You might have heard the term, “fabric grain.” It sounds like it could be a breakfast cereal just for sewists. But in reality, it’s a technical term that describes the direction your fabric has been woven. It’s important to know which way the grain is running, because fabric that is off-grain when you are cutting pattern pieces can cause your completed project to stretch out of shape. We’re here to give
you a better understanding of fabric grain and some tips on how to straighten it.

When you buy fabric off the bolt (in store or online), they unwind however many yards you want, then cut it off with scissors. Along either side (perpendicular to the cut edge) are the factory-finished edges called the selvage (or selvedge). These edges are bound to keep the fabric from unraveling.

The grain of the fabric is made up of the threads running parallel to the selvage and the threads running side-to-side (perpendicular to the selvage).

**The three types of fabric grain**

**Lengthwise Grain:** Sometimes referred to as the grainline or simply *grain*, lengthwise grain refers to the threads that run parallel to the selvage. The technical name for these is “warp threads.”

**Crosswise Grain:** Crosswise grain refers to the threads that run parallel to the cut edge of the fabric (the width) and so are perpendicular to the selvage. The technical name for these is “weft threads.” Here’s your little rhyme to help remember which is which: “*weft runs right to left.*”

For more about the fascinating world of warp and weft, check out our tutorial, [All About Fabric Weaves](#).

**Bias:** While technically not a grain, it’s the 45° angle between lengthwise and crosswise grain. Fabric cut on the bias is stretchy, and often used anywhere you need the fabric to “bend” more smoothly around a curve, such as for covering piping, creating bias binding, or in apparel projects where you want a soft, flattering shape.

**Why does grain matter?**

When a fabric is “on-grain,” the lengthwise and crosswise threads are at an exact right angle to each other. Woven fabrics always follow the grain because they are made with the actual warp and weft threads. With wovens, when the grain is off, so is the pattern. With printed fabrics, their designs are
printed on top of the woven threads. So the grain can be off and the pattern can still look okay.

Your fabric grain can be off a little bit and it won’t affect your project. But if it’s off by too much, your designs won’t line up when you’re trying to match panels and your seams can bunch or stretch because they’re actually being sewn too close to the bias.

How to check your fabric’s grain

You can check to see if your fabric is on-grain by establishing a straight line across, from selvage to selvage, then folding the fabric to see if it squares-up.

To do this, lay out your fabric panel right side up and flat on your work surface.

Near the top cut edge and starting at one side of the selvage, find one thread that goes all the way across (crossways). Start pulling it.

Ideally, you can simply pull the thread right out of the fabric. But if not, just pull until the fabric puckers along the thread, then keep bunching the fabric and pulling every few inches until the pucker reaches the opposite selvage.

Either way, pulling out this single thread will give you a straight line across the fabric.

The methods listed above still work without a selvage. It just makes it a bit harder to find the horizontal thread to pull. Place the fabric on your work surface oriented so the weft is running as it should: horizontal. If you’re not sure, make your best guess. At one corner, fray the fabric so you can get ahold of one thread and pull as described above. If your pieces are small, there may not be much you can do since the cuts from the larger fabric have already been made.

Using this thread line as your guide, cut all the way across the fabric.

Some folks prefer to rip across. To do this, snip about ½” in from the selvege, then rip the fabric across. Your
ripped edge will need to be pressed flat.

Fold the fabric lengthwise so the selvages align and are perfectly flush. If the two sides of the edge you just cut also line up and are flush, your fabric is on-grain.

If they don’t, proceed to the next section.

**How to straighten your grain**

There are two ways to do this.

**Ironing**: Fold your fabric in half (selvages together) so your cut edges are aligned. Pin along the cut line and pin the selvages together. Iron your fabric until flat.
If this doesn’t correct your grain, you can try stretching the fabric.

**Stretching:** Fold your fabric in half (selvages together). When your grain is off, you’ll see that one of your corners is short. Hold the short corner with one hand and with the other hand, grasp the opposite corner. Gently stretch the fabric on the diagonal.

Fold it in half again to see if the edges now align. Repeat the gentle stretching if necessary. Be careful not to stretch too strenuously or the fabric’s printed design motif can be stretched out of shape.

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