

# LEARNERS' PERMIT



## Essential info before you sew

This tutorial is provided for free. It is for personal use, but may be shared in a social sewing group or public school to teach others. It is not to be distributed online.

It may not be used as learning material in a paid sewing lesson.

Direct others to the Pattern Orchard website to obtain their own copy.

The information provided in this tutorial is general in nature. Different terminology may be used by sewers from different backgrounds and the sewing equipment used is based on commonly purchased items available in 2017 in Australia. Some older or newer equipment may have settings or options that differ from the examples given.

**Please share the [www.patternorchard.com](http://www.patternorchard.com) link with anyone who is interested in learning to sew or furthering their sewing skills. There are free Learning Patterns available on the website for personal use or donations for charities.**

**Tag #PatternOrchard on social media when sharing photos of items made from a Pattern Orchard pattern to spread the word about this free resource.**

This tutorial is suitable for most kids over the age of 8-10yrs with adult supervision for all sewing practice. Never leave kids unsupervised around sharp objects or machines. Plain language is used to gradually introduce some basic sewing terms.

Read through this document and complete the check list on page 18 to achieve your Learners' Permit. Only pages 15 & 16 need to be printed.



# LEARNERS' PERMIT

## Topics covered

- Page 3. Sewing Machine Parts [Identifying, Cleaning & Maintenance]
- Page 5. Threading Basics [Bobbin, Top Thread, Troubleshooting]
- Page 9. Tools of the Trade [Machine Feet, Helpful Gadgets]
- Page 11. Fabric [Types, Buying, Cutting]
- Page 13. Let's sew! [Pinning, Straight Stitch, Finishing Edges]
- Page 15. Learners' Permit [Practice, Checklist, Printable Permit]

## Before you start

Learning something new can come naturally or be a fun challenge. Approach every lesson without worries at the back of your thoughts, with a clear workspace, full stomach and well rested. Remind yourself that every skill takes time and patience to learn well. Your first attempt is practice so use scrap fabrics first.

You choose what to sew. Stick to items you know you can achieve or challenge yourself with new fabrics, techniques or tools. Learn as much as you want to learn.

Each of the Pattern Orchard sewing permits teaches a different set of skills.

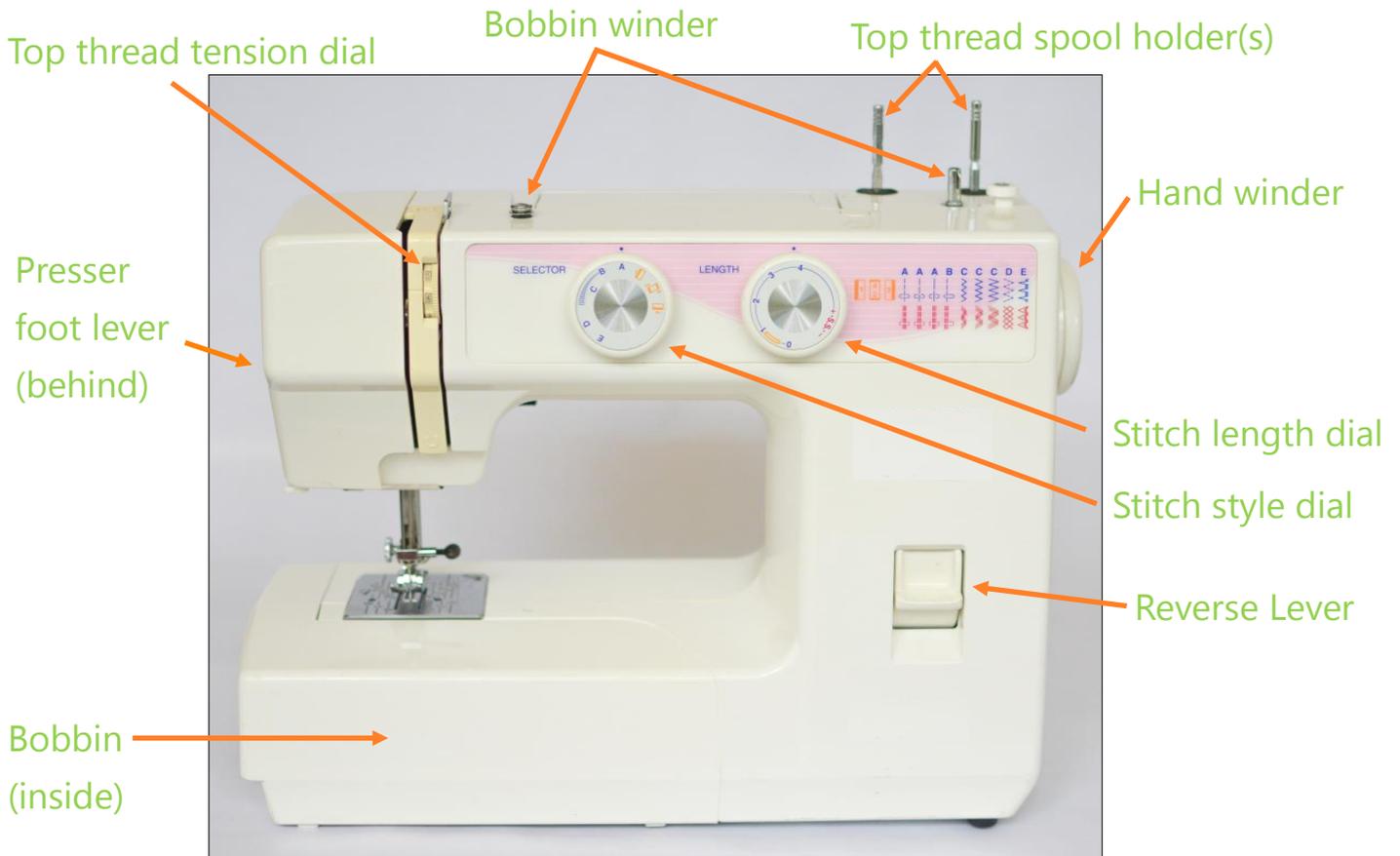
Start with the Learners' Permit, then move on to any of the other S.E.W.I.N.G. Permits. They do not need to be completed in order. Choose the skills that you want to focus on. Read through "Pick a Pattern" on the website to help you choose a suitable sewing pattern to start with after finishing each Permit.

Sewing can be a relaxing, creative and productive outlet. Enjoy.

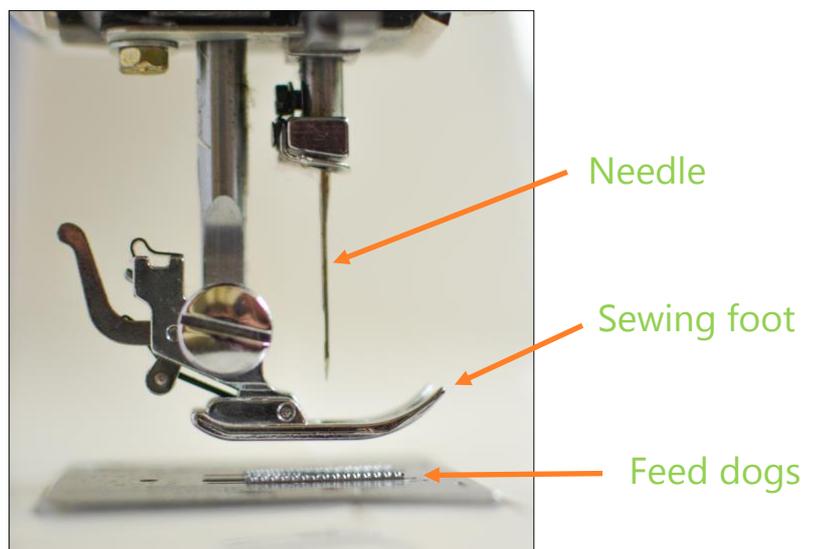
# Sewing Machine Parts

## Identifying

Most sewing machines operate in much the same way as they did 70+ years ago. Some new features have been added but the general sewing action remains much the same. The image below shows the parts of a typical basic sewing machine.



Some of these parts may be located in a slightly different position on other machines. For example, some machines have a reverse button above the needle, instead of a lever.



# Sewing Machine Parts

## Cleaning & Maintenance

A sewing machine should be regularly cleaned even when not in use to prevent fluff and dust building up that can cause moving parts to seize or rust.

De-fluffing: Open the cover to the bobbin area and blow the fluff out like you were blowing candles out on a birthday cake. A special brush can also be used.

Wipe the entire outer surface over with a tissue to remove any dust from the outside.

Oiling: Only use sewing machine oil to lubricate your sewing machines. Check the manufacturers instructions for where to oil your machine. You can usually see existing oil to give you an idea of where it is needed. Use sparingly.

Other maintenance: Check the power cord is firmly attached with no signs of damage to the cord. Also check any vents are clean.

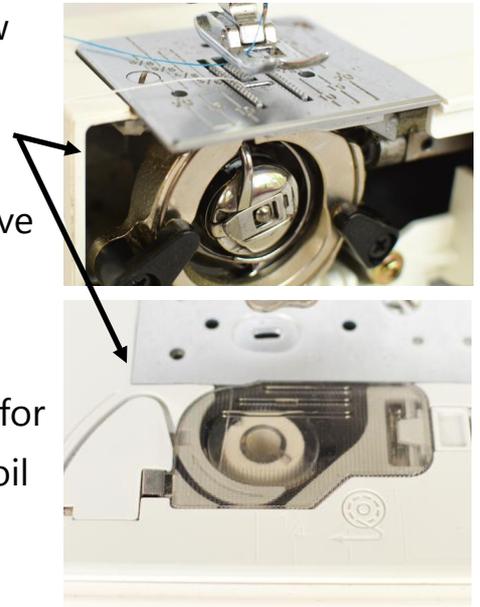
Any visible screws that hold parts together should not be loose.

The needle is usually replaced based on the amount of use.

If you sew daily you will need to replace the needle more often than someone who sews monthly.

If you ever notice a burning smell coming from the machine, immediately unplug it and seek help from a professional who can look into it.

Unplug your machine when not in use to avoid accidentally pressing the foot pedal.



# Threading Basics

## Bobbin

A bobbin is a small (usually round) device that is used to hold thread inside the sewing machine so that when the needle goes through the fabric, the top thread {blue} can loop around the bottom (bobbin) thread {white}. This creates a stitch.

The top thread is visible on the top of your fabric and the bobbin thread is visible on the underside of your fabric. You can use different colours on each side.

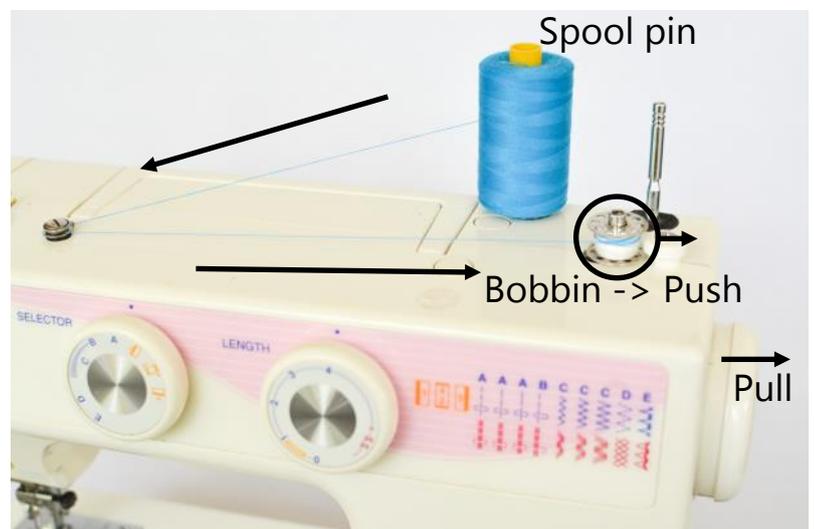
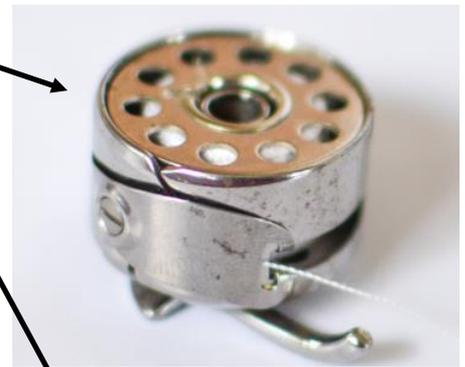
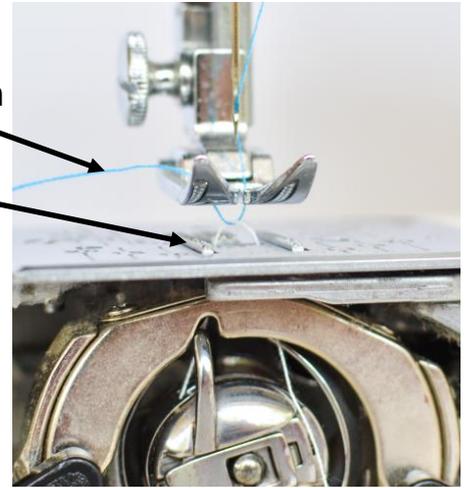
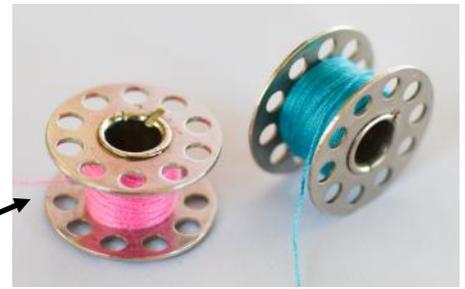
A full bobbin is sometimes placed into a bobbin housing before the housing is locked into position inside the machine. Some newer machines do not use a removable bobbin housing.

To fill a bobbin with thread, place the bobbin on the bobbin winder pin. Many sewing machines will require the bobbin be pushed to the right to lock into position. Also you will need to disengage the motor from the needle arm. On this machine that is done by pulling the hand winder dial outwards until it clicks.

Wrap the top thread around the bobbin winder's tensioner, then around the bobbin.

Now simply press the foot pedal to spin the bobbin so that it pulls thread onto itself.

Check your instruction booklet if using a slightly different winder setup.



# Threading Basics

## Top Thread

Threading the top thread of your sewing machine is not as tricky as it looks. There are many online videos around that can help if you need a more visual guide.



The top thread will follow this path:

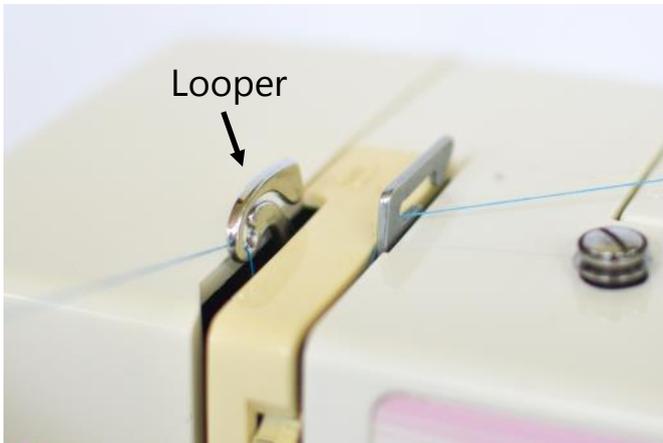
From the thread pin,

through a tensioner,

Down then back up to a looper arm,  
then down to the needle.

Lets take a closer look at what you can see from the top.

The looper arm is inside the machine and moves up and down as the needle moves up and down. Use the hand winder on the right hand side of the machine to rotate the looper up if you cannot reach it when threading.

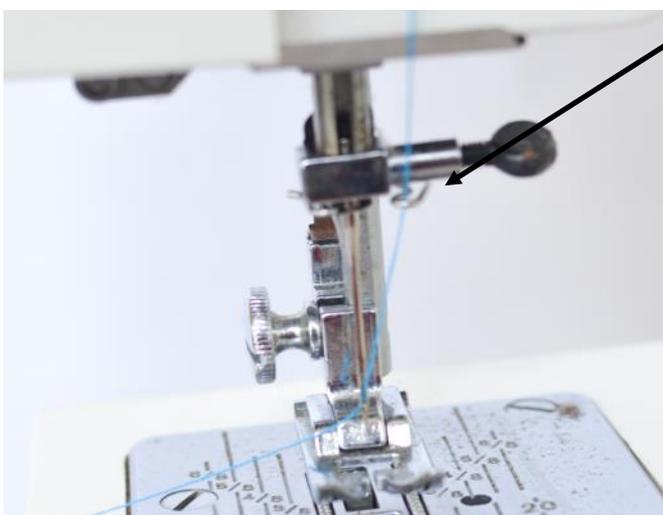


The thread then travels down toward the needle and there is usually a catch hook just above the needle that holds the thread out of the way when sewing.

The thread needs to pass from the front of the needle to the back of the needle through the small hole near the point.

Before sewing, there is one more important step to do, please read the next page.

Check your machine for a threading guide if it varies from the one pictured.



# Threading Basics

## Top Thread (continued)

Once the top thread {blue} has passed through the eye of the needle, rest the thread to the left of the foot.

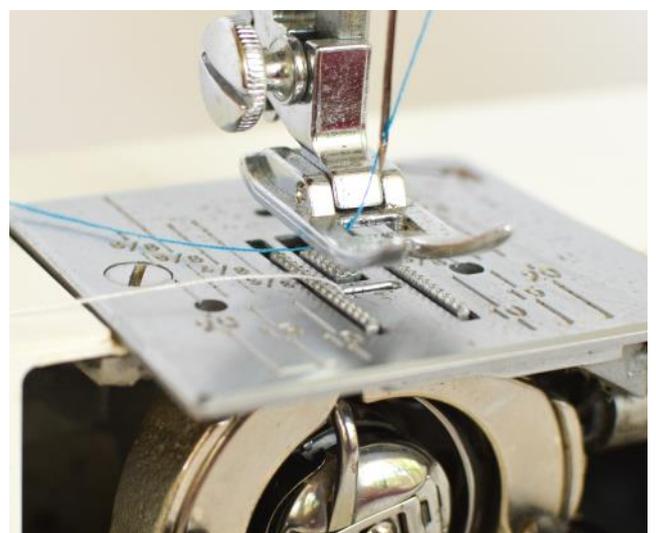
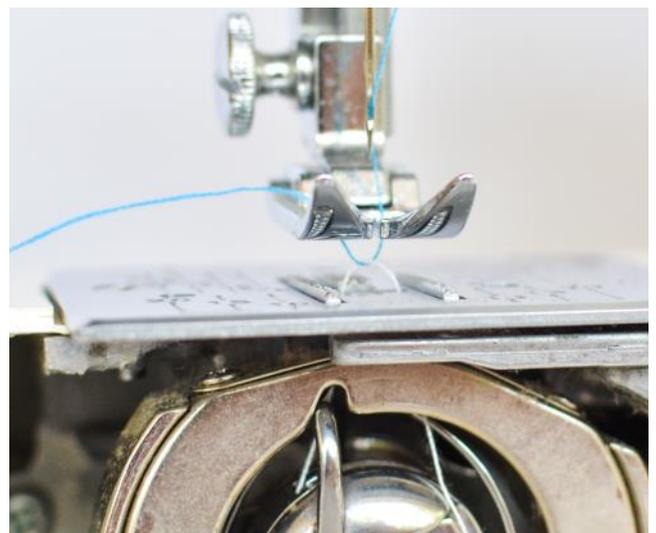
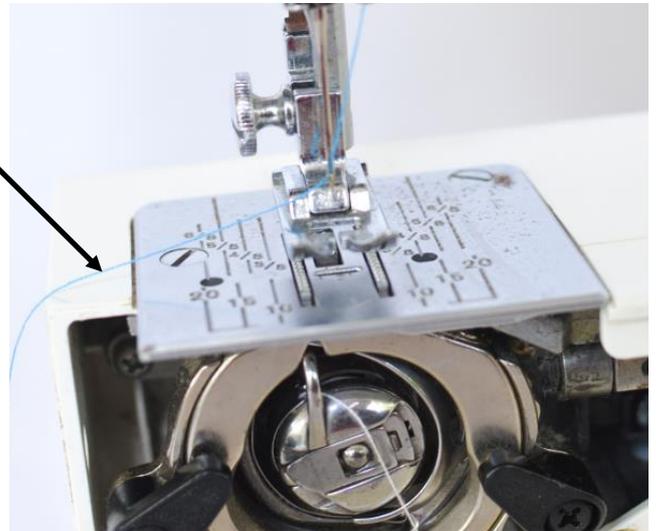
Place the bobbin in the machine and do not close the door/flap that covers the bobbin area yet.

While holding the end of the top thread gently with your left hand, rotate the hand winder on the right of the machine one full revolution so that the needle goes down into the machine and back up high again.

Give the end of the top thread a gentle pull with your left hand which should lift the bobbin thread up and out of the bobbin area so it now goes up through the silver plate and out near the top thread that runs under the foot.

Here you can see both thread ends near each other. Tuck them away toward the back of the machine before you close the door/flap of the bobbin area and begin sewing.

If you ever lose the bobbin thread, you will need to repeat these steps to bring it back up again. This process is the same for front and top mount bobbin types.

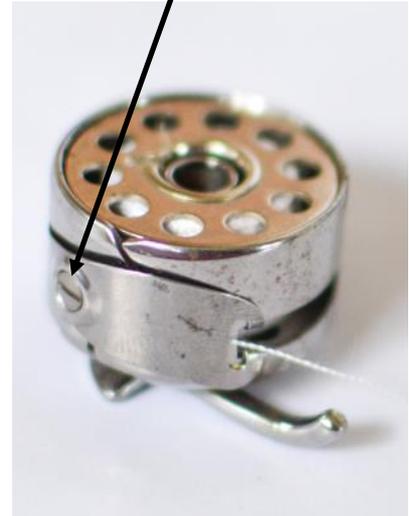
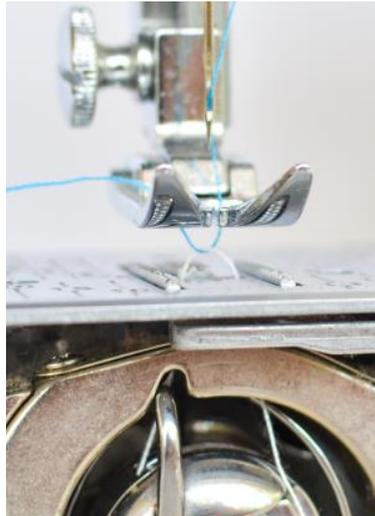


# Threading Basics

## Troubleshooting

The balance of getting the right thread tension lies in two main places.

The top thread has a tension dial with numbers on it at the top of the machine which presses two discs together. The bobbin thread has a small screw on the side of the housing that presses a metal plate closer to the housing.



Adjust both until you achieve an even tension that sits flat along the bottom and top of the fabric and the bobbin thread is not visible on the top of your work.

### Loose tension:

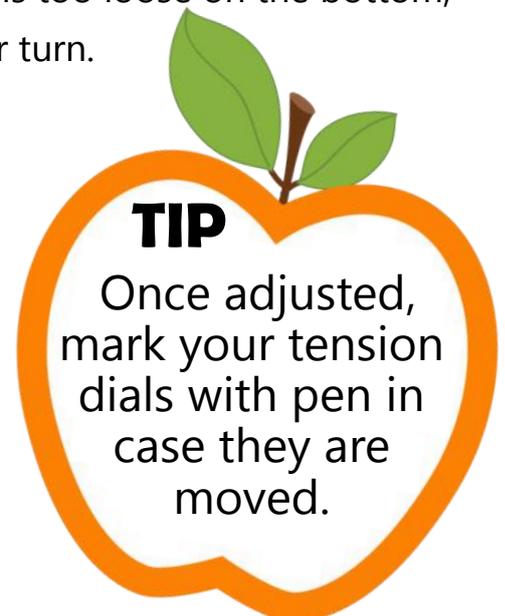
If the thread on top is loose and gaping, tighten the top tension to a higher number on the dial. The same goes for the bobbin thread. If it is too loose on the bottom, the small screw needs to be tightened another quarter turn.

### Tight tension:

If you can see the bobbin thread colour on the top of your work, the top tension is too tight and is pulling the bobbin thread through the fabric up to the top.

If the bobbin tension is too tight, the top thread will be visible underneath.

Loosen the top tension if the bobbin thread is visible on the top and loosen bobbin if top is visible under.



# Tools of the Trade

## Helpful Gadgets

There are many sewing tools that can make different tasks a little bit quicker or easier. For a beginner, all you really need is a sharp pair of long scissors, a few pins and a tape measure/ruler.



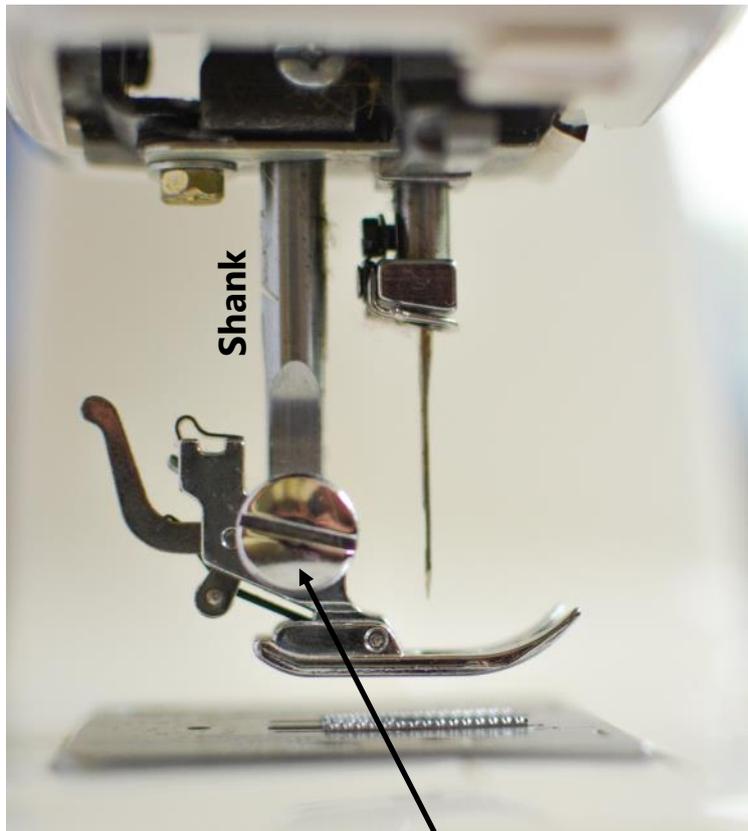
- Cutting with scissors - pin pattern piece to fabric, then cut around the edge of the pattern piece.
- Rotary cutters require a cutting mat too, place the pattern piece on the mat and place weights on top to hold it still. Roll the round blade of the rotary cutter around the edges of the pattern piece. Allows you to cut multiple layers of fabric at once.
- Small clips (mini pegs) can be used in place of pins when you do not want to pierce the fabric. Shown in red.
- Having a small set of scissors or thread snipper near your machine can make trimming off thread ends much faster as you sew.
- A quick unpick (also know as a seam ripper) is used to remove stitching when you accidentally sew something wrong.
- A chalk pencil (or washable marker) can be used to trace marks on fabric.
- Fabric glue pens can be used to hold fabric in place for long enough to sew down. Ideal with delicate fabrics that are easily damaged by pins.

Look through your local sewing store to find these and many more useful tools.

# Tools of the Trade

## Machine Feet

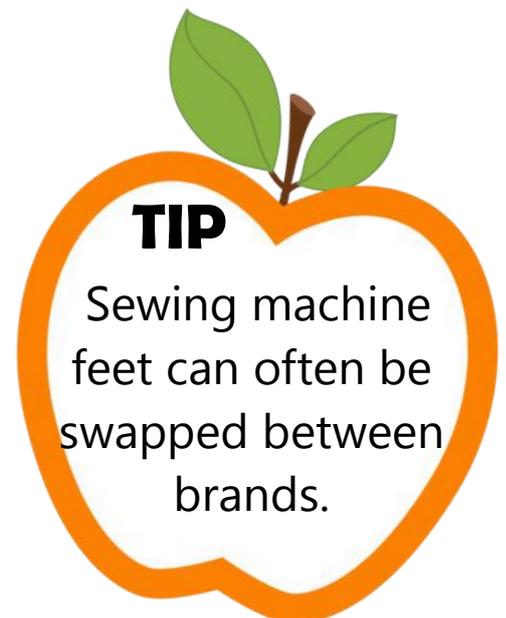
There are different types of 'feet' that can be attached to a sewing machine to achieve different tasks easier. For example, the rolled hem foot folds the fabric edge over as it feeds under the foot so that you don't have to do it yourself.



To change the foot, there is usually a small screw or push pin that is removed to take the foot off the shank so you can attach a different foot.

As a beginner, stick to the standard foot that came with your machine. Once you're feeling more confident with sewing you can try different feet.

Many sewing machines have a few feet that come with the machine.



# Fabric

## Types

Fabrics generally fall into one of these two categories:

WOVEN - Fabrics that are made by weaving the fibres together.

Cotton (men's button down collared shirts)

Denim (jeans)

Calico (ham bag)

KNIT - Fabrics that are made by knitting the fibres together (Stretchy fabrics).

These fabrics are often blends of a few different fibres.

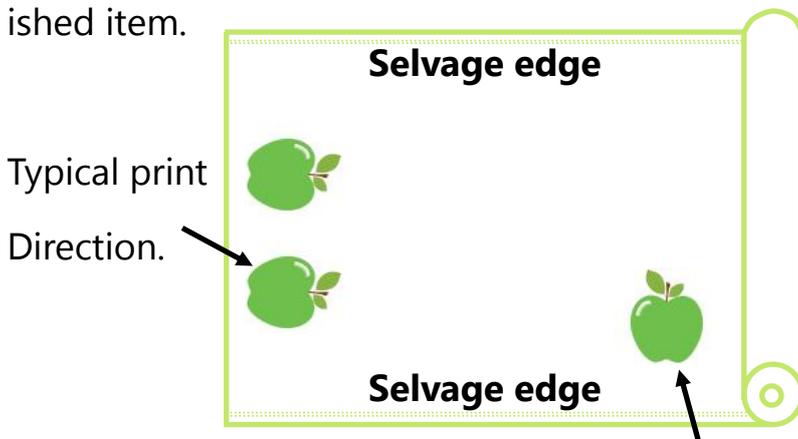
Spandex (swimmers)

Cotton jersey (underpants)

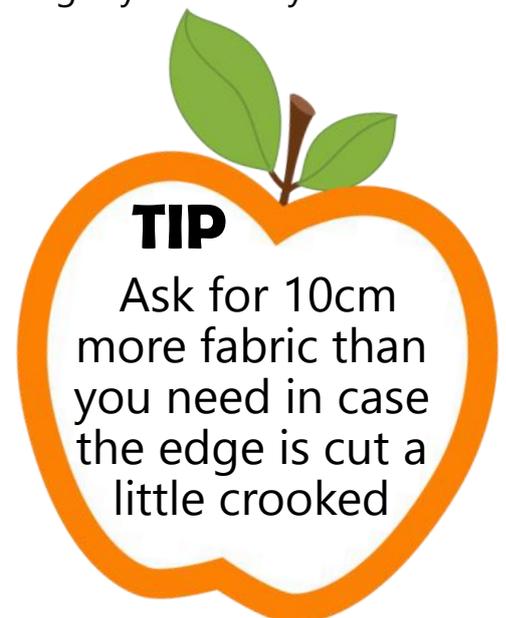
## Buying

Most fabric is sold by the metre off a roll called a 'bolt'. Common widths are 90cm, 112cm and 148cm. When you buy 3 metres of fabric off a 112cm wide bolt, you get a piece that is 112cm wide and 3m long.

Along the sides of the fabric is called the selvage edge. It is a sealed edge that does not fray. Also, there are often visible holes in the fabric along this edge made during manufacturing. When cutting your fabric at home, be sure not to place your pattern pieces too close to this edge as you can end up with unsightly holes in your finished item.



You may need to buy more fabric if the print direction runs along the selvage edge.



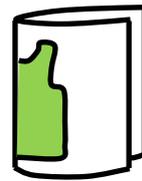
# Fabric

## Cutting

The print direction is very important. If your fabric has a picture on it that needs to be the right way up, ensure you cut out each shape so that the pictures on the fabric will end up the right way up when sewn.

Cut long straight pieces first, along straight edges. Then cut large pieces, then fill the gaps with smaller pieces (like playing tetris). Many patterns will include a fabric cutting layout guide to help you make the most of your fabric.

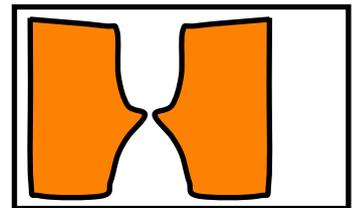
Are any of the pieces to "cut on fold"? This means the fabric is folded in half and the edge of the pattern piece is placed along the fold. You then cut out the shape but DO NOT cut down the folded edge. You should end up with a piece of fabric that is twice the size of the pattern piece and one half will be the opposite of the other. E.g. Left and right side of a shirt.



If a pattern piece has "cut 1 mirrored" written on it, that piece will need to be cut out and then you flip the pattern piece over so you are then looking at the back of it before cutting the next one. The 2 cut pieces of fabric should be the same shape but opposites, like a mirror reflection.



To be sure you have enough fabric, lay the pattern pieces out on the back of your fabric. If needed, trace around each pattern



piece on the back of the fabric to be sure they will all fit. Some pieces may not be visible, such as the lining on the inside of a dress or bag. These pieces can be cut from a different fabric if you do not have enough of your main fabric.

Keep your fabric off-cuts to practice sewing on before starting a new project to check your tension settings are suitable for that fabric type.

# Let's sew!

## Pinning

Holding two or more pieces of fabric in place so that you can sew through them without them sliding around can be tricky, even with woven fabrics (it is much harder with satin).

When pinning a woven fabric the pins are placed at right angles to the raw edge (as shown). When pinning stretchy fabrics to be sewn on an overlocker, the pins are placed in the same direction as the raw edge (opposite to woven).

Push the pin down through the fabric layers, then 'weave' it back up through the fabric in the opposite direction and again down through the fabric. This 'weaving' action helps the pin stay in place and not fall out.



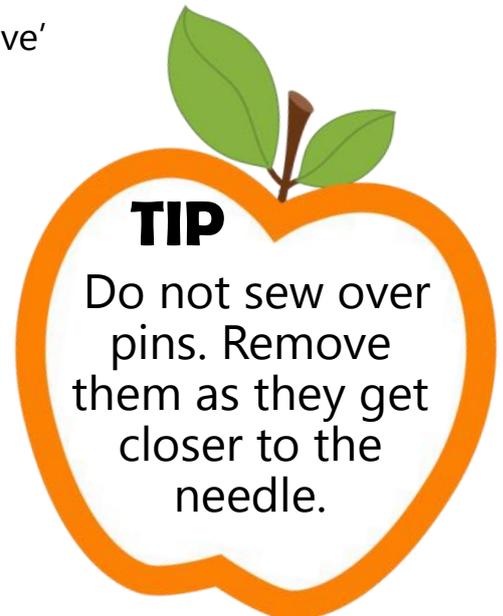
## Straight Stitch

To sew, place the fabric underneath the machine foot then lower the presser foot lever on the back of the machine to bring the foot down and firmly hold the fabric under the foot.

The raw edge should be to the right of the foot and the distance from the needle to the raw edge (called the **SEAM ALLOWANCE**) needs to be whatever amount is stated on the pattern you are using. Normally between 5-10mm.

Have a look at the photo at the top. You can see the raw edge on the right side lines up with the right edge of the machine foot. You can use the foot edge or the lines on the metal plate as a guide to ensure the raw edge is always a consistent distance from the needle as you sew, maintaining an even seam allowance.

Backstitching is done to stop the end of your sewing from pulling apart. Start by sewing forward 4 stitches, then back 4, then sew to the end of your line of sewing, then back up 4 stitches and forward 4 to the end again.



# Let's sew!

## Finishing Edges

Once sewn, the raw edge of the fabric could still fray and eventually the fabric would fall apart around your stitching after enough wear and washing.

To seal and strengthen the raw edges and prevent fraying there are many different methods that can be used, such as:

Rolled hem

Flat felled seam

Bias binding

Pinking shears

French seam

Zig Zag stitch

Overlocking

Clean finish seam

Certain stretchy fabrics do not require finishing and can be left raw after being cut.



Find out more about finishing raw edges in the six S.E.W.I.N.G permits and in the Learning patterns which teach you how to sew each method.

Available for free on the Pattern Orchard website [www.patternorchard.com](http://www.patternorchard.com)

**S**tretch: Fabrics, machines, techniques and more

**E**mbellishments: Decorative additions to sewn projects

**W**ovens: Sewing with woven fabrics, finishing options, techniques and tips

**I**nterfacing: Using interfacings to add firmness sewn projects

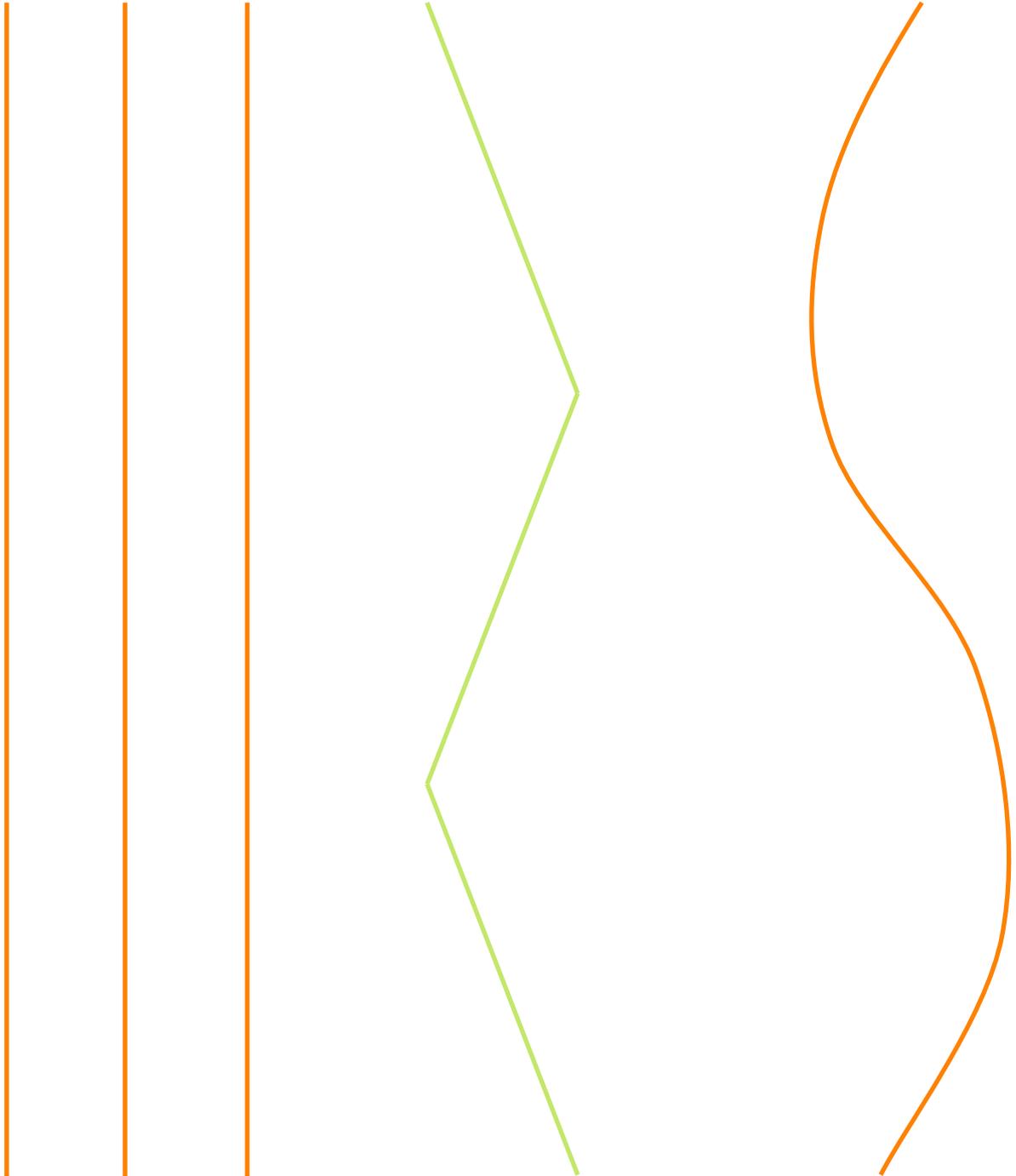
**N**otions: Adding functional zips, buttons and more

**G**arments: Fit, features and using patterns

# Learners' Permit

## Practice

Print this page. Sew along the marked lines. Reminder from page 11 to start by sewing forward 4 stitches, then back to where you started, then forward to the end. Once you reach the end, sew back 4 stitches, then forward 4 stitches. Now lift the presser foot to remove your paper and trim off the thread tails at the start and end.



When pausing to re-align the fabric/paper to get it back on track: stop sewing, ensure the needle is down through the fabric, lift the presser foot lever on the back of the machine, swivel the fabric/paper, lower the lever and continue sewing.

# Learners' Permit

## Check list

Read & understand the entire Learners' Permit document

Sit at a sewing machine and accurately name the parts listed on page 5 without needing to refer to the labelled photograph

Fill a bobbin with thread

Thread a sewing machine (top and bobbin threads)

Complete the practice paper sewing sheet on page 16



Once all of the above have been ticked, you are now ready to attempt your first sewing project! Head to [www.patternorchard.com](http://www.patternorchard.com) to find more information about choosing a good first pattern as well as free patterns for you to try.

You can now fill out your name and the date on your Learners' Permit license card below. Cut it out and keep it to remind you of how long you have been sewing for. Congratulations!

**Learner Sewing Permit**



//