Mountsandel



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Mountsandel – what the archaeologists found

During the 1970s, underlying a small patch of grass behind the medieval fort at Mountsandel, Coleraine, Peter Woodman and his team of archaeologists discovered evidence of a Mesolithic (Middle Stone Age) settlement dated to 7900-7600BC. Their discoveries dramatically revised our understanding of prehistoric life in Ireland, and the site remains the earliest known evidence of human settlement in Ireland. From what the archaeologists found, we can learn about the Mesolithic environment and how people made the best use of their natural resources to shelter, clothe and feed themselves.

The local soil is very acidic, and the natural materials that Mesolithic people would have used for housing, tools and clothing rots away quickly, so very little evidence of the Mesolithic period survives. However, from the clues that do remain, and from what we know about the prehistoric environment, archaeologists have been able to piece together how Mesolithic people lived at Mountsandel.

The Mesolithic Settlement

The archaeologists found evidence of a series of post holes in the ground, where wooden posts had been driven in to build huts and other structures. There was a hut area at the centre of the site, outside of which were drying and storage racks, a flint knapping area and probably also a butchering area.

The huts were substantial, measuring approximately 6m in diameter. They were almost egg-shaped, made by driving hazel rods into the ground, tying them at the top and then weaving smaller branches into the main structure. They were probably covered predominantly in turf and some hide. The entrance was on the south west side and there was roughly central hearth, with small flint-working area beside the fire and a sleeping area at the back. There were four huts built over time in the same spot. Each of these huts could have lasted for several years and been repaired or rebuilt for several generations.

Mountsandel operated as a base camp for an extended family group of around six to twelve people. Other evidence found at the site suggests that people lived there during the summer, autumn and early winter, but may have moved elsewhere during the rest of the year when food became more difficult to find.

The Mesolithic Environment

The local environment provided a huge range of food and other resources for the settlement at Mountsandel, making it a valuable base for most of the year.

The site was in a rich forest on the upper limits of the Bann estuary, within easy reach of open sea cliffs, and ideally placed on a wide, relatively well-drained plain which would have contained several small lakes. The river was narrower and more easily accessible at this point and, because water levels were higher, was ideally located between freshwater and estuarine environments.

The forest provided the materials to make shelters, tools and weapons as well as fruit, nuts and berries to eat. Wild boar, mountain hare, and a variety of woodland, lakeland, and river birds were hunted nearby. The river provided salmon, eel, trout and bass and the cliffs on the shore were a rich source of flint.

Artefacts found and their uses_

Almost all the artefacts found were flint, as the acidic local soils had destroyed the majority of other evidence.

Substantial amounts of flint were probably collected from screes at the foot of chalk cliffs; some may have been removed from the chalk clliff face. Most would have been gathered from within 10km of the site, probably at either Portrush or Downhill.

Flint cores were brought to the site to be worked into blades or axes by flint-knapping. Because of scarcity of flint in the immediate area, many cores had been reworked to the point of exhaustion. The largest number of tools were microliths, tiny blades several of which could be mounted in a wooden shaft and used as an arrow or cutting tool. There were also core axes, flake axes, picks, borers and scrapers.

The range of blades and their uses for a range of woodworking activities illustrate best the number of activities carried out on site. Many were stained and showed traces of wood and hide polish. It should be remembered that fishing communities tended to use more complex equipment made from organic material that would leave little trace e.g. fish traps, net, canoes, paddles, fish hooks etc.

There was also good evidence that the site continued to be used into the Neolithic period. Neolithic finds included flints, handmade pottery, a net sinker, glass beads and a spindle whorl.

Mountsandel Explorers

A trip to Mountsandel Wood to see the site of the Mesolithic settlement in the context of its immediate environment can help your pupils visualise what life was like for Mesolithic people and how they used natural resources to survive.

Looking at the Landscape:

- What did this landscape look like in Mesolithic times compared to today?
- What food and other natural resources were found here in Mesolithic times? How did this change through the seasons?
- Look carefully as you walk through the forest for things to eat or materials that would have been of use to Mesolithic people. Encourage pupils to use their imaginations.

What did the archaeologists find?

- Why does nothing remain visible of the Mesolithic settlement above gound?
- What happens during an excavation?
- What did the archaeologists find out about Mesolithic people from what they found here? What were they not able to find out?
- Ask the pupils to imagine they are one of the hazel rods that made up a Mesolithic hut and stand in a large circle approximately 6m in diameter, with their hands up in the air and bending slightly towards the middle.



What was life like for Mesolithic people?

- How did they get their food and collect water? How did they know what plants were edible or poisonous? How did they cook their food?
- What did they wear? Were their clothes warm or waterproof?
- How did they wash or go to the toilet?
- Do you think life easy or difficult for Mesolithic people?

Recording the Visit:

- Collect examples of plants found in the forest.
- Cut some hazel rods to make into spears, bows and arrows.
- Take photos of any wildlife spotted on the walk.
- Identify key features of the landscape on a map of the area .




Entrance to Wood
River Bann
Rugby Avenue
Mountsandel Wood
Site of Mesolithic Settlement
Mountsandel Fort
Mountsandel Road
Castleroe Road
Somerset Forest
The Cutts or Eas Craoibhe
Entrance to Wood

An Archaeologist for the Day

You will need:

Plastic trays
Sand
Selection of Mesolithic and Neolithic ‘artefacts’
Spoons
Small paint brushes
Rulers

Directions:

Fill the trays with sand and bury the artefacts, separating them into. Neolithic and Mesolithic finds (the Neolithic trays will be virtually the same as the Mesolithic but will also have pieces of pottery and wheat).

Divide the class into smaller groups of 4-6 pupils.
Ask each group to carefully excavate the trenches (trays), using their ‘trowels’ (spoons) and brushes to remove the dirt from the objects.
Ask each group to decide whether the trench they have excavated shows. evidence of a Mesolithic or Neolithic settlement, based on the objects found.
Ask each pupil to measure and record an object from their trench using the worksheet overleaf.





You won’t have a ready supply of real artefacts to excavate. But collecting Mesolithic and Neolithic objects is easier than you might think.

Find pieces of flint, stones and shells at a local beach.

Burn whole hazelnuts and seeds to look like they have been cooked in a fire.

Break an old flower pot and stain and sand it to make it look older.

Save and sterilise fish and chicken bones from your own cooking.

Pluck a few wheat heads from a nearby field and dry in a hot press.

Artefact Record Sheet

Name:

Measure your artefact:

How long?

How wide?

How thick?

What colour is your artefact?

Circle any words that help to describe your artefact:

shiny	**glassy**	**dull**	**polished**
sharp	**blunt**	**smooth**	**rough**

What do you think your artefact was used for?

Draw your artefact in the space below.

Making Tools and Weapons

Flint knapping is a highly skilled craft. Having a go for yourself will quickly illustrate how skilled prehistoric people had to be to survive in their environment. But it can be also very dangerous. Shards of flint are sharper than glass so safety goggles and gloves should be worn at all times.



You will need:

- Large thick sheet of polythene
- Strong masking tape or gaffa tape
- Nodules of flint
- Assorted sizes of hammer stones
- Protective goggles and gloves

Please remember that the flint cliffs of the north coast are a protected feature of our environment. Only gather pieces of flint lying on the beach. Choose flint as clean of chalk as possible, this will make it easier to work with.
Basalt and granite make good hammer stones. Choose round stones of different sizes and weights. You will need small pebbles to shape your flint blades.



Directions:

- Spread the polythene sheet out on the floor and tape down the edges to provide a working surface.
- Divide the class into small groups of three or four to take turns at flint knapping.
- Each pupil should start with a large piece of flint and use a large hammer stone to strike a flake off an edge.
- Rest the flint flake on a large flat stone and use a smaller hammer stone to gently knock small pieces off the edges to shape it gradually into a blade.
- It is very easy to shatter the flakes while working on them, but do not be discouraged, it takes a little of practice!
- Once pupils have gained a little confidence, they may want to try and make different shapes of blade, e.g. a knife, an arrow head, a scraper etc.



Microliths, mounted into wooden shafts to form a cutting tool (above) and a spear (middle)

Flat axe head





Borers or awls



Scraper



Picks



Axe head mounted into a wooden handle

Large stone axe head



Mesolithic Stone Tools found at Mountsandel

Courtesy of the Ulster Museum

Make a Model Mesolithic Hut

Archaeologists now think Mesolithic huts were sturdy enough to last several seasons and were probably predominantly covered in turf sods or animal hides. The materials used for this model are designed to reflect this. This does take a bit of planning, so if you don't have the materials or space required to make this scale of model, the same principals can be used to make smaller ones from wire and paper.

For each hut you will need:

- One board of plywood 60 x 60 x 2.5cm
- Willow rods—2 sizes, heavier to build the frame and lighter, very pliable ones for weaving
- PVA glue
- Materials such as bark chips, imitation moss, hessian etc. suitable to cover the hut
- Allow about 2 hours to make the huts. Pupils will need to work together in groups of 3-5.



Directions:

- Using a compass, mark and drill 8 evenly spaced holes in a circle on the board (see above diagram). The width of the holes should relate to the diameter of the willow rods you will be using for the main frame of the structure. The holes should be deep enough for the willow frame to remain secure.
- You will need 4 sturdy rods for the hut frame, about the thickness of a pencil and 80-90cm long. Insert one end of each rod into a hole, bend it across the board, and insert the other end into the corresponding hole on the opposite side, creating a dome about 20cm high.
- Leaving a gap between two of the frame rods to create a doorway, weave smaller willow rods in and out of the frame working backwards and forwards from one side of the doorway to the other along the bottom of the dome. To add a new rod in, set it slightly behind the end of the last rod and just continue as if you had extended the last piece of willow. Weave about 6 rows until the dome has become secure.

- Next, weave more rods randomly across the top of the dome, creating a more open weave to which you can attach your roofing materials
- Take small pieces of Hessian and weave these at random through the willow, using some glue to hold it in place if necessary. This is to act like the inside of a sod of earth with its fibrous close root system and will support the other materials you will be using for the roof.
- Use glue to attach moss, bark, compost, leaves etc. to the hessian, completely covering the roof of the hut.
- Finally, spread a thin coat of glue over the floor of the hut and sprinkle some compost over it, to give the impression of an earthen floor.

You may like to use other materials to re-create your hut. Remember that in Mesolithic times the hunters and gatherers had to use what materials were available to them. This model is just an interpretation of what a Mesolithic hut may have looked like.







The workshops photographed and these guidelines were provided by willow weaver, Louise McLean. If you would like to arrange a workshop with her, please phone 07731457263

Make a Prehistoric Shoe

This pattern is based on a hide shoe found in Drumacoon Bog, Co Cavan. Dated to the Iron Age, this is the oldest shoe yet found in Ireland and may be similar to those worn in Mesolithic or Neolithic times.

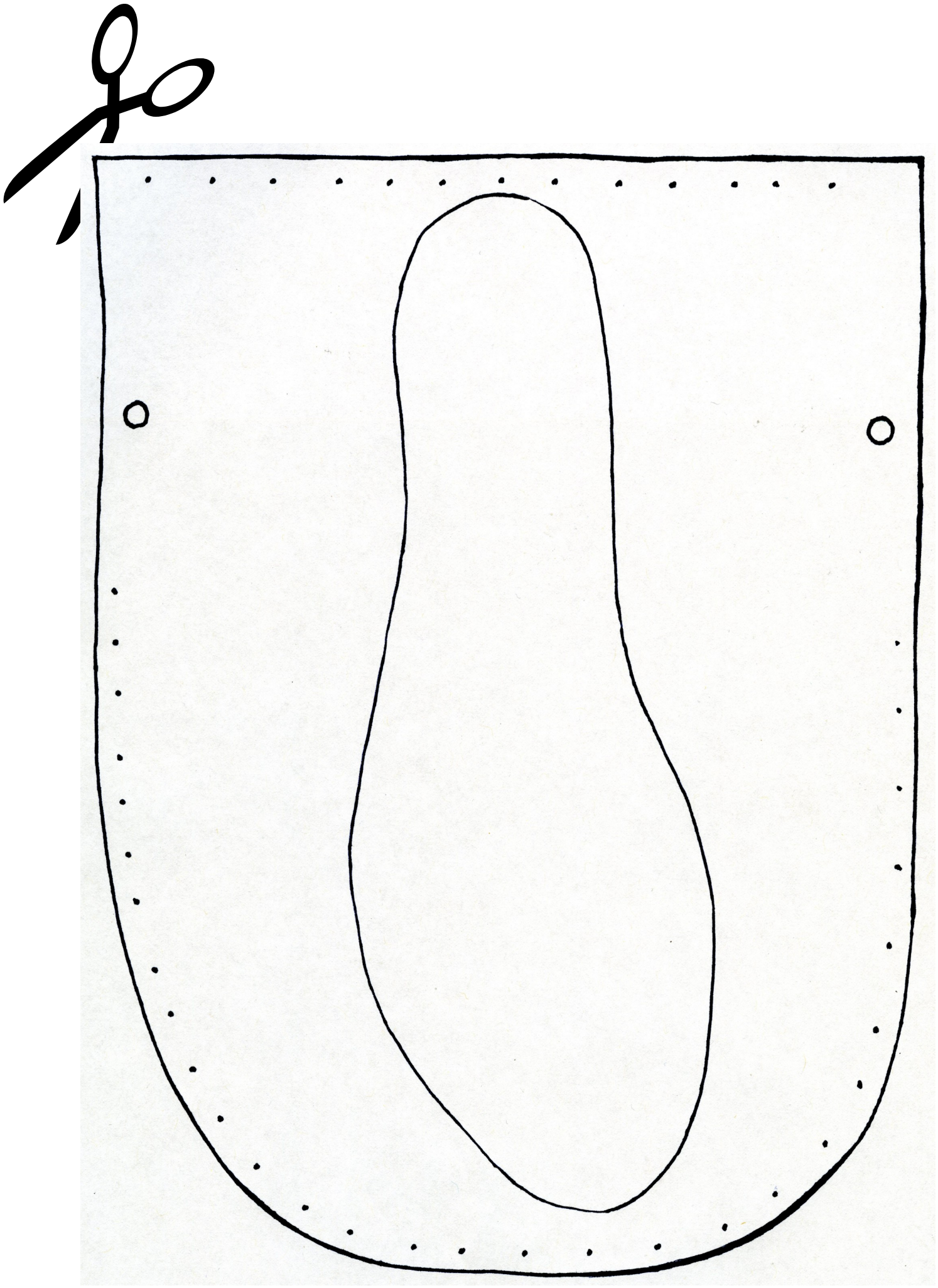


Each pupil will need:

- 1 pair sharp scissors
- 2 dressmaker's pins
- a piece of imitation leather large enough to fit your pattern
- 1 large tapestry needle
- heavy duty linen thread
- leather cord

Directions:

- Use a photocopier to enlarge the pattern overleaf so that the dotted outline is roughly the same size as your pupils' feet.
- Ask each pupil to cut out the paper pattern and pin it to their piece of leather.
- Then they should cut out the leather, carefully following the edge of the paper pattern.
- Leaving the paper in place, use the scissors to punch small holes through the paper and leather where they are marked (you will probably have to do this for your pupils) and remove the paper.
- Fold the leather in half lengthways and sew the heel together, tying the thread securely at the top.
- Open out the toe of the shoe and draw the thread in and out through the holes along its edge, leaving about 5cm of thread loose at each end.
- Take the two ends of the thread in your hand and pull, drawing the leather in to create a toe shape.
- Tie the ends of the thread together to hold the toe in place.
- Cut a short piece of leather cord and thread it through the two larger holes across the top of the shoe as a lace



Make a Neolithic Pot

You will need:

- A ball of self-drying clay for each pupil
- Wooden boards or mats to protect the tables
- Paper plates to rest the pots on
- A selection of twigs and shells

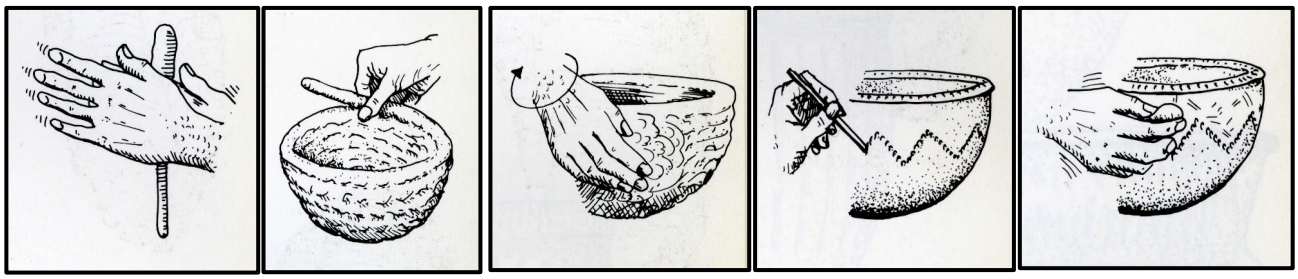


Pinch Pot

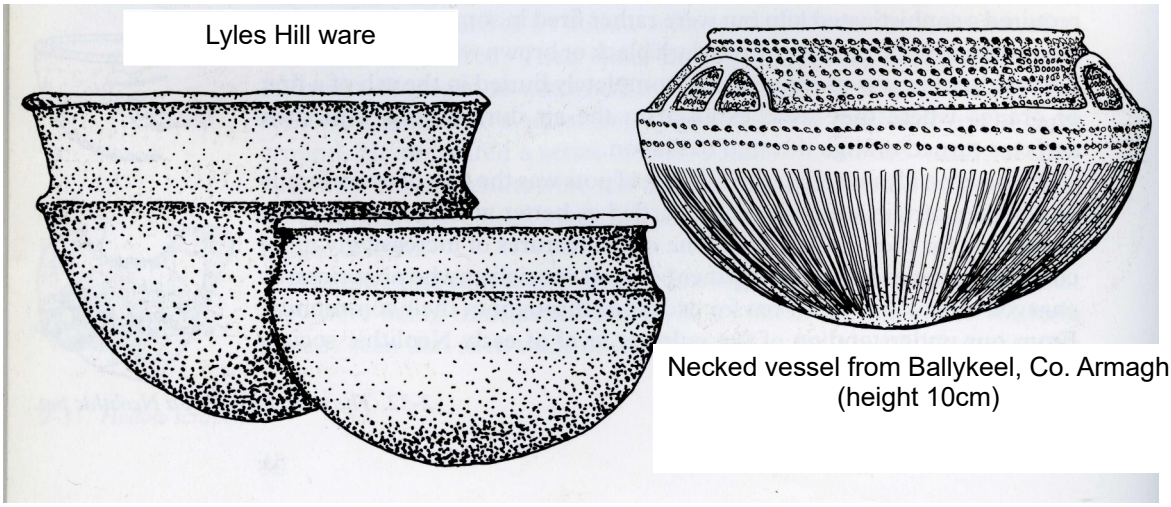
- Take a ball of clay.
- Push your thumb into the centre.
- With your thumb in the centre, gently pinch up the walls of the pot with your fingers.
- Smooth the inside and outside of the pot with your fingers.
- Rest the pot on a flat surface to create a base for the bowl.
- Only small pots can be made this way.

Coil Pot

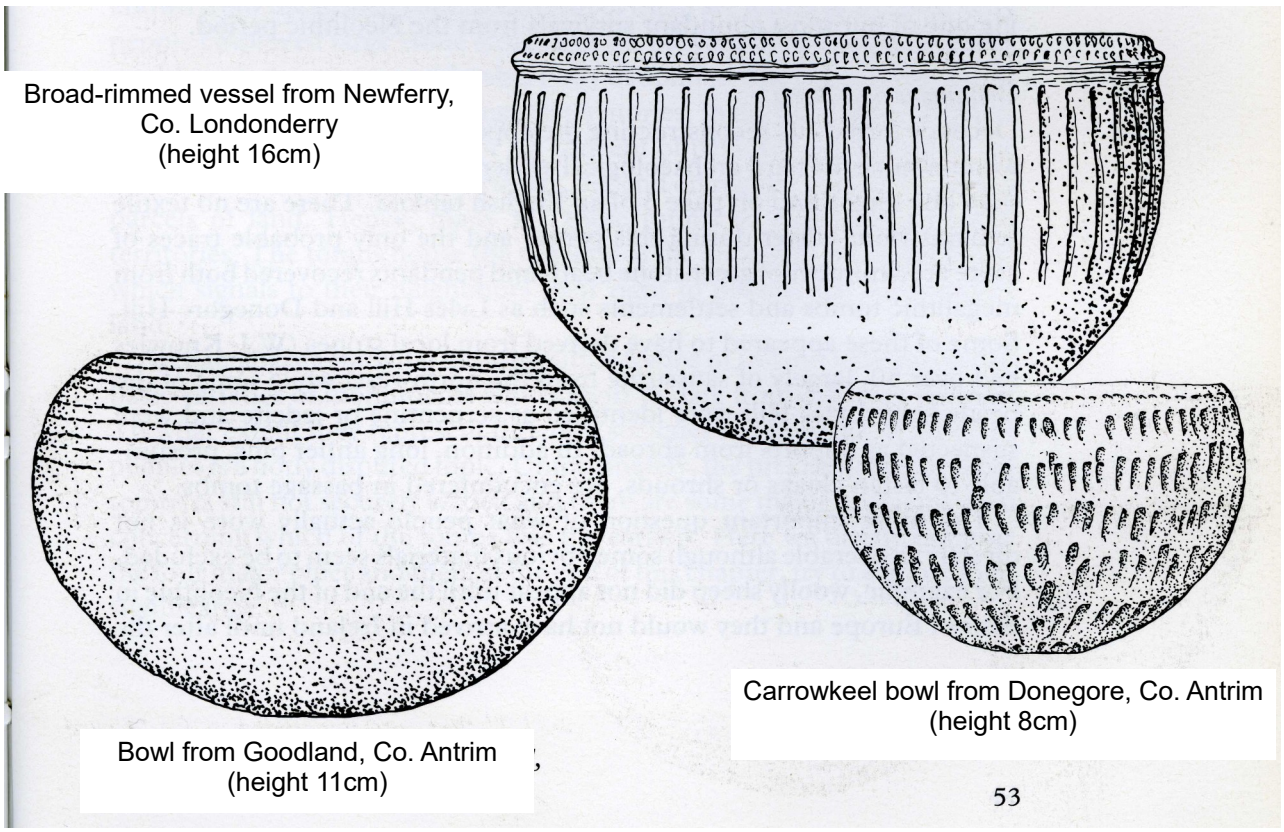
- Make the base of the pot in the same way as for a pinch pot, but always set it on the table upside down to keep a round rather than a flat bottom.
- Take a small piece of clay and roll it in your hands or on a flat surface to make a long sausage shape about the width of your finger.
- Place the coil on top of the base, and join the two ends by smoothing over them with your thumb.
- Use your thumb to carefully smooth over the join between the coil and the base on the inside and outside of the pot.
- Repeat this, adding slightly longer coils to make your pot wider, or slightly smaller ones to make it thinner, according to the shape of pot you wish to make.
- Make sure all the coils are securely joined together by gently smoothing both inside and outside with your fingers.
- Decorate the pot by making imprints with twigs and shells, or other natural materials with a rough surface. Use some of the designs overleaf for inspiration.



Once the pots are made, leave them to dry for around a week.



Necked vessel from Ballykeel, Co. Armagh
(height 10cm)



Broad-rimmed vessel from Newferry,
Co. Londonderry
(height 16cm)

Carrowkeel bowl from Donegore, Co. Antrim
(height 8cm)

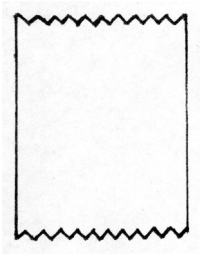
Bowl from Goodland, Co. Antrim
(height 11cm)

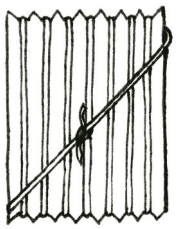
Weaving Cloth

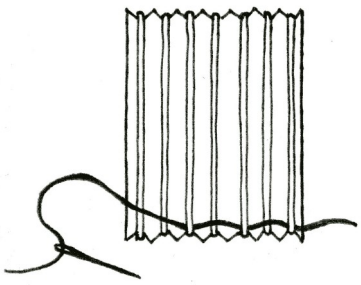
You will need:

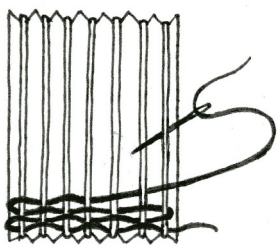
- Thick sheets of card
- Pinking shears
- String
- Assorted colours of woollen yarn
- Long darning needles
- Scissors











Directions:

- Cut the card into A5 rectangles and zigzag the top and bottom with pinking shears.
- Starting at one side, wrap the string around the top and bottom of the card to create the 'warp'.
- Make sure there are an even number of warp threads on the card and tie securely at the back.
- Cut a long length from one of the balls of wool and thread it onto a darning needle.
- Starting at the right hand side, weave the needle alternately under and over each warp thread, drawing the wool along with you as you go but leaving a short length of wool hanging out at the side.
- Having completed the first row of the 'weft', work back from the left hand side, this time making sure the needle passes under where the first row went over and vice-versa.
- The loops left at each side between the rows should be loose enough so that the warp threads don't start to draw together.
- Continue weaving under and over, then over and under, pushing down each row gently as you go so that you no longer see the warp threads.
- Change the colour of your wool to create a striped pattern, again leaving the end of the wool hanging out at one side.
- When you have finished weave the loose ends back into the cloth to secure them.
- Carefully cut the string at the back of the card, remove the cloth, tie each pair of warp threads together at both ends and trim off the excess.