills recorded in Irishtown and on the canal. The remains of some of the old mill buildings are still visible on the banks of the River Nore. Lady Desart established the in 1906. The weavers and spinners of Greenvale woollen mill in the 1920’s. The mill Kilkenny Woolen Mills were built by Ellen, Countess of Desart in 1906 as part of Kilkenny’s ‘Industrial Revolution’. There were other woollen mills in the county throughout the medieval time and later, such as at Graignamanagh.

Further reading
- River Nore Heritage Audit.
### Linkage and Integration

(i) **Aistear**
- Identity and Belonging – children think about themselves as changing and growing.
- Wellbeing & communication - Team cooperation
- Exploring and Thinking –early maths concepts, counting, ordering, pattern recognition

(ii) **Primary school curriculum**
- **History**
  - Skills and concepts: working as a historian - time and chronology
  - Strand: story; myself
- **Maths**
  - Skills and concepts: applying and problem-solving - reasoning, implementing, understanding and recalling
  - Strands: early mathematical activities: counting, comparing and ordering; Algebra - extending patterns
- **Science**
  - Skills: designing and making
  - Strand: materials - properties and characteristics of materials; materials and change
- **Visual Arts**
  - Skills and concepts: an awareness of texture; An awareness of pattern; an awareness of line
  - Strand: creating in fabric and fibre

(iii) **Archaeology in classroom**
- Module 8 – Looking at old photographs.

### Learning activities and method

An activity story board could be designed with photographs of the children engaged in the activity at different stages. Comments made by children and adults could be included and this will help to document the process. This could become a learning story for children to use in reviewing how the activity was carried out and the outcome of the activity.

**Activity 1 – Old clothes**
Discuss why the baby clothes no longer fit the child, and why they need new clothes. Introduce the idea of old clothes and new clothes.

**Activity 2 - Types of clothes**
Children handle selection of clothes made from different materials, and look at photographs of old clothes. Discussion should draw attention to the feel, the colours, who wears these clothes, are they inside or outdoor clothes, patterns in the clothes, and where the materials come from.

**Activity 3 - Learning how to weave wool - the human loom**
The aim of this activity is to learn the art of weaving. Children will see how a loom really works. Use small group to ensure the children’s attention hold for the duration of the activity.
Learning activities and method (continued)

(This activity may be better with rope for younger children)
Cut eight 2-3m lengths of one of the colours of very thick wool to make the 8 pieces of ‘warp’ (the strings that would hang down on a loom).

- Keep the other length of wool long; this is the piece they are going to weave.
- Stand as in the picture holding a length of rope between two people (an alternate for younger children is to tie the 8 strands of wool/rope to chairs). This represents the basis of the loom with the warp threads.
- Nominate a pupil to be the ‘bobbin’ and two children to be the weavers.
- Have your other string of wool (which represents the ‘weft’) coiled up and held by one person. The ‘bobbin’ takes the end of the wool and weaves in and out of the warp wool stepping under and over the wool, when the bobbin gets to the end, she turns around and weaves the other direction.
- The weaver will need to make sure the weft is straightened after being thread under and over.
- The children watching call out ‘under’ and ‘over’ to guide the ‘bobbin’ so that he/she knows which way to go.
- Keep going until you have ‘weaved’ some ‘fabric’. Swap around roles so all children get to try different things.

Discuss the use of wool and knitting. Show the children knitting, and jumpers, discussing where wool comes from, how it is made into wool, and how it can be made from wool into clothes.

Activity 4 – Introducing chain mail
Chain mail was worn during medieval times as protection when going into battle. Tell the children a story that they can relate to: a fairy tale such as Snow White, or a story about Shrek, to help them understand what chainmail is, what it is made from, and why it was worn.

Activity 5 – Learning how to make a paper chain
The aim of this activity is to introduce the concept of making a paper chain, as a pre-cursor to making chain mail (see activity 6).

You will need coloured sheets of A4 paper cut across the page in to c. 1cm wide strips. The outcome is simple links of chain of coloured paper.

1 Each child starts with 2 strips of one colour (green) and 2 strips of a second colour (blue), 2 strips of a third colour (red), plus a glue stick (it is possible to use sellotape instead)
2 Take one of the green strips and put glue on the end, and stick it to itself to make a hoop
3 Repeat this process with the first of the blue strips, inter-locking it with the green strip
4 Repeat this process with the different colour strips to complete a chain

This process can be continued as long as the class wishes.
### Learning activities and method (continued)

**Activity 6 – Learning how to make chain mail**
The aim of this activity is to introduce the concept of making a sheet of chain mail. You will need coloured sheets of A4 paper cut across the page into c. 1cm wide strips as per activity 5. The outcome is simple coloured paper chain mail.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td><strong>1</strong></td>
<td>Each child starts with 2 strips of one colour (green) and 2 strips of a second colour (blue), 2 strips of a third colour (red), plus a glue stick (it is possible to use sellotape instead)</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Take one of the green strips and put glue on the end, and stick it to itself to make a hoop</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>Repeat this process with the first of the blue strips, interlocking it with the green strip</td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>Repeat this process with the three remaining blue strips, all of them interlocking with the green strip</td>
</tr>
<tr>
<td><strong>5</strong></td>
<td>Take the second green strip, and loop it around the bottom two blue strips</td>
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<tr>
<td><strong>6</strong></td>
<td>Each pupil should complete this process. Take a stick, and slot it through the upper two blue loops of each child's work</td>
</tr>
<tr>
<td><strong>7</strong></td>
<td>Take one of the red strips and use it to loop the right side blue loops of one child's work with the left side blue loops of another child's (the red strip should interlock four blue loops)</td>
</tr>
<tr>
<td><strong>8</strong></td>
<td>Repeat this process to join all the children's work together</td>
</tr>
<tr>
<td><strong>9</strong></td>
<td>Take another red strip and use it to loop the lower right side blue loop of one child's work with the lower left side blue loop of another child's (the red strip should interlock two blue loops)</td>
</tr>
<tr>
<td><strong>10</strong></td>
<td>Repeat this process to join all the children's work together</td>
</tr>
</tbody>
</table>

This process can be continued as long as the class wishes.
Assessment

Children should be able to discuss what clothes (including protective clothing) they wear today and compare it to what was worn in times past, and how it was made.

Resources & Materials

Activity 1 – Old clothes
- Each child should bring in:
  - an item of their own baby clothes.
  - a photograph of themselves wearing baby clothes

Activity 2 - Types of clothes
A selection of materials should be brought in: suggestions include wool, leather, cotton, velvet.

Activity 3 – Learning how to weave wool
- Two different colours of wool – or rope, or bandages, strips of cloth as wider material can be woven into a pattern more swiftly.
  - Cut one of the colours of wool in to 8 (or more if larger class size) lengths of 3-4 m
  - Leave the other colour as a long bound ball
- Wooden spoons

Activities 5 & 6 – Learning how to make chain mail
- Coloured A4 paper (at least three different colours)
  - Cut 1cm wide strips across the page, c. 10 strips per child
- Scissors (x1)
- Glue sticks (or sellotape) (x pupils (can share))
- Bamboo or other stick to loop the mail on to

Teaching Resources

General information about Ireland’s archaeology and history
- http://www.itsabouttime.ie/primary/05links.htm
- http://www.digitkids.ie/teaching_resources

Mills and milling in Kilkenny
- There is a working traditional woollen mill in Graignamanagh called Cushendale Mills http://www.cushendale.ie/

Rothe House Museum, Co. Kilkenny holds a nationally important late eighteenth to twentieth century costume and textile collection

The history of weaving
- http://www.historyforkids.org/learn/clothing/weaving.htm

Weaving games

The history of chain mail & making chain mail