

Chapter 9

Paper Sculpture: 3D Art from Paper or Card

In This Chapter

- ▶ Understanding paper sculpture basics
 - ▶ Creating in three dimensions
 - ▶ Making mounted or framed sculptures
 - ▶ Folding origami creations
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When you think of sculpture, you probably think of clay, marble, wood, bronze, or stone. Paper probably isn't at the top of your list, but don't feel limited with paper. Although people use paper as a flat surface most of the time, with the art going on the paper, the paper *is* the art with paper sculpture. You make the sculpture by curving or folding the surface into a 3D form and using the texture and color of the paper to make interesting and artistic shapes. With just with some clever cuts or folds and a little imagination, you can make some fabulous paper art.

Are you excited about taking a stab at what sculptures you can whip up with your paper? If so, this chapter provides you with a quick overview of the characteristics of paper sculptures and outlines a few projects you can try. I present 3D projects you can cut and assemble, tell you how to score paper so you can create creases that curve, and show you how origami lets you sculpt from a single square sheet of paper.

Identifying Key Characteristics of Paper Sculpture

Paper sculpture is the art of making beautiful 3D objects from flat sheets of paper. Characteristics of paper sculpture include the following:

- ✔ Paper sculptures are made from sheets of paper and card, often cut into shape and then glued together.
- ✔ Paper sculptures use curves and creases to make flat sheets of paper become 3D.
- ✔ Paper sculptures can use a variety of different types of paper and card within the same sculpture.

When making paper sculptures, you have many options. However, you may want to consider the following techniques to give your card the wow factor:

- ✓ **Curves and creases:** You can use them to stiffen paper and to make it into a 3D shape. Curved creases especially can make interesting 3D surfaces.
- ✓ **Cuts with a craft knife:** You can make very intricate cuts with a craft knife. These cuts let you add detail and pattern to your sculpture.
- ✓ **Origami:** Origami is the art of folding a single square sheet of paper without any cutting or gluing.

This chapter looks more closely at how you can fold, crease, and cut paper into incredible paper sculptures.

Creating a Freestanding Paper Sculpture

For centuries, artists, hobbyists, and children have been making paper sculptures. From the kid slicing up a cereal box to build a model battleship or a town for the Lone Ranger to the artist modeling endangered animals or Czechoslovakian castles, a lot of people have fallen in love with paper sculpture. Search online for “paper models” or “papercraft,” and you’ll find hundreds of free model templates you can download, print, and assemble. A lot of the templates are from fellow hobbyists, but even companies such as Yamaha Motor (www.yamaha-motor.co.jp/global/entertainment/papercraft) and Canon (www.canon.com/c-park) are getting in on the action.

Part of the fun of paper sculpture, though, is drawing your own templates and designing new models. In this section, I give you some tips on designing in 3D and introduce a simple water lily sculpture.

Working in 3D

The challenge of paper sculpture is figuring out how to turn a flat sheet of paper into something that has depth, height, and width. You generally can’t mold, chisel, or carve paper the way you do with other sculpting materials, so you have to score, fold, cut, curl, layer, and glue the paper to make your project.



As you design and build your paper sculpture, follow these tips:

- ✓ **Choose how you want to design your sculptures.** You basically have two ways:
 - Draw them out on paper in your notebook and plan all the details of the model before you start building.
 - Just start cutting and sticking.

Both techniques work well. I sketch when I know what I’m designing. When I’m just trying to be creative, I get out the scissors and snip, snip, snip.



Color, white, what's right?

Sometimes models look great just in white, and some projects need color — so how do you decide? Your final decision depends on your personal preference. There's no right or wrong answer. These guidelines can help you make your decision:

✓ For a more abstract effect, use white or go *monochromatic* (use only one color). Don't forget, though, that if you have a flat model with no color, it'll be very hard to see what's going on. A white-only paper sculpture works best with lots of 3D shape. The shadows and highlights really bring out the depth of the model.

✓ If your model is aimed at being as real-to-life as possible, then it will look better in full color. Scale models of buildings or vehicles look best if they accurately represent both the shape and color of the subject.

So what's the best way to add color to your model? You can either use precolored materials or color the materials with paint or pen before or after you've completed your model. Spray paint works well for sculptures, but you have to use it in a well-ventilated area. Chapter 4 discusses some general coloring methods.

- ✓ **Keep everything clean.** When you're making your sculpture, make sure your hands and work surface are clean and that you don't get any excess glue on your work. This tip is especially important for paper sculptures because people can view these works from any angle.
- ✓ **Use the appropriate paper.** You need to use fairly heavy paper for paper sculptures so that your finished piece doesn't flop over. Look for paper that is at least 150 g/m² or 90 pounds. (See Chapter 2 for info on paper weight.)
- ✓ **Add texture to your paper before you add it to your sculpture.** Press the flat of a scissor blade or the handle of your craft knife into the back of your paper to *emboss* it (raise it slightly). Or check out your craft store for proper embossing tools.
- ✓ **Experiment with the paper to get different effects.** For example, you can run a long strip of paper over the edge of a pair of scissors to make a curly strip.

Project 9-1: Water Lily Sculpture

This paper water lily sculpture is as beautiful as it is simple. It involves cutting, scoring, folding, and layering paper before you glue it to a lily pad base. You can make the baseboard from a single sheet of card stock. You glue two rows of petals into place on top of the baseboard, along with some paper leaves. The finished result is an elegant water lily with a layered look that defies the simplicity of its construction.

Tools and Materials

2 to 3 sheets of thin white card

Scissors or a sharp craft knife

Ruler

Cutting mat

Pencil and eraser

White school glue and glue spreader

1. Copy the templates from Figure 9-1 onto a sheet of card and cut them out.

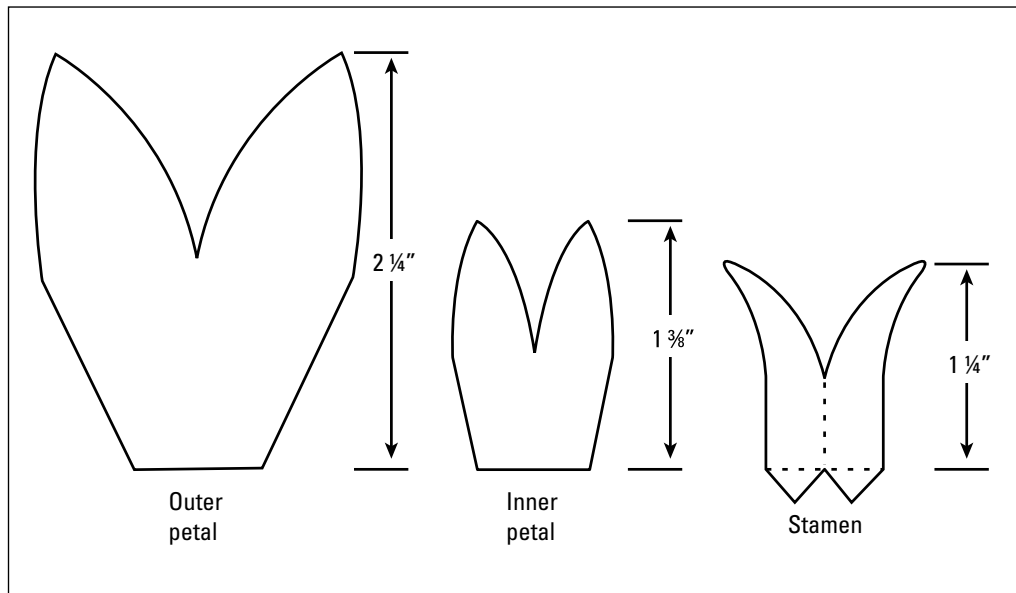


Figure 9-1:
Cut out these templates for the flowers.

Three parts make up the flower: the large outer petals, the small inner petals, and the stamen. Copy the templates as accurately as possible. Then cut them out to create patterns that you'll trace around in the next step.

2. Draw around the petal and stamen patterns you created in Step 1.

The final flower has six of the large outer petals and six of the small inner petals. Draw around each petal pattern six times, each time carefully lining up the pattern with the outline you've just drawn. Erase part of the lines where the petals touch each other to make them dashed — these are score lines.

Trace around the stamen pattern three times, creating three separate pieces.

3. Draw a tab on each of the petal parts and stamen as well as a tab to close the petal shapes.

Look at the petals in Figure 9-2. Draw a small tab on the base of each petal as shown and also draw a tab to close the petals.



4. Score along the dotted lines and cut out the petal and stamen parts.

Cut in toward the center of the cuts to get the best quality cuts. If you cut outward from the corners, the card tends to twist, leaving unwanted kinks in your work.

5. Glue the petals together and glue them to the center of a sheet of card.

Glue down the tab that closes each set of petals, creating two rings of petals (see Figure 9-3). The two sets of petals fit one inside the other. Fold the tabs from the outer petals outward and those from the inner petals inward; glue them to a sheet of card (your baseboard).

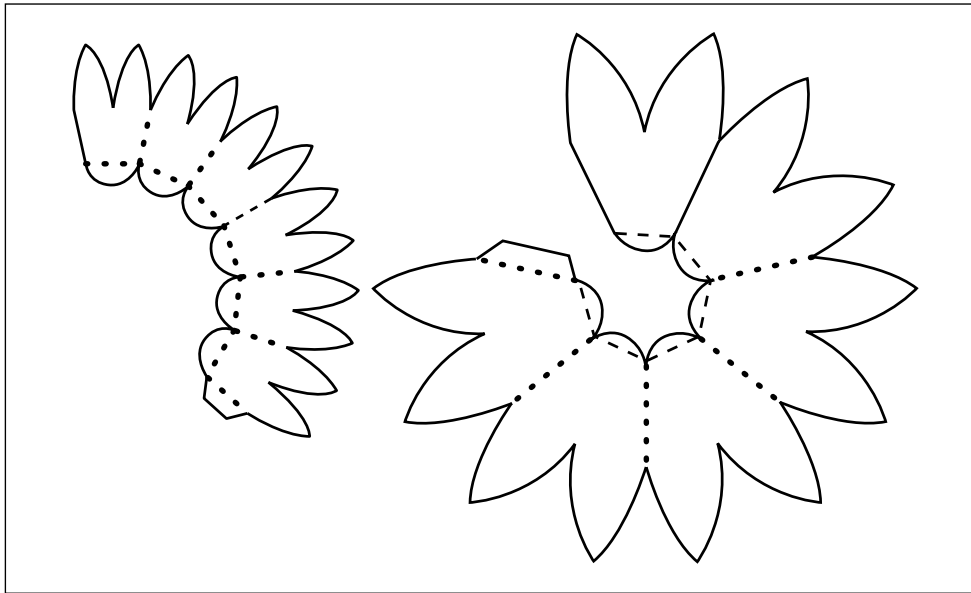


Figure 9-2:
Add tabs to
the petals.

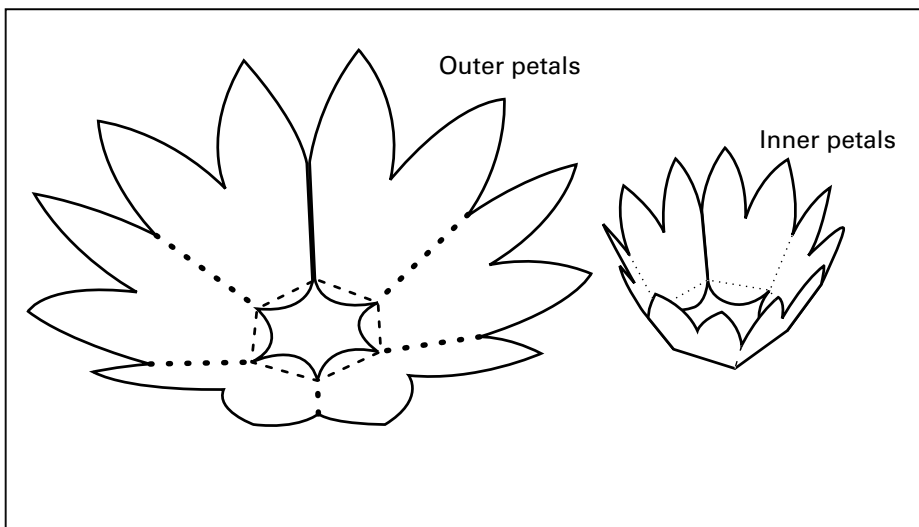


Figure 9-3:
Glue the
petals
together.

6. Glue together the stamen parts and glue them into the center of the flower.

The stamen is made of three identical stamen pieces. Fold two of them in half and glue two halves together; then glue the third stamen piece into place so that it touches the other two stamen pieces (see Figure 9-4). Glue the finished stamen into the center of the flower.

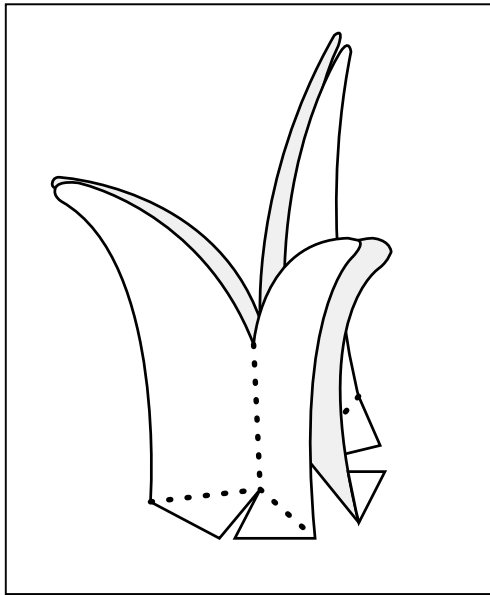


Figure 9-4:
Glue the
stamen
together.

7. Finish the model by adding two or three large leaves to the base piece of card stock.

Cut out some large lily pad leaves; don't worry if they hang over the edge of the base-board. Glue them down and then trim off the excess to look like Figure 9-5.



Figure 9-5:
Glue some
leaves into
place and
trim them
down to
size.

This sculpture works well as a white model, but it also looks good in color.

Shallow Sculptures: Limiting the Point of View

With paper, you can create sculptures that aren't very deep and that don't allow viewers to see all the way around them. Not only is this technique artistic, but it also saves you the trouble of having to design the back of your project. Some people glue their paper sculptures directly to a background, but you can also attach your sculpture to a deep picture frame that lets the pieces seem to float. In this section, I tell you how curved creases can add interest to these shallow sculptures, and I introduce a fun ladybug project.