Cutting Mats

If you frame a picture for wall-mounting, you probably will want to surround it with a mat. There are four ways to go if you want a mat for your print.

1. **Buy a pre-cut mat**

   Precut mats are available for a few common picture and frame sizes. For example, you will be able to find the following mat sizes at a store such as Michaels here in town:
   - 8”x 10” picture and 11” x 14” frame
   - 11” x 14” picture and 16” x 20” frame

   You can find a wider variety of pre-cut mat sizes on the web:
   - [http://www.jerrysartarama.com/art-supply-stores/online/2051](http://www.jerrysartarama.com/art-supply-stores/online/2051)

   Precut mats are fairly inexpensive. Their main disadvantage is that they require you to crop your photo to have the fixed dimensions of the mat, which may be a problem if you cannot sacrifice any of the picture to cropping.

2. **Buy a custom mat**

   After you have measured the photograph and frame and have decided on the mat size you want, you can order a custom mat from an Arts & Crafts store. This is not cheap – probably between $5 and $10, depending on the size of mat – but it is cheaper than having the picture framed professionally.

3. **Get the picture framed professionally**

   This is expensive – maybe $75 - $100, depending on where you get the framing done and what kind of frame you choose. It does give you the freedom to choose any size of mat and frame.

4. **Cut your own mats**

   If you have a mat cutter available, you can choose a commercially available frame (e.g., 11”x14”, 16”x20”, or 18”x24”) and cut a mat to fit the frame and your picture. Given the mat cutter, this is the most inexpensive option and one that gives you the freedom to choose a print size of almost any dimension. The only disadvantage is the cost of the mat cutter. The model we are using in this course cost $230, but cheaper mat cutters are available.
In this lesson, you will learn how to use our mat cutter to cut your own mats. Although the lesson is limited to one type of mat cutter, the techniques you learn will not differ much if you use another type later. The main difference between mat cutters is in ease of use rather than what needs to be done.

The Logan Simplex Plus Mat Cutter, Model 750

Our mat cutter is a mid-range model – fairly easy to use and large enough to cut large mats, but not as expensive as a full-blown professional model. It has two cutting heads that will allow you to cut straight edges for the outside of a mat and slanted beveled edges on the inside.

Determining the Size of the Mat

In this lesson, we will assume that you have a picture that measures 8 1/4” x 12 1/4”. You want to frame the picture with an 11” x 14” frame that you have purchased ready-made from an Art & Crafts store.

You should cut the inside of the map slightly smaller than the picture to ensure that the opening in the mat will cover the entire picture. I usually give myself around 1/4” leeway on all sides. Our print measures 8 1/4” x 12 1/4”, so the opening we cut should be 8” x 12”.

Always measure the actual print you are going to mount so you are sure of the area it actually covers.
An 8” x 12” opening centered in an 11” x 14” frame would look like the diagram at the right. We will cut the inside portion 1” from the right and left outer edges and 1.5” from the top and bottom outer edges.

Before you begin, mark the back of the mat in some way – I usually scribble over it with a pen or pencil. This helps avoid confusion later.

Cutting the Outer Edges of the Mat

You may see a metal Mat Guide on the rear of the mat cutter attached by two black knobs.

If the Mat Guide is there, loosen the two knobs and gently slide the guide along the black metal tracks until it has been removed from the mat cutter. We will not need the Mat Guide for cutting the outer edges.
Set the **Squaring Arm Stop** at 11”.

Lift the **Guide Rail** and place a piece of mat board face up on the mat cutter.

Slide the mat board along the black **Squaring Arm** so that it is flush with both the Squaring Arm Stop and the Squaring Arm.

At this point the mat board should be squarely against the Squaring Arm.
Lower the Guide Rail and place the **Straight Cutter** head on the rail above the board.

**Be Careful: The cutting blade on the Straight Cutter head is sharp!**

Grooves in the bottom of the Straight Cutter head should fit over a ridge on the edge of the Guide Rail, so that the cutting head slides along the Guide Rail.

Hold down the Guide Rail with one hand and firmly pull the cutting head along the rail. *Keep a constant downward pressure on the rail and the cutting head as you make your cut.*

**BE CAREFUL WHEN THE CUTTING HEAD BREAKS THROUGH THE END OF THE BOARD. IT WILL TEND TO JUMP TOWARDS YOU.**
Set the Squaring Arm Stop to 14”.

Place the sheet of mat board that now is 11” on its short side back in the mat cutter. Again, the board should be flush with the Squaring Arm and its Stop.

Cut the other side of the mat board.

At this point you should have a piece of mat board that is 11” x 14” on the outside.
Marking the Inner Edges

Loosen the black knobs on the Mat Guide. With the raised edge of the Mat Guide towards the Guide Rail, line up the runners on the bottom of the Mat Guide with the black metal channels on the mat cutter. Drop the runners into the channels and carefully slide the Matt Guide forward. Do not force it! It will slide smoothly if it is positioned properly.

The inner edge on the long side of the mat board should be 1 ½” from the outer edge. Slide the Mat Guide in until it reaches 1 ½”.

When you are cutting a beveled edge, you must separate the mat cutter from your mat board with a Backing Sheet to prevent the cutting blade from digging into the matt cutter board. I will keep old remnants of mat board around to use as Backing Sheets. Raise the Guide Rail. Take one of these remnants and place it flush against the Mat Guide and Squaring Arm as shown the picture at the right.
We have set the Mat Guide to 1 ½”, which is the distance of the inner edge from the long side of the mat. Place one of the long sides of the 11” x 14” piece of mat board face down on the mat cutter on top of the Backing Sheet and snug against the Mat Guide and Squaring Arm.

Before actually cutting the inner edges, we will mark where the edges should be with a pencil or pen.

Lower the Guide Rail, hold the rail firmly with one hand, and draw a line along the Guide Rail with a pencil or pen.

Rotate the mat board 180° so that the opposite long edge is under the Guide Rail and draw another line.

Raise the Guide Rail and set the Mat Guide at 1”. Mark the other two edges. When you are finished you should have outlined the inner section on the back of the mat board.
Cutting the Inner Beveled Opening

Now we are ready to cut the inner opening. Set the Straight Cutter head aside and get the Bevel Cutter head.

Again, be careful. The cutter head is sharp!

The Mat Guide currently is set at 1”, so place one of the short sides of the mat against the Mat Guide and square it against the Squaring Arm. The mat should be face down so that you can see the lines you drew on the back.

Lower the Guide Rail. Place the Bevel Cutter head over a ridge on the edge of the Guide Rail, so that the cutting head slides along the Guide Rail.

The blade on the Bevel Cutter head is mounted on a swiveling blade holder. The usual position of the blade holder is up, which keeps the cutting blade away from the bottom of the head. This head will not cut if the blade holder is not pushed down.

If the blade holder is pushed down, the blade is exposed and the cutting head will cut the mat below it.
Without pushing on the blade holder, slide the cutting head toward the mat until the Indicator Line on the cutting head coincides with the line you have drawn on the back of the mat.

**Hold the cutting head securely with one hand so that it will not move.** With the other hand, push the blade holder down so that the blade slices into the mat.

Continuing to firmly hold the blade holder down, slowly pull the cutting head toward you with your other hand.

In my experience, the cutting blade tends to ride up as you pull the head along the mat, so you must be careful to keep steady pressure on the blade holder.

Continue to pull the cutting head toward you until the Indicator Line on the head reaches the second line you have drawn on the back of the mat.

**You need to exercise care when the Indicator Line on the cutting head approaches the drawn line.** I move the head very slowly at this point to make sure the lines coincide.
Repeat this step for the opposite side of the mat board, which also needs an inner edge that is 1” from the outer.

Set the Mat Guide to 1 ½” and cut the other two inner edges.

**Removing the Inner Section**

If all the inner edges have been cut sufficiently, the inner section should fall out. Frequently, one or more of the inner corners may not be cut completely, though, so that the inner section still is slightly attached at one or more of its corners. If this is a case, *carefully* turn the board over without tearing the uncut corner(s). Take a razor blade and carefully slice the uncut corner(s). Remember that the inner edges are beveled so that the razor blade cut should be at an angle.

When you are through, you should have a properly cut mat with beveled edges on the inside.
Example: Cutting a Mat for an 11” x 14” Photograph

Mark the back of the mat board with a pencil.

It is easy to find 16” x 20” frames, so we will cut the outer edges of the mat to that size (pp 3 – 6 above).

If the photograph is 11” x 14”, we want to cut the inner opening as 10 ½” x 13 ½”. Cutting an opening that is ¼” smaller on all sides gives you a little leeway in case the photograph did not print exactly as 11” x 14”. It also makes it easier to align the photograph with the opening.

Calculate the distance between the outer and inner edges of the mat.

Small side: Subtract 10 ½” from 16” = 5 ½”. Divide by two = 2 ¾”

Large side: Subtract 13 ½” from 20” = 6 ½”. Divide by two = 3 ¼”

The shape of the mat is shown below:

Directions for marking and cutting the inner beveled opening are on pages 7 – 11 above.