SEWING TOOLS

A sewing machine and a few basic sewing notions are all that is required to make the animal heads. Here is some information on the essential equipment and other useful items.

Measuring and marking equipment

Tape measure

A tape measure is a vital addition to the sewing box. A PVC tape is preferable, as it won't stretch or tear like a fabric or paper one.

Tailor's chalk

Tailor's chalk is used for marking pattern shapes on fabric and can be brushed away. It comes in white for use on dark cloth and in various colours for use on light fabric. It should be kept sharp for a clean line. The chalk can also be found in the form of a pencil.

Carbon paper

Dressmaker's carbon paper is used in the same way as the traditional stationery kind used for copying documents. This type is heavier, making it easier to pin to the fabric without tearing. It is available in yellow, white, blue and red, to work with light or dark fabrics.

Cutting equipment

Shears

Tailor's and dressmaking shears have long blades and a bent handle so the scissors can rest on the table while cutting, keeping the fabric flat. The blades should be kept sharp for ease of cutting. They must be kept solely for cutting fabric; use a separate pair of scissors for cutting paper patterns.

Small cutting tools

A small pair of very sharp, pointed scissors are ideal for fiddly tasks such as cutting threads close to the work, clipping fabric and unpicking stitches. Thread clips have one finger ring, designed to hang from the middle finger as you sew. The blades are sprung so they can easily unpick or snip loose threads.

Sewing machine

Many modern sewing machines have a huge variety of stitch selections.

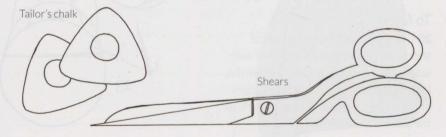
However, all the projects in this book can easily be made with a basic machine, even an old treadle or hand-operated machine that only does straight stitch.

Care of the machine

Regular maintenance of your sewing machine is essential to keep it running smoothly. Always unplug it before cleaning and oiling. Lint (a combination of fabric and thread particles) can get caught up near the bobbin and in hidden areas, so should be removed before it causes problems with the machine. Use proper sewing machine oil and refer to the manual for the areas that need it. Tighten all the screws and then work some machine stitches on scraps of fabric to catch any excess oil.

Using the machine

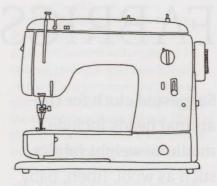
Have your machine set up in an area with plenty of light and where you can be comfortably seated. Before sewing, make sure that the machine is threaded correctly and that the two threads, from the needle and the bobbin, are placed towards the back of the work. Turn the wheel towards you so that the needle is in the work, preventing a tangle of threads. Every time you begin a new project or use a different type of stitch, practise first on a spare piece of fabric to check the tension and avoid having to unpick mistakes. Taking it slowly will ensure control of the machine, and problems with the tension or tangling threads will be less likely to occur.



	Machine Needle Size Guide
Size	Fabric examples
8/60	Sheer fabrics, chiffon, georgette
10/70	Lining fabrics, cotton lawn
11/80	Shirting fabrics, lightweight cotton
14/90	Cotton sateen, linen
16/100	Denim, canvas
18/110	Leather, vinyl, upholstery fabrics



Beeswax



Sewing machine

Machine needles

It is important to use the right size needle for the weight of fabric to produce the best results. Universal needles have a slightly rounded point for use with knitted fabrics, but are sharp enough to go through woven fabrics. For knitted fabrics, a ballpoint needle slips between the fibres of the fabric, preventing snagging. There are also needles specifically for use with denim and leather, and twin needles, used for working two even rows of stitching. Needle sizes are shown in both imperial and metric. The smallest sizes relate to the finer needles for use with lightweight fabrics. Where the number is larger, the needle is bigger, for sewing medium- to heavyweight material.

Small notions

Pins

Pins come in various sizes, for use on fabrics from fine laces to heavy woven cloth; ones with coloured glass heads are easy to find in fabric. Take care not to use pins that are rusty or blunt, as they will damage the fabric.

Beeswax

Beeswax is used for strengthening thread and preventing knots, and is very useful when closing the base of the animal head. It also helps when threading needles. Draw the thread across the beeswax a couple of times to coat it.

Thimble

The thimble should fit comfortably, without falling off, protecting the finger that pushes the needle through the fabric.

Thread

When finding thread to match the fabric, choose one that is slightly darker on the reel because it will look lighter when stitched into the fabric. Use a strong thread for sewing seams. Polyester thread is strong and suitable for hand and machine sewing on all fabrics. Tacking thread is cheaper and, as the stitches are temporary, will break easily. This makes it perfect for the task, but not good for sewing permanent seams. Use a contrast colour for tacking so the stitches are easy to see when they need to be removed.

When sewing on the machine, use the same thread on the bobbin as in the needle. If you are stitching together two different shades of fabric, the colour on the bobbin and needle can be changed to match, but don't mix the fibres.

Hand-sewing needles

Needles are available in an array of sizes for a multitude of needlework tasks. Make sure they are not rusty and the points are sharp so as not to damage the fabric. The needle should go through the fabric with ease, without leaving a mark or hole.

Sharps

These medium-length needles are used for general sewing and come in various sizes to suit different weights of fabric. They have a relatively large eye to facilitate threading.

Betweens

These are short, slim needles with a round eye, ideal for working small, even stitches.

Straws or milliner's needles

These are long needles used for hat making, and are ideal for tacking or basting.

FABRICS AND BUTTONS

Suggested cloth for the animal heads include medium-weight fabrics, such as wool, linen, baby cord and quilting cotton. The projects are not suitable for stretch or open-weave fabrics.

Wool

Wool is a softly woven and functional fabric. The surface of the fibre is water-repellent. The fabric can absorb up to 30% of its weight in moisture without feeling wet, while still retaining its warmth. For the ram on page 104, a herringbone wool was used for the horns, while the main fabric is a blend of wool and cotton.

Tweed

Originally from Scotland, tweed is a durable, textured fabric woven in two or more colours in the Hebrides, Ireland and Yorkshire. A beautiful flecked tweed was used for the main fabric of the stag head (see page 66).

Linen

Linen is made from flax-plant fibres. It is a strong fabric that has natural irregularities in the weave. It is cool and comfortable, although it does tend to crease easily. Laundered linen was used for the pig's head (see page 48).

Cotton

Cotton is very practical and resilient. It can be woven into a very fine, sheer fabric and can also produce durable materials, such as canvas and denim.

Waxed cotton/Oilskin

This densely woven canvas fabric has been treated with waxes or oils to make the fabric water-resistant. When working with this cloth, use tailor's shears to open the seams, rather than pressing with an iron, and pin inside the seam allowance to avoid making holes in the fabric. After time, the oil or wax will need to be reapplied, although this isn't necessary when used on the animal heads. The horns and nose of the ox (see page 84) are made in oilskin.

Duck

Duck is a closely woven, heavy canvas. It is made in various weights and is used for sails, tents and workwear. It is a tough fabric that is smooth to the touch. A small amount of duck canvas was used for the beak of the cockerel (see page 120).

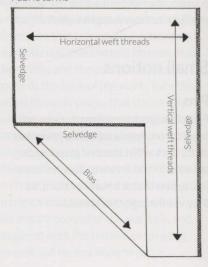
Glazed cotton

This fabric has had a finishing process that adds sheen to the surface. The treated cloth is rubbed between rollers to polish the fabric.

Preparing fabric

Press the fabric before you start a project, making sure the iron is set to the right heat for the fabric type. Make sure the grain of the fabric is straight before cutting out the pattern. The warp and weft (vertical and horizontal) threads should be at right angles to each other.

Fabric terms



Straightening the fabric

Straighten the weft edges (the horizontal threads that lie between the selvedges) by clipping the fabric at a selvedge edge and tearing it across, or by withdrawing a thread from the fabric and cutting along the straight line it produces. Straighten the fabric by stretching on the bias or crossways until the edges lie together.

Interfacing

Interfacing comes in black or charcoal grey for dark fabrics and white for light fabrics. It is available in light-, medium- or heavyweight versions, to match the weight of the fabric you are using. The projects in this book all use iron-on interfacing that has a shiny, fusible side that is laid on top of the wrong side of the fabric. It is a good idea to test it out on a scrap of material first to check the weight you are using is correct. Make sure that the iron is at the right temperature for the fabric. Place a damp cloth over the pieces and press the iron down for a few seconds, then lift and repeat on another area. Do not drag the iron over the fabric, as it could pucker or move the material. After the interfacing has been fused in place, allow the fabric to cool before stitching.

Stuffing

Polyester stuffing is a synthetic fibre that is lightweight and washable. Pure wool stuffing is a lovely, natural fibre. Durable and soft, it can be washed by hand but cannot be machine washed, as it will shrink and felt. Kapok is a natural fibre

with a soft, silky texture. It comes from a seedpod that is harvested from the ceiba tree. Before stuffing your animal head, tease the fibres by pulling them apart with your fingers to make them light and fluffy. Use small amounts at a time and line the inside of the fabric with a layer of stuffing before building up the filling in the centre. This will prevent the finished piece from looking lumpy.

Buttons

Buttons are used for all of the animals' eyes, and for the crocodile and pig's nostrils (see pages 136 and 55). The size of buttons required for each animal head is listed at the beginning of each project. As a guide, it also states whether to use buttons with or without a shank. However, either type can be used, depending on how you wish the features to look. As foxes have vertical pupils, two-hole buttons can be used for the fox's eyes. Two-hole buttons have been used for the ram on page 111, as the stitches form the horizontal pupil. Four-hole buttons

Cockerel, page 120



can be stitched so the threads cross in the middle to represent a round pupil. Flat buttons with holes can be layered, placing a small back button on top of a larger brown button and stitching through the holes of both at the same time to form the eye. Many of the buttons sourced for these animal heads are antique cut glass or metal, in interesting patterns and colours or with a bit of sparkle, although simple plastic buttons can be just as effective. Use thread coated with beeswax (see page 153) to sew the buttons to the animal head.

Mount board

Generally used for framing artwork, mount board is ideal for keeping the base of the animal head firm. The larger heads use two pieces of board for extra rigidity. A packaging carton can be substituted, but make sure it is strong and not corrugated, as it will bend.

Caring for your heads

A soft brush or a piece of fabric with a pile, such as velvet, will remove surface dust that will inevitably settle on the finished animal head. Brush the rough side of the pile across the head to remove the dust. The heads can also be carefully cleaned using a vacuum cleaner. Cover the nozzle with some nylon gauze, such as a pair of tights.

STITCHES AND SEAMS

The majority of the seams are machine stitched, with very little hand sewing involved. Temporary stitches or pins are used to hold layers of fabric together during construction. The seams are trimmed and clipped after stitching, so they lie flat inside the finished head.

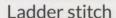
Tacking (basting) stitch

Tacking or basting is a temporary stitch made by hand, used to join pieces of fabric ready for permanent stitching. This is the easiest and quickest hand-sewing stitch. Knot the end of the thread and work large stitches from right to left. Finish with a couple of stitches worked over each other to secure the end. When the seam has been permanently sewn by machine, remove the tacking stitches.



Staystitching

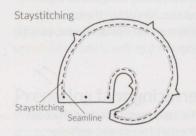
This is a straight machine stitch used around curved and angled edges, such as around the ram's horns (see page 109), to prevent stretching when handling before joining the pieces together. The stitching is done ½ in (0.3cm) inside the seam line. The stitches do not need to be removed because they will be hidden between the seam allowance and the raw edge, inside the animal head.

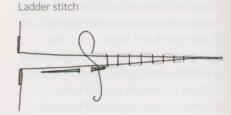


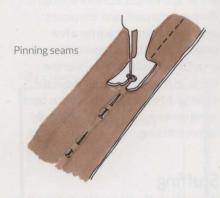
These hand-sewn stitches are almost invisible and the seam will be hidden inside. Working on the right side of the fabric, make a stitch at the seam line of one side of the opening and then work a stitch in the other side. After two or three stitches, pull to close.

Pinning seams

When pinning fabric along the seam line, insert the pins so that the points face away from you. As the pins cannot be stitched over when in line with the needle, they will be easy to remove with the pin heads facing towards you; you will also avoid pricking your finger. Pins can be machine stitched over when they are at right angles to the edge of the work. This way, the needle will not get broken by hitting the pins, and the pins can be removed after stitching the seam. This is a particularly useful method when sewing curves.

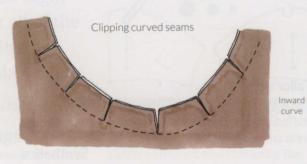


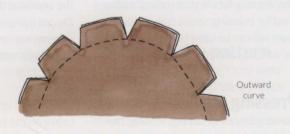


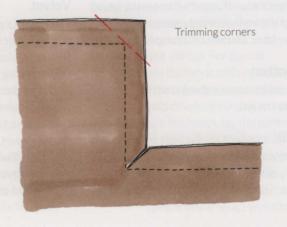












Plain seam

The patterns in this book use plain seams. With the right sides of fabric together, stitch along the 3% in (1cm) seam line and press the seam open or to one side, as stated in the instructions (see Pressing, page 158). To secure the line of stitching and prevent the stitches from unravelling, run the machine backwards and then forwards over the first and last few stitches. The raw edges of the seam can be trimmed to neaten it.

Clipping seams

Where a seam is curved, snipping or cutting notches into the fabric will enable it to lie flat. On fabrics that fray easily, cut the layers of the seams separately and make sure the snips and notches of each seam do not match. To reduce bulk in multiple thicknesses of fabric, the seams can be layered by cutting each thickness of the seam slightly narrower than the last, so they lay flat.

Clipping curved seams

For seams that curve inwards, snip a straight line in the seam close to the stitches. For outward curves, cut a V-shape into the seam close to the stitch line.

Trimming corners

Corners should be trimmed to an angle so the fabric lies flat when the work is turned right side out. An inverted corner should be snipped close to the seam line.

PRESSING

Each animal head is created from multiple fabric pieces. Careful pressing of the seams as you stitch them will make the next step easier, as well as producing crisp lines on your finished project.



Pressing equipment

Have all the equipment for pressing close to hand and set up ready to use as you sew. Remove all pins before pressing.

Iron

The iron should have adjustable heat settings for different fibres and a choice of steam or heat only. Use the point of the iron to open seams. Use a dry cloth if applying the iron directly to the fabric. If the iron is being held away from the fabric when steaming, a cloth is not required.

Ironing board

The ironing board should be well padded and sturdy. Set it up at a height at which you are comfortable standing.

Pressing cloth

Press on the wrong side using a damp or dry cloth, if necessary, to protect the fabric from the heat of the iron and prevent shine. Muslin makes a good pressing cloth since it is see-through. It can be used in a single layer or folded to adapt to the weight of the material you are pressing.

Tailor's ham

This is a shaped cushion that is firmly stuffed. It is ideal for pressing curved areas on the animal heads.

Seam roll

This is a long fabric-covered roll that is used for pressing seams (see above). The seam roll can be used for narrow areas for which a tailor's ham is too large.

Pressing fabrics

Pressing is not the same as ironing. The iron is set down onto the fabric and then lifted, rather than pulled across the fabric. Set the iron to the right temperature for the fabric and test on a scrap first.

Cotton

A hot iron over a damp cloth will remove any creases.

Silk

Press with a medium heat, using a dry cloth to avoid the seam line marking the right side of the fabric (using a damp cloth may cause water marks).

Linen

Press with a hot iron on the wrong side of the fabric.

Synthetics

Use a cool iron, avoiding going over the seams as this can mark the fabric. Do not dampen the material, but pass a steam iron over the fabric without touching it with the iron.

Wool

Use a warm iron and damp cloth. Leave on the board to dry naturally.

Velvet

Fabric with a pile should not be pressed directly. Press as little as possible and only on the back of the fabric, placing the pile side down on a needle board or onto the pile side of an oddment of velvet. Velvet can be steamed, taking care not to get the fabric wet. Stand the iron upright and cover it with a damp cloth. Gently pass the velvet in front of the steam it produces to steam out any wrinkles.

USING THE TEMPLATES

All the information you need for cutting out and joining seams is given on the templates, which you need to copy at 200%. Before you begin to sew, transfer all of the essential markings to the prepared fabric.

Pattern markings

The markings on the template show how it is to be laid on the fabric and cut out, as well as features, such as eye position.

Cutting line

The cutting line is a continuous line on the pattern. The seam allowances are $\frac{3}{8}$ in (1cm) throughout.

Stitching line

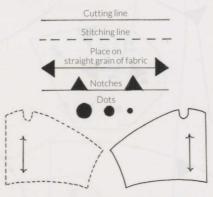
A broken line on a pattern indicates the sewing line.

Grain lines

When laying out the pattern pieces on the fabric, make sure that the line of the grain, which is marked by a long, double-ended arrow, follows the selvedge of the fabric.

Dots and notches

Dots refer to points that should meet on pattern pieces or show where a line of stitching should begin or end. Most of the dots on each template are labelled with



Broken lines in the cutting layout indicate the reverse side of the pattern piece. Place the pattern with the right side facing down on the fabric.

a letter, so they are easy to identify. The notches are used to match the seams accurately when they are sewn together.

Laying out the pattern

Cutting layouts for 36in (90cm) wide fabric appear at the beginning of each project. Broken lines indicate the reverse side of the pattern pieces, so they should be placed with the right side facing down on the fabric. Where the lines of the pattern pieces in the cutting layouts are continuous, these should be placed right side up. For double thickness, fold the fabric with right sides together, so the selvedges are parallel, and lay the pattern pieces on the wrong side. For single thickness, lay the pattern pieces on the right side of the fabric. When more than one of the same piece is to be cut one at a time, reverse the paper pattern for the second piece.

Nap

The nap is a pile produced by directional raised fibres on fabrics such as velvet. Fabrics with a pile or a one-way pattern must be cut with all the pattern pieces placed facing the same direction. The length required in this book is for fabrics without nap, so you should allow for extra if you choose a fabric with nap or a one-way design. When working with a nap, the pattern should be pinned to the wrong side of the fabric before cutting. The direction of the pile can be found by brushing your hand over the material. Brushing with the direction of the nap will feel smooth, whereas brushing against the nap will feel rough. A shiny, silky look is produced when the nap is running down. When the nap is running up, the fabric shade is deeper and richer.

Cutting out the pieces

Pin the pattern pieces to the fabric so the pins lay in the same direction and do not obstruct the cutting line. Use enough pins to hold the pattern down, taking care not to pucker the fabric. Using sharp scissors, place one hand flat on the pattern and fabric to hold it down, keeping it flat so the lines being cut are accurate. Cut away from you along the seam lines – the solid lines of the pattern. Cut notches outwards, rather than in to the seam allowance.