Introduction:

Background Information for Teachers

What is Felt?

Felt is a non-woven fabric that is formed when sheep’s wool or animal fur is subjected to heat, moisture and pressure. Soap helps the process. The heat and moisture cause scales or fibres to open up and the soap allows the fibres to slide over each other more easily. As the fibres rub against each other they become entangled. A protein in sheep wool (keratin) bonds with proteins in the other fibres making the bond permanent. Whilst some felt is very soft, some can be strong enough to use as a construction material.

Felt is the oldest natural fabric known to humankind. People were making felt long before they were knitting or weaving. The oldest evidence of felting comes from Turkey. Wall paintings from 6,500 to 3,500 BC show felt appliqué. Archaeological evidence of felt-making was found in the frozen tomb of a tribal chief in Siberia. The tomb dated from the 5th century BC. The Romans used felt breastplates, tunics, boots and socks.

Felt is still used in many parts of the world. In Mongolia, nomads live in felt tents or yurts. In Turkey, felt hats and rugs are common and in Scandinavia and Russia, felt boots are still widely made.
Why did Ancient People Make Felt?

Felt making is simple, requires little equipment and is fairly quick. Ancient people may have collected clumps of wool from wild sheep. Perhaps they stuffed animal skin footwear with these fibres to keep their feet warm. After walking on these fibres for a while they may have noticed that the fibres matted together, became stiff and formed a kind of fabric.

Many cultures have legends as to the origins of felt making. Sumerian legend claims that the secret of felt making was discovered by Urnamman of Lagash.

Where can We See Originals?
Felt, like all textiles, decays over time and so fabric of any sort from this time is rare. The Hermitage Museum in Russia has some pieces of felt that date to 500 or 600 BC
www.hermitagemuseum.org
ART PACK: Stone Age to Iron Age

Activity 1: What is Felt?

Background information
This is an investigation activity and is designed to encourage pupils to look closely at a range of fabrics and to consider how they might be made.

You will need:
- Photographs of felt items
- Samples of felt fabric/items made of felt, other wool-based textiles for comparison - pieces of knitted and woven woollen fabric

Main activity:
Distribute fabric samples to the class. Allow pupils time to examine the pieces of fabric. Encourage pupils to look closely. (You might wish to provide hand lenses and/or use a visualiser to enlarge and show the different fabrics.) Pupils will probably notice the regular pattern of the woven fabric, the regular but open pattern of the knitted fabric and the irregular and closely meshed fibres of the felt. Ask pupils how they think the different types of fabric were made. Some pupils will have observed people knitting and some might even be able to knit themselves.

Pupils could investigate the different properties of each fabric:
Which fabrics fray most readily?
Which fabrics are the most/least permeable?
Which fabrics are the easiest to stretch?

Ask pupils to suggest ways in which fabric might be shaped into different forms - a single piece of felt can be moulded into a form, e.g. hat - woven fabrics are usually shaped by cutting and joining pieces together, knitted fabrics can be joined but the pieces are usually knitted to the desired shape rather than being cut from a single sheet.
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Activity 2: Making Felt

Background information
Prehistoric people made felt from the shed wool and hair of the animals they hunted. Later, as animals were domesticated the fleece of sheep would be used. (Whilst it would theoretically be possible, in rural areas, to collect sheep’s wool from fences etc. it is not recommended that you do. ‘Raw’ sheep’s wool represents a considerable health and safety risk.) Carded wool is widely available from art suppliers.

You will need:
- Carded wool. You can buy card wool ready to use (clean, oil free and either still in its natural colour or dyed in a range of fantastic shades) from a range of online suppliers and probably your local haberdashery shop
- Bubble wrap (with small bubbles)
- Liquid soap
- Warm water
- Old towels
- Waterproof sheets (this is a good outdoor activity)
- Plastic containers and lids with holes or water spray bottles (to hold the warm soapy water)
- Rolling pin or dowel (approx. 3cm diameter) - this is not essential but it does make the whole rolling process a bit easier for little hands!
Main activity:
Tell pupils that they are going to make some of the oldest fabric known to mankind!

Instructions: (also see Making Felt.ppt)

- Lay a towel on the table. With bubble side facing upwards place the bubble wrap on top of the towel
- Pull tufts from the carded wool and fluff them up by continuing to pull them apart
- Lay the tufts of wool on the bubble wrap
- Fluff up some more wool and lay it at 90° to the first layer
- Fluff up another tuft of wool and lay it in the same direction as the first layer
- You can add extra tufts of fluffy wool to create a more interesting effect
- Add tufts of wool or snips of readymade felt for decoration
- Spray the wool pile with warm soapy water and cover with another piece of bubble wrap, this time with the bubble side facing downwards
- Gently rub hands over the bubble wrap in a circular motion to help the wool fibres knit together
- Place the rolling pin/dowel on top of the bubble wrap and roll the wet wool, bubble wrap and towel into a sausage around the rolling pin dowel
- Roll the sausage backwards and forwards about 50 times!
- Unroll the sausage, turn the rolling pin/dowel through 90 degrees and reroll the sausage
- Roll the sausage backwards and forwards another about 50 times!
- Unroll the sausage and remove the top layer of bubble wrap
- Lay the felt flat and leave to dry
- When dry, add further decoration by sewing on coloured threads or wool
Activity 3: Create a Felt Pouch Bag

Background:
People have always used bags and containers to carry small items. During the Stone and Iron Ages, simple pouches made of a single piece of fabric and a draw string would have been used to carry important items. Sturdy pouches for carrying heavy items such as a flint fire striker and tools would have been made from animal skin and would have been worn tied to the waist. A similar technique would have been used to form simple footwear. Mittens could also be made in this way, with a slit cut to allow the thumb out for grasping objects.

Method 1 – Circular pouch

You will need:
- Felt fabric (either use the pieces made above if suitable or use readymade craft felt)
- Cord, embroidery thread, thin leather/leatherette strips or even old shoe laces
- Circle template 22cm in diameter
- Decorative wooden beads (bead holes needs to be just big enough to accommodate two thicknesses of cord snugly)

Selection of beads and feathers (available from craft suppliers)
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Instructions:

- Cut a circle of felt
- Sew a ring of running stitches about 1cm from the edge all the way around the circle. Alternatively, if using a thick cord or lace cut a ring of small slits approximately one centimetre from the edge of the felt and thread the cord through these slits. Slits should be just big enough to accommodate the cord, evenly spaced and about a centimetre apart
- Thread both ends of the cord on to the bead and knot the cords together
- Gently run the bead up the cord towards the fabric to close the pouch
- Decorate the pouch – hang feathers, small shells or beads onto fine threads sewn to the pouch
- To make a pouch using your own made felt see instructions on the PowerPoint file Making Felt.pps
Method 2 – Rectangular Pouch

You will need:
- As before but use a square of felt rather than a circle

Instructions:
- Fold the square of felt in half to create a rectangle
- Mark and then cut an arc across one of the unfolded corners
- Unfold the felt and decorate with beads, buttons or shells
- Fold the felt in half again and sew using running or back stitch along the long edge, around the curved edge and along the bottom to the fold. Embroidery thread is good for this
- Sew a ring of running stitches around the top of the pouch (as in method 1) using a thicker cord
- Thread both ends of the thread through a bead or button and draw the bead or button along the cord to close the pouch
- Knot the ends of the cord together
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Activity 4: Other Things to Do with Felt

Make finger puppets
Young children will enjoy making finger puppet representations of the animals seen in cave paintings (horses, bison and reindeer...)

You will need:
- Felt fabric in a range of browns, creams and black
- Wool in similar colours
- Sewing thread or embroidery thread
- Googly eyes (available from craft shops)
- Glue (PVA or Copydex)
- Templates for each animal
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Reindeer:

- Using the template, cut two body shapes and two ear shapes from a piece of felt. Cut two antler shapes from felt of a different shade. Cut a nose shape from the same colour felt as the body.
- Using running stitch, join the two body pieces together. Do not sew along the bottom edge.
- Glue the ears and antlers in place. Ears can be given a more 3D look by pinching the bottom end together to form a crease before gluing in place.
- Glue two ‘googly’ eyes in place.
- Glue the nose in place.

**Teachers’ Tip:** The nose and antler pieces require some skill to cut. Some children may find it easier to draw the nose using a felt-tip pen. Pipe cleaners make a good alternative to cutting out felt antlers.
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Bison:

- Using the template, cut two body shapes from dark brown felt. Cut out one nose and two ears. Cut one set of horns from the same or lighter coloured felt
- Using running stitch to join the two body pieces together. Do not sew along the bottom edge
- Glue the ears and horns in place. Ears can be given a more 3D look by pinching the bottom end together to form a crease before gluing in place
- Glue strands of black or brown wool on to the head between the horns. Allow some wool to spill down the back of the puppet
- Glue two ‘googly’ eyes in place
- Glue the nose in place
- Add a few short strands of wool to the back of the puppet to make a short, thin tail
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Horse:

- Using the template, cut two body shapes and one head shape from a piece of felt
- Using running stitch, join the two body pieces together. Do not sew along the bottom edge
- Glue the head in place
- Add two ‘googly’ eyes
- Glue 4 or 5 short strands of wool to the head to form the mane
- Add 4 or 5 longer strands of wool to the reverse side to form a tail

Teachers’ Tip: Hand Puppets can be made in the same way by enlarging the templates. Some pupils may find it easier working at a larger scale.