

# GARMENTS PERMIT



## Fitting fabric to the human body

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 10 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 terminology.

Read through this document and complete the check list on page 14 to achieve your Garments Permit.

Only pages 13 & 14 need to be printed.



# GARMENTS PERMIT

## Topics covered

- Page 3. Garments [Description, Components, Grainlines]
- Page 6. Understanding Fit [Perspective, The Human Body, Customisation]
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## 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.

# Garments

## Description

A garment refers to a wearable item of clothing.

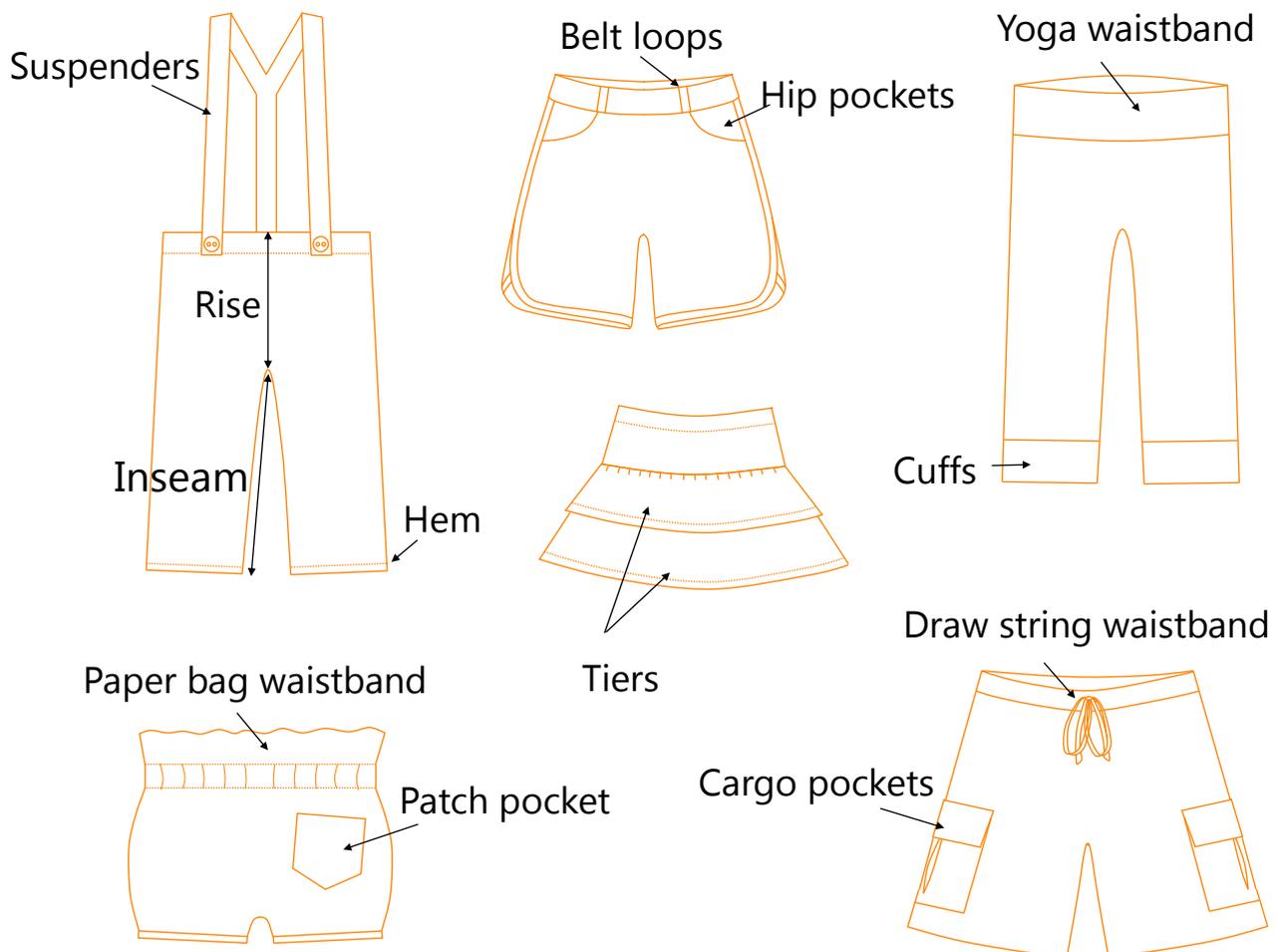
Most garments are sewn together using fabric and thread.

It is common to use fasteners such as zippers and buttons to aid in the wearability of clothing.

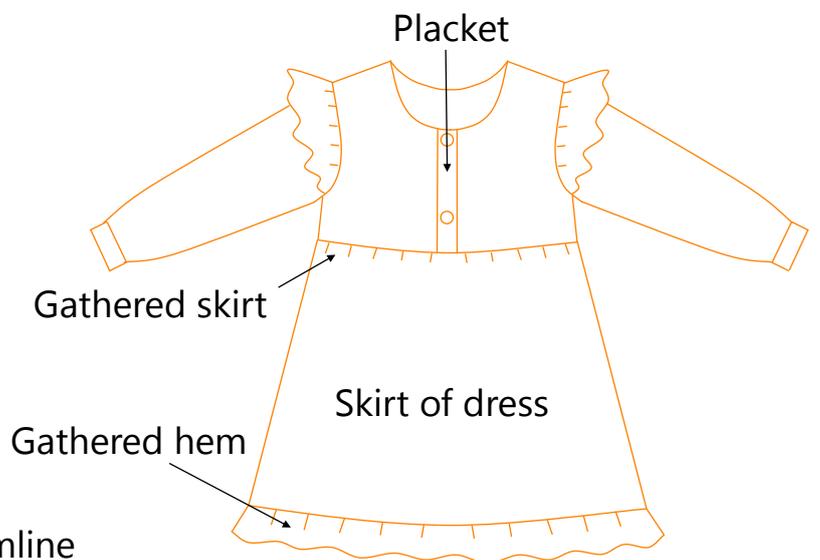
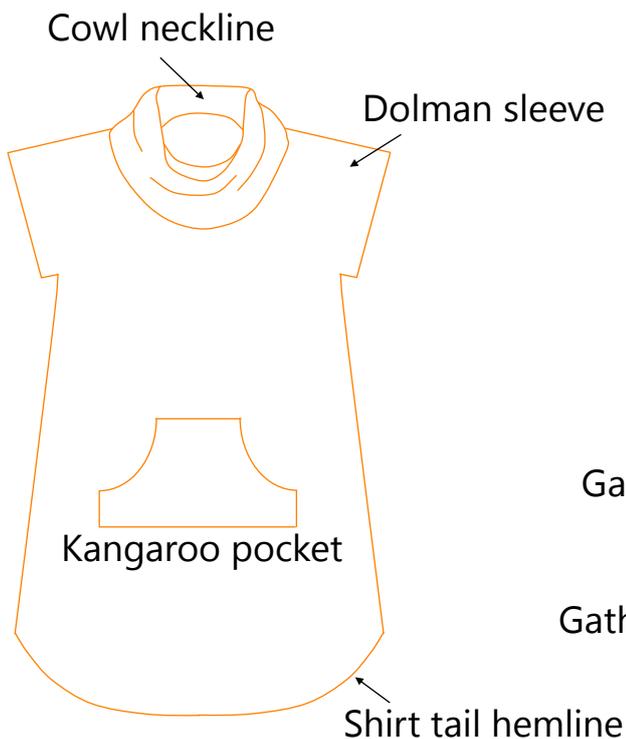
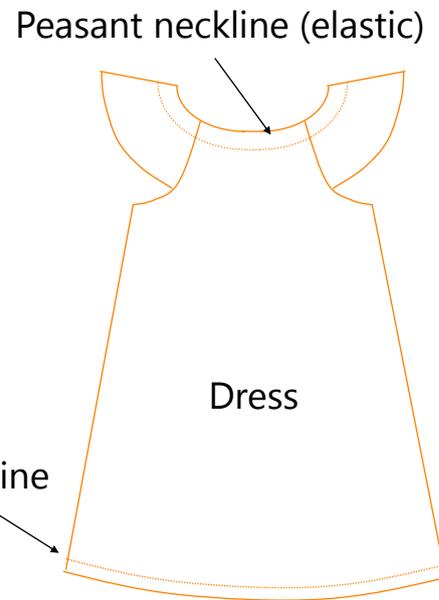
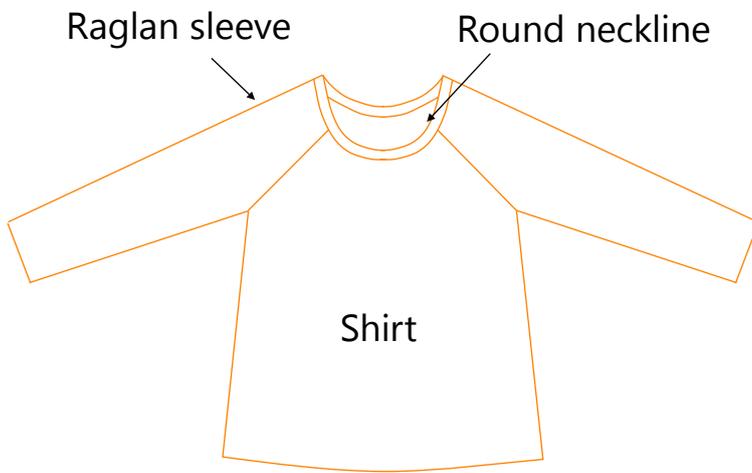
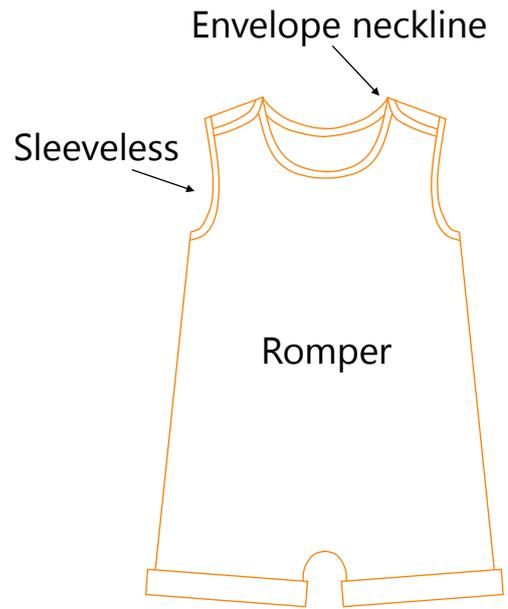
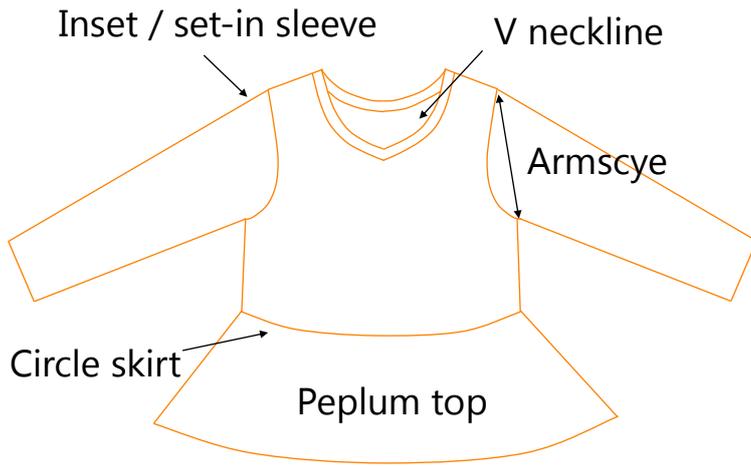
Fashions have changed a lot over the centuries, but certain aspects of past designs remain in modern garments. These features and styles are sometimes known by different names.

## Components

Some common features and components of garments:



# Components continued..



# Grainlines

The grain or grainline refers to the direction the fabric is made.

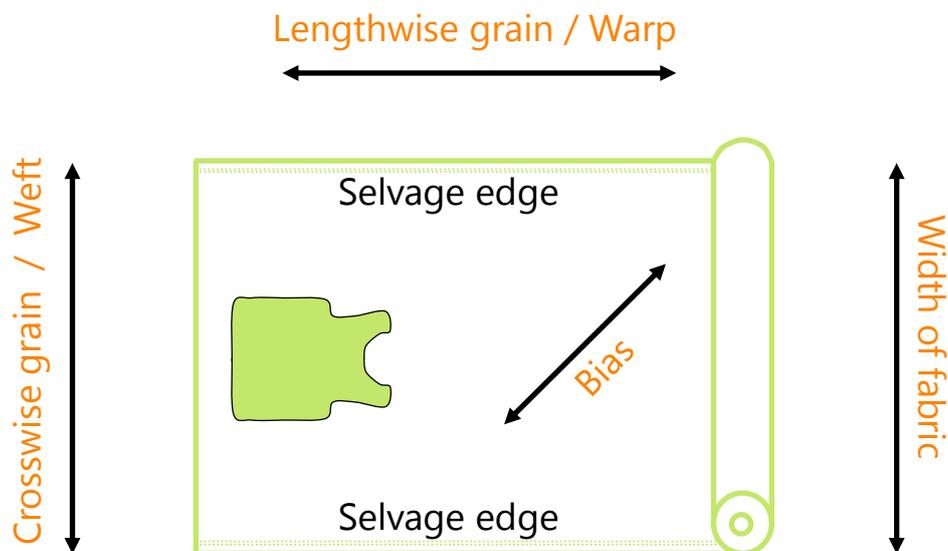
The Weft or Crosswise Grain runs across the fabric.

The Warp or Lengthwise Grain runs the length of the fabric.

This info is needed when sewing garments to correctly cut out the pattern pieces.

If they are cut along the wrong grainline, they may not fit well once constructed.

Most patterns only mark the Lengthwise grain on pattern pieces.



The Bias is a term used to inform the sewer that an item needs to be cut at a 45 degree angle. Bias binding is cut along the bias, at 45 degrees to the selvage.

Always check that you have laid out your pattern pieces along the correct grain before cutting anything out.

This is more important with stretchy fabrics as some stretch more in one direction than the other. Woven fabrics such as quilting cotton or poplin can often be cut along the opposite grain as the direction is less important.

Check your pattern for specific instructions.

# Understanding Fit

## Perspective

Let's start by identifying one very unrealistic expectation.

"If the clothing in my wardrobe is all size 10, then everything with a size 10 tag on it should fit me".

You may have heard the saying 'no two people are identical'.

Even twins have unique fingerprints.

How can we expect clothing to fit one person the same way it fits another?

After reading this document, it is hoped that you may better understand the many factors that influence the fit of the clothing you wear.

Sometimes we need to make slight modifications to a pattern to get it to fit our own unique shape best.

### A little experiment you can try

If you asked someone to select 10 random clothing items from a retailer that were all in your size for you to try on, you would likely leave the fitting rooms unhappy with the fit of at least one of the garments.

What is it about the ill fitting garment(s) that you don't like?

Was the fit in that area of your body, something you often find a little off?

Was the item of a style you don't usually wear?

Was that item made from a fabric you usually wouldn't wear?

# The Human Body

While we know that every human is a slightly different shape, clothing is most commonly designed using something called a sloper. This is a 2D representation of a 'typical' person in each size. By drafting a pattern from a sloper, the finished garments will all fit the sloper perfectly. However, once placed on a human body little differences will become visible and vary from one person to the next.

Knowing how your body (or the body of the person you are sewing for) differs from the average sloper, can make customising a garment to fit, much easier.

For example, athletic swimmers often have larger than average shoulders as they have more muscle tone around their upper body. Garments can be made to better fit their unique shape by adjusting the shoulder area.

Beyond averages, there are also a variety of body shapes. You may have heard people refer to their body as 'pear shaped' or that someone has an 'hour-glass figure'. These stereotypes are a common way people differentiate someone from the 'average' body shape. Remember that 'average' is not 'ideal', just more typical.

Fitting a garment to a human body today, does not guarantee that it will fit later. As we all know, our bodies change over time. Dehydration, a big dinner, hormones, growth spurts, exercise and illness among other factors, can change the fit of our clothes within days or even hours. We often don't notice little changes until getting dressed and seeing a garment fitting a little differently than what it did last time you wore it.

The clothing you already have may not fit the same next week or next year, depending on how your body is changing. This can be constant fluctuation or more gradual changes.

# Customising

The best thing about sewing your own garments is the fact that you can customise the fit to suit you! Adjusting a pattern to suit the measurements of an individual can be very simple for some garments and more complex for others.

Patterns sometimes include helpful tips on how to mix sizes. E.g. a size 4 dress with size 5 length to fit a taller than average girl.

Sewing for growing kids is often a little more challenging as growth spurts involve an increase in weight, followed by an increase in height. The chest measurements increase, before decreasing again. The child has not dropped a size, actually gone up a size, but has not yet filled out around the chest area. For this reason, height, weight and chest measurements should all be considered when choosing a size.

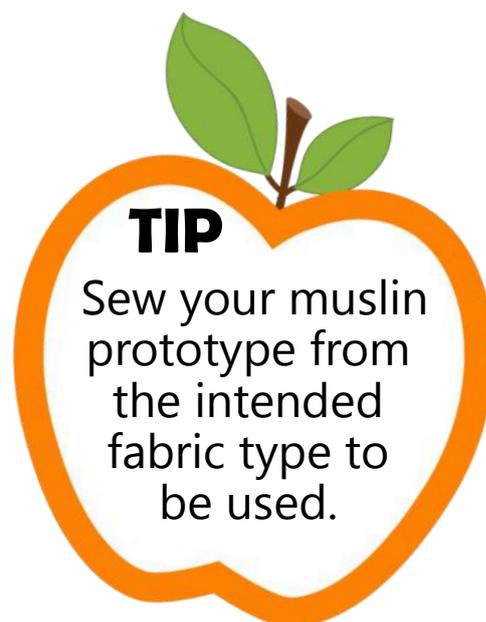
The intended fit of a garment plays an important role in how it fits. If the garment was created to fit tight to the body, but you want a looser fit, simply choosing a larger size will not achieve the fit you desire properly. It is best to choose a different garment that is designed to fit the way you want it to fit. Identifying the intended fit of a garment will help you better choose the right garment to meet your desires.

One dress may be intended to fit loosely and drape gently while another may have been designed to achieve a more fitted look to accentuate body curves.

A modelled picture of a finished garment is a helpful way to see how it is going to fit (if the model is wearing the correct size).

In short, the way you want a garment to fit can differ from the way the clothing was designed to fit. There are some things you can change to achieve a different look, but it is not always ideal to fiddle with the shape of pattern pieces if you are not experienced with drafting and knowing how changing one line can affect the fit in multiple areas.

When altering a pattern, sew up a trial version first to check the fit of your changes, called a 'muslin'.



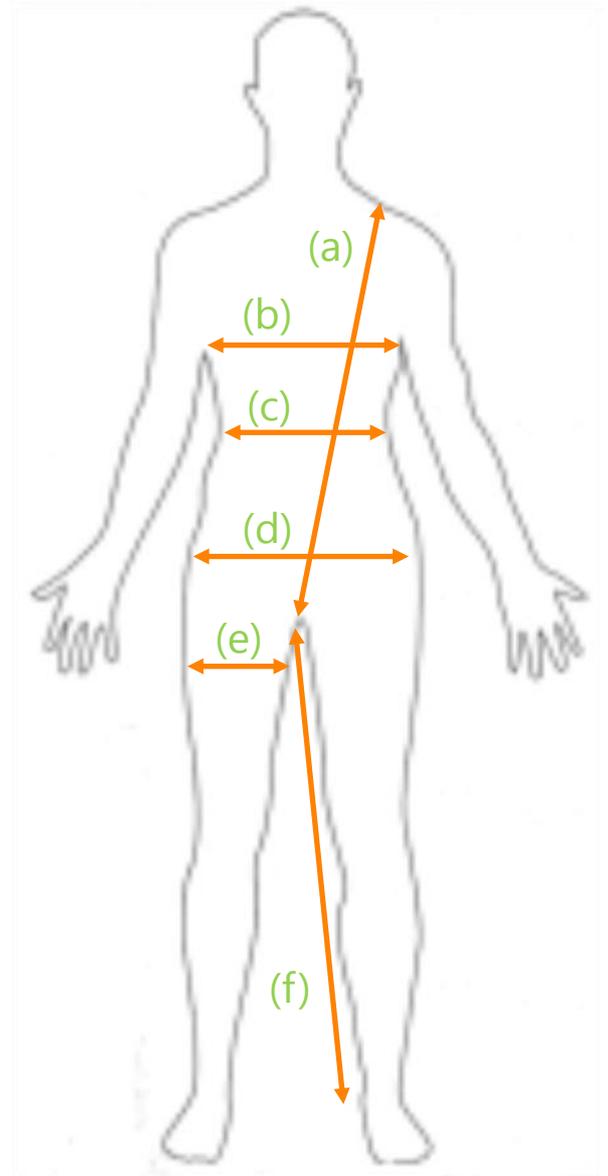
# USING PATTERNS

## Measurements

Accuracy when measuring can save a garment from needing alterations after construction. A pattern will usually give you 1-4 areas to measure to help you choose the right size or in some cases enable you to mix the sizes if needed.

Below are some of the main areas most patterns use to measure for fit:

- (a) Girth: Over one shoulder, between legs and back up to the start.
- (b) Bust/ Chest: Around the fullest part of the chest (nipple level). Inhale and exhale without the tape measuring becoming tight as you breathe.
- (c) Natural Waist: Above the navel, but below the ribs.
- (d) Hips: The fullest part of the hip & bottom.
- (e) Thigh: Measured at the widest point.
- (f) Inseam: Standing straight legged with feet slightly apart, measure from underpants to where you want long pants to finish. Usually to about the inner ankle bone.



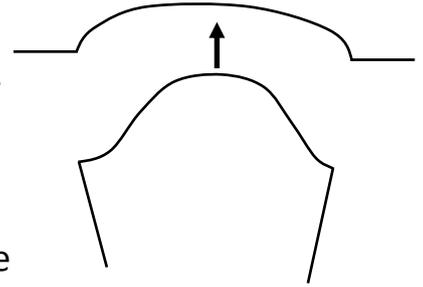
# Ease

When using a pattern you may come across the term 'ease'.

There are 2 definitions of this word in relation to sewing so it is good to be able to tell which version of the term is being used.

Ease is used to define the amount of extra room allowed in the fit of a garment for movements. E.g. Around the chest, a loose fitting top will have more ease than a fitted top.

The second use of the term, has to do with fitting two pieces of fabric together that are usually different shapes or sizes. Most commonly, easing a sleeve onto the shoulder of a top. The raw edge of the sleeve may seem too big due to the added seam allowance, so it may require easing into the shoulder to get the two to fit together.



# Notches

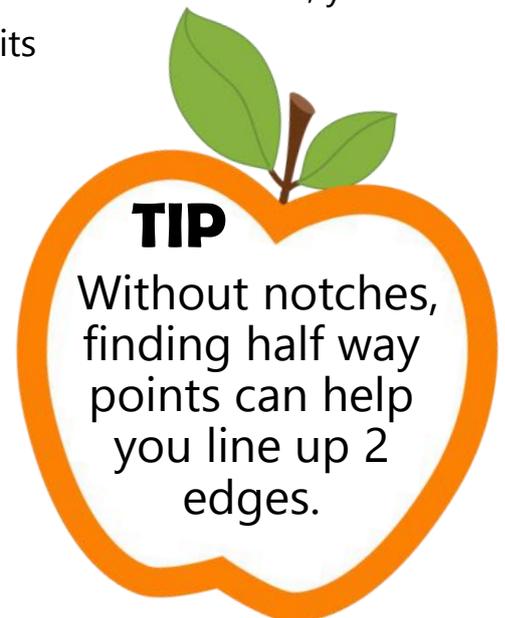
To help align one pattern piece to another, there are often notches marked on the edge of both pattern pieces for you to line them up when sewing.



You do not have to cut around a notch. As long as the location of the notch is marked on the back of your fabric with chalk or a washable fabric marker, you can cut straight past a notch to avoid cutting fiddly little bits in the edge of your fabric.

It is best to mark notches when cutting out each pattern piece out so you don't miss any.

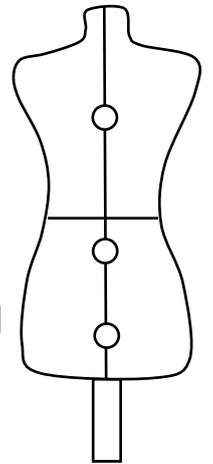
When sewing, align the notches as stated in the patterns' instructions.



# Making Patterns

## Draping

A dress makers dummy, as pictured here, is often used to create a pattern by draping fabric or paper over the dummy. It can be adjusted using dials to increase or decrease the size to specific measurements for a custom fit. Draping is the term used to describe the creation of a pattern piece by physically fitting it to a model or dummy first. Features like darts can be more easily worked out by simply folding and pinning to fit.



Seam allowances are added and the pattern pieces afterwards.

## Tracing

Some basic garments can be re-created by simply tracing around the outside of an existing garment.

There are some things that cannot be easily traced.

Remember that the front and back of pants/shirts are generally different so you will need to trace each separately.

After tracing around each section of a garment, you will need to add seam allowances to the relevant sides and hem allowance along the bottom.

Always sew up a muslin (prototype from scraps) from your traced pattern piece before cutting into your good fabric.

Alternatively, if a garment is not longer usable you may be able to unpick the seams to better create pattern pieces from the unpicked sections of the old garment.

You will need to figure out how to put it together too.



# Grading

Once a pattern has been drafted to fit 1 size, it can then be scaled up or down to create smaller or larger sizes of the same garment.

Grading is the term used to describe enlarging and shrinking a pattern to fit the next sizes up or down.

A pattern piece cannot simply be increased by a percentage. Each section of the garment will need to be adjusted manually to properly fit the next size up.

For example, children grow up more than they grow out. The body section needs more length added than width. Also, the armhole (arm hole) will need to be increased but not by as much as the body length. The angle of the armhole may also need to be changed. The pattern piece is not just increasing in size but also the shape will change a little as the body changes in many ways as we grow.

Maintaining proportions true to the original garment, while ensuring it accurately fits each size can be difficult for a beginner sewer. Knowing how much to increase each section takes a lot of practice.

Slopers (as mentioned on page 7) are often used to help grade garments more accurately.

Once a pattern has been graded up or down to fit different sizes, it can then be tested and altered to ensure all seams align well and the garment looks the same in all sizes when worn.

This extra info is good to know, but not vital when beginning to sew.

There are many great patterns already drafted and ready for you to use.

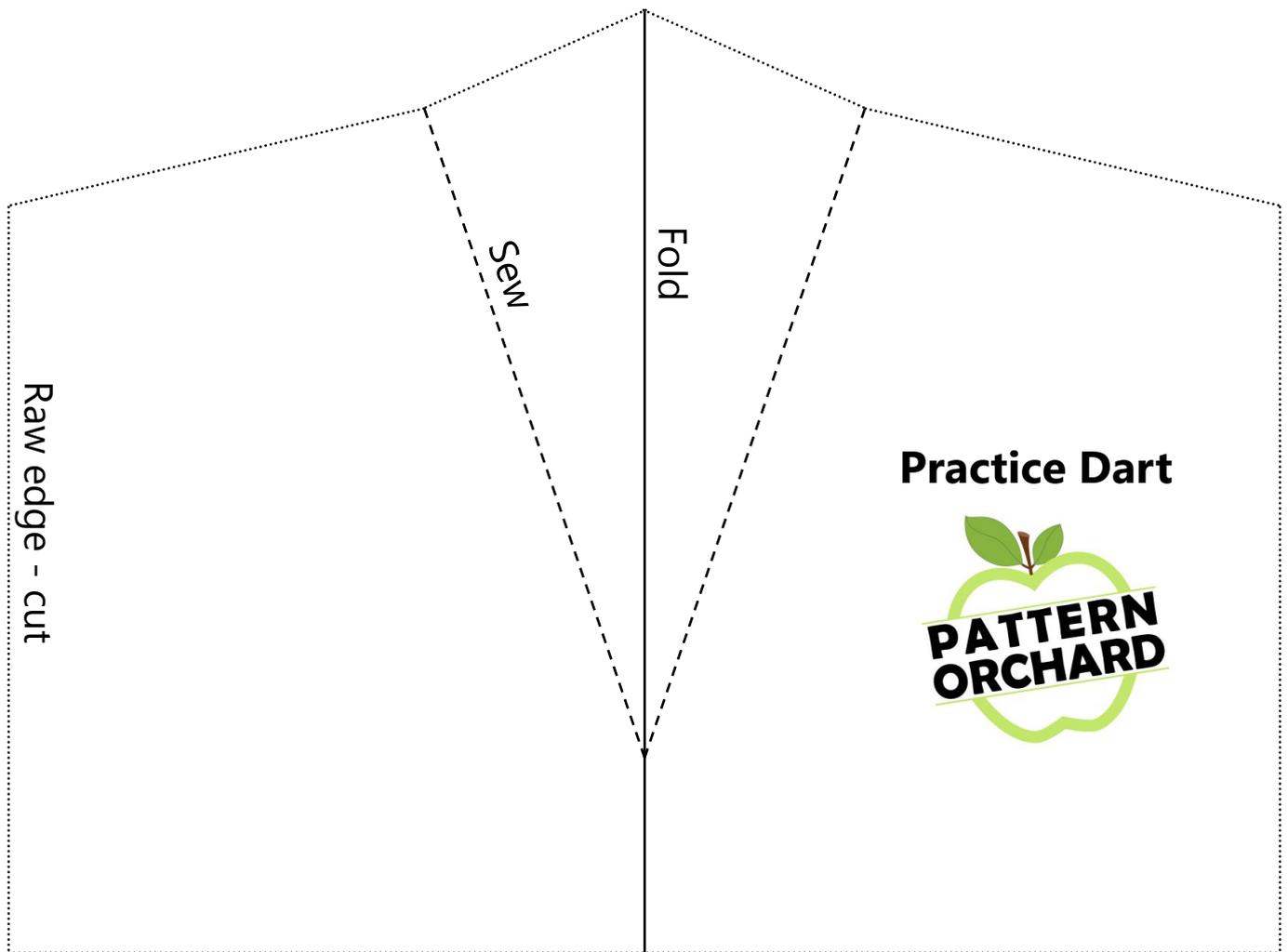
If you are interested in furthering your knowledge of pattern making, check out local pattern making courses to get some hands on experience with drafting.

# Garments Permit

## Practice

Print this page. Trace the shape onto your fabric. Fold along the marked fold lines before sewing the dart down the sew lines.

Notice that once sewn, the tip of the dart can be folded to one side of the seam and the top raw edges align.



# Garments Permit

## Check list



Read & understand the entire Garments Permit document



Read through a sewing pattern for a garment. Ensure you can visualise how the garment goes together as you read



Trace around a simple item of clothing



Measure someone at every point on page 9



Complete the page 13 practice paper sewing sheet



Once all of the above have been ticked, you are now ready to attempt your first garment 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 Garments Permit license card below. Cut it out and keep it to remind you of how long you have been sewing for. Congratulations!

**Garments Permit**



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