Chapter 1

Gearing Up

In This Chapter

- Selecting the right tools and equipment
- Creating your collections of beads, stones, and crystals
- Figuring out the necessary findings

Get your gear on! Actually making jewelry is the highlight of the creative process, but we think it's almost as much fun to get ready to make jewelry. Think of it as the crafty equivalent of getting new supplies at the beginning of the school year. If you've flipped through a bead supply catalog or browsed an online bead store, no doubt you've seen hundreds of different tools and supplies, which may overwhelm you. In this chapter, we pare down the seemingly endless catalog of gadgets and gotta-haves and give you the real deal on just what you need to get started.

If you want more details about any of the tools, beads, or findings that we talk about in this chapter, please check out our first beading book, *Jewelry Making & Beading For Dummies* (Wiley).

Taking a Look at Essential Tools

Tools vary widely in price range. You can get a basic starter kit with three or four different tools for $15, or you can spend $50 (or more) on a single pair of professional-quality pliers. The most expensive tools are absolutely not necessary when you're just starting out. Look for tools with descriptors like *economy* and *value* to get started.

Picking out pliers

We use three different types of pliers daily in jewelry making: round-nose pliers, chain-nose pliers, and crimping pliers, shown in Figure 1-1a, b, and c respectively. We consider these to be must-have tools.

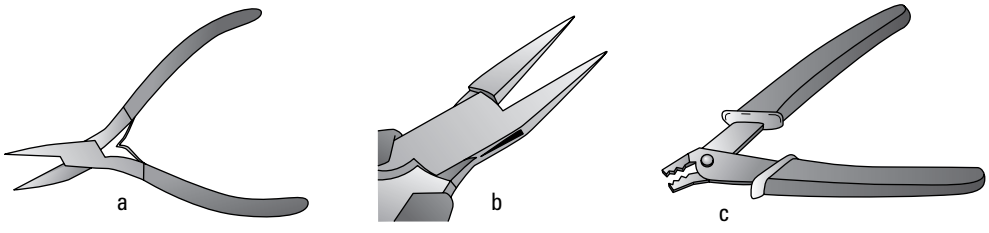

Figure 1-1: If you buy only three sets of pliers, these are the ones to invest in.

- **Round-nose pliers**, shown in Figure 1-1a, are great for making eye loops and wrapped loops.
- **Chain-nose pliers,** pictured in Figure 1-1b, are awesome tools to bend wire at a 90-degree angle, a necessary step in creating perfect eye loops. They're also great to open and close jump rings, to tuck in the end of a wrapped loop, or to grab and tighten beading wire prior to crimping. We reach for these pliers constantly.
- **Crimping pliers,** which appear in Figure 1-1c, help you flatten crimp beads in a clean, neat, professional-looking way. (*Crimp beads* flatten around beading wire to secure findings, beads, and other components onto the wire at a specific point. We cover the basics of the technique in Chapter 2 and have many, many projects dedicated to crimping techniques in Chapter 4.)

Wielding your wire cutters

You need at least one wire cutter, sometimes called *cutting pliers,* in your toolbox to help you cut wire, head pins, beading wire, or even thread in a pinch. Three different wire cutters can come in very handy:

- **Diagonal cutters** leave the edge of the wire pointed or angled. For the most part, use a diagonal cutter when you need a pointed end or you're going to wrap the wire and the point down.
- **Flush cutters** create a blunt or flat cut on the end of a wire. These are a great choice to use when the end of the wire may come into contact with your skin. Check them out in Figure 1-2.

  Diagonal cutters and flush cutters are tough to tell apart at first glance; the difference between them is the angle of the cutting blade.
- **Memory wire cutters (or *shears*)** are stronger than the other two cutters and made specifically to cut the extremely rigid memory wire easily.

Never use diagonal or flush cutters to cut memory wire on a regular basis. *Memory wire* is a rigid steel wire that will quickly dull even the sharpest cutters. If you plan to make memory wire jewelry, invest in some memory wire cutters.

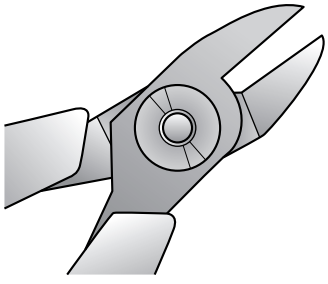

Figure 1-2: Wire cutters make life easier.

You can find wire cutters that cut either from the side or on the end (these end-cut pliers are sometimes called *nippers*). We think side wire cutters are best for general use.

Investigating other hand tools

Depending on what techniques you choose to focus on, you may need a few other items to add the nuances that make finished projects something special.

Wire jigs

You can make wire-wrapped jewelry with pliers and a wire cutter. But if you want to make consistently sized, uniform pieces over and over again, consider a jig. A *wire jig,* like the one in Figure 7-2 in Chapter 7, is the only way to go. In its simplest form, a jig is a board (typically made of plastic) with holes, and you insert pegs into those holes. Then you wrap wire around the pegs. You can change the configuration of pegs to create all sorts of wire-wrapped shapes.

Check out Chapter 7 for details on how to make wire jewelry with a wire jig.

Files

A file allows you to remove any rough or pointy edges that happen when you snip and trim wire. You can shape and smooth sharp metal edges, leaving your pieces ouch-free. Files also come in handy if you decide to pursue more advanced metal-working techniques that are beyond the scope of this book (but really fun!), like working with *precious metal clay* (a malleable clay containing real precious metal that cures to reveal only the precious metal) or metal fabrication techniques.

Some people advocate using a fingernail file in jewelry making. We don't recommend it. They typically aren't hard enough to get the job done. A good set of jewelry files costs around $10 for a set of ten.

Bead reamers

A *bead reamer* is a tool designed to gently increase the size of a bead hole. The rounded tip gradually increases in diameter and is designed to allow you to gently twist the reamer, slowly widening the hole or smoothing out rough edges. Bead reamers seem to work best with natural materials like pearls and gemstones, but they can work on other materials as well. You can get a set for around $5.

If you primarily use crystal, glass, or machined metal beads, you can probably skip this tool. Most of those beads have smooth, consistently sized holes. However, if you move on to cutting your own metal components (like tags, for example), a bead reamer is a great choice to smooth any drill holes you make.

Scissors

Depending on what kind of jewelry you make, scissors can be essential. Bead weaving in particular requires a sharp pair of scissors. Use them to cut thin stringing materials, like silk bead cord and Nymo thread. We've even used them to cut very thin (32-gauge) wire.

Keep a designated pair of scissors with your jewelry-making equipment so you always have them handy. Check out the needlework section of the craft store to find a small pair that will be just right for you.

Hammer

A hammer is great tool to use if you work with precious metals. You can create interesting textures by repeatedly striking metal with the two different ends of the hammer. Or you can actually pound a piece of metal around something, like a *mandrel* (a metal rod) for example, to make rings and cuff bracelets. Look for metal ball-peen hammers with smooth, rounded, or textured heads to make different impressions as you pound.

If, instead, you want to smooth or harden metal pieces without marring them, choose a rawhide hammer, which looks more like a mallet with a wide head. It's made of wood and rawhide and helps you harden and/or flatten metal pieces while keeping them nice and smooth. You can also choose a plastic mallet for this not-so-delicate job.

Anvil and block

If you're pounding on metal with a hammer, you need something to lay the metal on, right? We don't recommend that you just sit down at your dining room table and start banging away. At a minimum, you need a piece of wood to protect your work surface. But when you're ready to take the next step and choose a professional piece of equipment, consider either an anvil or a block.

A *block* is a thick square block of steel (or rubber or wood) with a flat surface for hammering metal. It's handy for hardening your metal designs to help them keep their shape. Or you can use it as a firm surface to pound out cool and interesting textures.

Place a small, folded hand towel under your block to muffle the hammering noise *and* keep the block from damaging your work surface as you bang away. If your block is fairly lightweight, dampen the hand towel before you place it under the block to keep it from sliding around.

In addition to being one of Wile E. Coyote's favorite weapons, an *anvil* is a metalworking tool made from solid steel designed to provide a firm surface for you to hammer away on to shape and mold softer metals. In addition to the flat, block-like top, anvils have *horns* (metal pieces that stick out from the main body of the anvil) with various shapes. Most have a rounded horn to allow you to shape a cuff, for example. Some also have horns with corners of some sort so you can create more-angular designs.

You don't need a big blacksmith-sized anvil. You can find jewelry-sized anvils at many online jewelry stores for less than $30. Depending on the material you choose, a block costs between $10 and $20.

Sorting Out Equipment

In addition to tools, other pieces of equipment are helpful in pursuing your newfound passion for jewelry making. In the following sections, we give you more details about those items, as well as the reasons why we recommend using them.

Keeping things straight with a bead board organizer

An essential design tool, a bead board organizer (typically just called a *bead board*), shown in Figure 1-3, gives you built-in space to lay your bead strands out as you create your design. Typically, it has little compartments to hold and separate several types of beads, plus measurements along the strand compartments to help you keep track of how long your creation is. Some boards have the capacity to lay out as many as five necklace strands and five bracelet strands at the same time — superhelpful if you're designing coordinating accessories.

Consider investing in one of these inexpensive ($5 or less) tools, even if you plan only to follow the designs in this book instead of coming up with your own original creations. You can read the instructions and lay out the beads in the specified pattern, and then you can string them up more quickly and accurately.

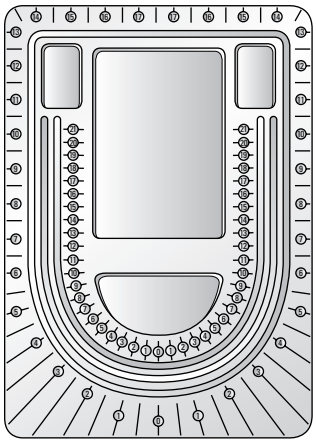

Figure 1-3: A bead board organizer helps you keep things straight.

Laying down a bead mat

A bead mat is a piece of fabric that serves as place to set your beads. The fabric helps keep the beads from rolling around on the table, and if you drop a bead on your work surface, it's less likely to bounce away from you if you have a mat to cushion it. It's a helpful piece of equipment, especially if you're stringing beads randomly.

You can buy a bead mat from a bead store or make your own from a piece of felt, an old blanket, or even a dish towel. You just need something with a little cushioning power. Cut it or fold it to roughly 9 x 12 inches and bead away.

Using a polishing cloth and some elbow grease

If you work with precious metal, you need a polishing cloth. A *polishing cloth* is a piece of fabric (usually a special weave of cotton) treated with a polishing compound of some sort. Coauthor Heather keeps one on her work table and always gives her wire a quick rub down with one of these before using it in a design. The cloth is way more convenient than using a messy paste or liquid, and unless the metal is severely tarnished, a polishing cloth is usually all you need.

Don't wash your polishing cloth, or you'll remove all the cleaning properties. Just use it until it's covered in black grody tarnish, and then toss it and get a new one.

Very fine steel wood (0000 grade) is great for polishing fine sterling wire as well. It's amazing how it brings out the material's natural shine.

Storing your treasures in a bead box with compartments

You can find many different styles of this quintessential beader's best friend, shown in Figure 1-4, in any craft store. Bead boxes with compartments are great for holding lots of different beads in a small space without mixing them together. You can find simple plastic boxes with 20 compartments, rolling totes that hold multiple bead boxes, or cabinets that hold hundreds of tiny drawers.

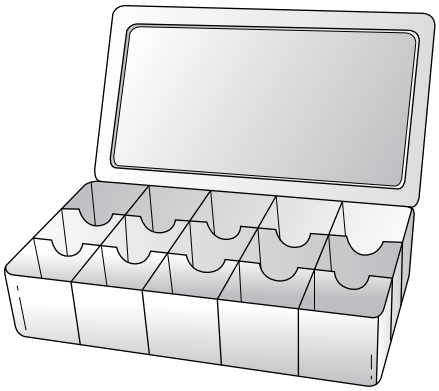

Figure 1-4: A bead box contains your beads.

Getting everything exact with a ruler or tape measure

Even if you choose to buy a bead board marked with accurate measurements, it's handy to keep a ruler or tape measure nearby. Check out the notions section of a fabric or craft store to find a small flexible tape measure that you can keep with your tools. You can find them for around $2.

Getting Your Beads and Stones Together

Ah, beads! These little beauties are probably the reason you're interested in jewelry making to begin with. It's why coauthor Heather got started. She was enamored by the variety of shapes, sizes, colors, finishes, and textures available. Almost every time we pick up a catalog or stroll through a bead store, we see something new, something that inspires us to make a new jewelry piece. In this section, we give you the basics of getting your beads together to get started.

We could talk forever about beads, but we have limited space. Ultimately there's no substitute for reading bead catalogs and visiting your local bead store to continue to develop your knowledge about what's available in the world of beads and figure out what you like.

Selecting bead sizes and shapes

Designing jewelry is definitely an art, rather than a science. Choosing what beads go together in different pieces is really a matter of trial and error, and you'll improve as you get more experience. Certain characteristics (like size, shape, and material) typically come into play when you choose beads for a project.

Why size matters

Because beads are relatively small, individual beads are typically sized in millimeters, designated by the abbreviation *mm.* (Some vendors give the English equivalent in inches for larger pieces.) But strands of beads are typically sold in inches. For example, you may choose to buy a 16-inch strand of 6mm beads, which is roughly 68 beads. Confused yet? To help you out, we include this handy chart, Table 1-1, that lists the bead size, strand lengths, and the approximate number of beads on the strand.

You can also use Table 1-1 to figure out how many beads you need to buy to create a necklace or bracelet of a certain length.

Table 1-1 Approximate Number of Beads Needed for Specific Lengths of Beaded Strands

Bead Size	*Length of Beaded Strand*									
	6″	*8″*	*10″*	*12″*	*14″*	*16″*	*20″*	*24″*	*28″*	*32″*
3mm	51	68	85	102	119	136	170	204	238	271
4mm	39	51	64	77	89	102	127	153	178	204
6mm	26	34	43	51	60	68	85	102	119	136
8mm	20	26	32	39	45	51	64	77	89	102
10mm	16	21	26	31	36	41	51	61	72	82
12mm	13	17	22	26	30	34	43	51	60	68
14mm	11	15	19	22	26	29	37	44	51	59
16mm	10	13	16	20	23	26	32	39	45	51
18mm	9	12	15	17	20	23	29	34	40	46

Because we want you to be successful in re-creating the designs in this book, we include specific information about the size of each and every bead in each and every project. Just take a look at the materials list at the beginning of each project for the specifics.

Shaping up your options

Beads come in all kinds of shapes. Traditional shapes, like round, bicone, teardrop, and oval, come in all sizes and materials. But other shapes (including hearts, stars, various animals, and leaves) are increasingly popular.

Here's a quick rundown on the shapes we commonly use for the designs in this book:

- **Bicone:** A bicone bead sort of looks like two cones stacked on top of each other with the non-pointy ends touching. The center of the bead is wide, and the tips taper down to a point. You can find *faceted* (having many flat, polished cuts) and smooth bicones. Faceted crystal bicone beads are extremely popular in jewelry design and available just about anywhere that sells jewelry.
- **Cube:** A cube is a square bead with six sides that are exactly the same size. You can find faceted and smooth cubes. Crystal cubes tend to be faceted, but other materials may be smooth or faceted.
- **Nugget:** This bead shape is defined by its lack of shape, strangely enough. The term *nugget* refers to a bead chunk that has no specific dimensions or proportions. Instead, it's a bead (often of a piece of gemstone) with angular edges and sides unequal in length.
- **Round:** Round beads are, well, round — perfectly spherical in fact. Unless otherwise noted, they're smooth. These beads are great all-purpose beads that can be used alone or to provide a visual break between other bead shapes.

- **Rondelle:** Rondelles are round-ish beads. They have an overall round shape, but they're typically a bit squished, almost doughnut-like. The hole is drilled through the wider, flatter face of the bead, rather than the round, thinner edge. Often the round edge is embellished in some way, with crystals or a texture. Many spacer beads are rondelles.
- **Tube:** Tubes are rounded beads that are longer than they are wide.

Making sense of seed beads

You've probably seen the pouches or tubes of tiny colorful glass beads that line at least one wall of your local bead store. These beads, called *seed beads,* are essential in techniques like bead weaving. Larger seed beads can be strung into standard necklaces, bracelets, earrings, and more. Seed beads have their own set of rules regarding sizing. They have a complicated number system, and after you crack it, you can differentiate these little guys from each other without too much problem.

The larger the size number, the smaller the seed bead. So for example, size 8 seed beads, like the ones we use in the black-and-bright necklace in Chapter 3, are larger than size 11 seed beads, like the ones used in the red hot net necklace in Chapter 11.

In addition to size choices, you can consider color (including some cool inside-out transparent beads) and shape (like hexagonal, square, and triangle) when contemplating your own designs.

Managing materials

The materials you select for a piece significantly impact the look of the design. When you pick out sparkling crystals, rich veiny turquoise nuggets, or sterling silver rondelles, you set the tone for your entire piece.

We can't possibly cover the full range of the amazing materials made into beads these days. We haven't touched on shell, wood, bone, horn, or acrylic. Consider this a recommendation to visit your local bead shop soon.

Gemstones

When you think of the word *gemstone,* you probably think of precious stones like diamonds, rubies, and emeralds. Those gems are indeed gemstones, but for many of us, they're out of our everyday jewelry-making budget. Lucky for us, though, many other gemstones may fill the bill, like pearls, onyx, hematite, or fluorite. You can get high-quality specimens of these semiprecious stones at some surprisingly low prices.

Here are a few things to remember when you're looking to buy some gemstones to spice up your jewelry making.

- **Consider what grade you need to purchase.** Coauthor Heather just picked up some peridot and garnet stones (her daughters' birthstones) for a reasonable price because they were small- and medium-grade stones. If by some sad set of circumstance the pieces get lost or broken (they're still pretty young girlies), she won't feel completely distraught because she didn't pay a ton of money for them. On the other hand, if you make high-end pieces with nothing but precious metals and high-quality gemstones, you need to buy and sell accordingly.
- **Get to know gemstone lingo.** Terms like *synthetic* (grown in a lab), *simulated* (glass colored to look like gemstones), *natural* (100 percent naturally occurring and untampered with), and *genuine* (created in nature, but may have been altered in some way) have different meanings and should affect the price you pay for the beads.

It's perfectly legal to sell nonnatural stones, but the details of the alteration must be disclosed to the buyer. Get the full scoop before you open your wallet. Don't pay for more than you're getting.

- **Buy the right amount for your budget and needs.** This point has two sides. Side one: Typically the more you buy, the less your per-bead price is. Side two: The more you buy, the more you pay in actual dollars. Buy cautiously, but shrewdly, because these beads can be one of your highest expenses.

Glass and crystal

Basic glass beads are economical. Highly faceted rounds and bicones can be a great addition to any project. In fact, you can create gorgeous pieces with nothing but basic glass beads.

Although many glass beads are basic, a few are not. Artists specialize in creating a stunning array of handmade glass beads. Here are a couple of categories to check out:

- **Dichroic:** Fashioned into beads, pendants, and charms, these *dichroic* (two-colored) glass pieces have a thin layer of metal infused into them, giving them an iridescent, changing quality as you view them from different angles.
- **Lampwork:** Lampwork beads are made with a torch and bead canes in several stages. Often the artist creates the basic shape of the bead, and then adds designs (like flowers, swirls, and bumps) on the surface, almost painting them on with molten glass. Check out an example of a beautiful lampwork bead in the free-form peyote bracelet in Chapter 11.

Crystal is really just glass with lead added to it. (It's perfectly safe because the lead is stabilized in the glass.) Some crystals, often the colorless ones, have a coating applied. The most common coating is *aurora borealis, AB* for short, that gives the crystals an iridescent shine.

Metal

Metal beads add something special to jewelry creations. Back in the day, you had gold, sterling silver, silver plate, or base metal, which was colored to look like gold or silver. (And we had to walk to school uphill, both ways.) But today, even at the neighborhood craft store, you can find many different kinds of metal beads and components. Most stores have a full section of sterling silver beads and components. Some may have gold as well. And almost all have base-metal beads in a variety of finishes designed to resemble antique bronze, patina-fraught copper, or tarnished silver.

Clay

Many fun and funky clay beads are on the market today. Some jewelry artists work exclusively in this versatile medium, making colorful millefiori cane beads. These artists often create jewelry with their custom-made pieces, as well as sell beads for you to use in your own designs. Check out arts festivals and craft fairs to meet polymer clay artists and pick up some of their creations.

We dedicate a whole chapter (Chapter 12) to the joys of polymer clay. We show you how to roll your own beads and create other jewelry components.

Stringing with Wire, Threads, and Cords

If you can string a bead on it, we've probably used it in our jewelry making. If it's used in jewelry making or beading, we've probably used it to do other stuff too. (Coauthor Heather just used beading wire and crimp beads to fix a set of broken wind chimes.)

Wire hardness and size

Did you think all wire was just long and skinny? Not true. If you were to cut a piece of wire and then inspect its cross-section under a microscope, you'd see right away the differences between seemingly similar pieces of wire. That's exactly what we (or rather Fire Mountain Gems and Beads) did to create Figure 1-5. The chart can help you figure out which wire works best for your particular project. To make things easy, we use 22-gauge sterling silver wire for the bulk of the projects in this book.

A general rule of thumb: The higher the gauge number, the smaller the diameter of the wire. So an 18-gauge wire is thicker than a 26-gauge wire.

WIRE SIZE CHART

In reference to wire gauge size numbers, the larger the number, the smaller the diameter of the wire.

Round	Square	
• 26 Gauge	▪ 26 Gauge	▪ 22 Gauge
• 24 Gauge	▪ 24 Gauge	▪ 20 Gauge
• 22 Gauge	■ 22 Gauge	▪ 18 Gauge
• 21 Gauge	■ 21 Gauge	▪ 16 Gauge
• 20 Gauge	■ 20 Gauge	▬ 14 Gauge
• 18 Gauge	■ 18 Gauge	
● 16 Gauge	24-gauge wire is smaller in diameter than 18-gauge wire.	
● 14 Gauge		

Figure 1-5: Wire sizes and shapes.

Source: Fire Mountain Gems and Beads

The term *hardness* refers to how easy (or not) a piece of *precious metal* (gold-filled or sterling silver) wire is to bend into a shape. You can find wire in *dead soft* (very malleable), *half-hard* (sort of malleable), and *full-hard* (not very malleable).

Cords, threads, and other stringing materials

You can find all kinds of cording made from many different kinds of materials these days. Here are just a few of our favorites:

- **Stretchy cord:** We use this quite a bit in the early stringing chapters. You can use it to make pieces that don't need a clasp. Instead, the cord stretches to accommodate hands, heads, or whatever obstacle you need to slip the jewelry over.
- **Leather:** This all-purpose stringing material is great for knotting, or you can choose to terminate it with heavy findings designed to accommodate its girth.
- **Beading wire:** Possibly the best thing to happen to jewelry making in 2,000 years, nylon-coated stainless steel beading wire (typically just called beading wire) is an essential element for most jewelry makers. Its amazing combination of strength and flexibility makes it a great choice for almost any application. Popular brand names of beading wire include Accu-flex, Beadalon, and Soft Flex.

  If you see the term *beading wire* in a materials list, it refers to nylon-coated stainless steel wire. Wire that you can bend and it holds its shape is called simply *wire.* We know it's confusing, but we're going along with the manufacturers on this one.
- **Nymo:** Nymo is a nylon thread used in bead weaving that looks much like the thread used in sewing machines. Smaller amounts are sold on bobbin-sized spools, and it's available in a large variety of colors and thicknesses. Nymo must be *conditioned* (lightly covered in beeswax) before using it to weave.

- **Silamide:** For those bead weavers who like to skip a step, Silamide is a thread that comes already conditioned and ready to go. Smaller amounts are sold wrapped around display cards, while larger amounts are sold by the spool. It doesn't come in as many colors as Nymo, but it still has a pretty good assortment, such as purple, blue, pink, off-white, black, and brown.
- **Kevlar:** Nothing beats the strength of Kevlar (as in the material used for bullet-proof vests), and some bead weavers love this fact about this strong-yet-thin stringing medium. One drawback is that it's very limited in colors.
- **Braided thread:** Also often referred to under brand names like FireLine or Power Pro, this is a nylon cord that looks similar to good old fishing line. It's super-strong, and many bead weavers love working with it because it's available in a clear color and thus can be used with any color of beads.
- **Silk:** The traditional stringing material used for pearls for hundreds of years, silk still really can't be beat for stringing and knotting pearls and other gemstones. It comes in a large assortment of colors. You can buy it wrapped around small display cards, which includes an attached needle, or for those who need to buy in bulk, you can get silk on large spools, sans the needle.
- **Nylon:** Some bead stringers prefer using nylon beading thread over silk because you don't have as many issues with snagging or stretching because it's not a natural material. Nylon is also a good choice when you want to knot between gemstone beads.

Selecting Your Findings

Without findings, most jewelry would be little more than just a strand of beads. *Findings* — the connectors, clasps, wires, and non-bead components used in jewelry making — give handmade jewelry a professional, quality finish. They allow your pieces to take on a new dimension.

Most findings are made out of metal, but they may be embellished with beads. Metal findings bear some of the stress of wearing the piece (like the pull of gravity). For many years, you could find findings only in precious metal or base metal. Now base metals come in a variety of finishes, like antiqued brass, antiqued bronze, colored wire, weathered copper, and on and on. Experiment with designing with different finishes.

Fascinating fasteners: Clasps

A *clasp* is a jewelry component that allows you to put a piece of jewelry on, take it off, and wear it securely.

Answer two basic questions when choosing a clasp for your project:

- **How will your piece be worn?** Which is more important: a secure connection (think lobster claw or spring ring) or ease of putting on (toggle clasp or magnetic closure)?
- **What is the right metal for the job?** At a minimum, you want to coordinate the clasp with the other materials, but you can actually match the clasp to the materials. More and more, manufacturers are creating sets of findings designed to be used together.

Check out Figure 1-6 for our favorite clasp choices.

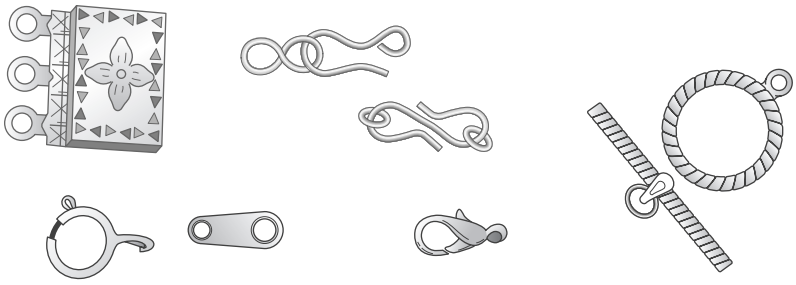

Figure 1-6: An assortment of clasps.

Choosing from a variety of connectors

A *connector* is a component that helps you connect other elements together to make your designs special. So if you want to hang a charm from a bracelet, you need some kind of connector. These jewelry components typically fall into a few general categories we identify in the following sections.

Sometimes components that we traditionally think of as clasps can serve as connectors. Many add-on jewelry components, like charms and pendants, come pre-attached to either a spring ring or lobster clasp (both shown in Figure 1-6), which allows you to quickly and easily connect them to an existing piece of jewelry.

Crimps

Crimps, shown in Figure 1-7, are excellent connectors to have in your jewelry-making stash. In a nutshell, they're designed to let you smash them around a piece of cording to stop a bead (or clasp, charm, and so on) from sliding around on the cord.

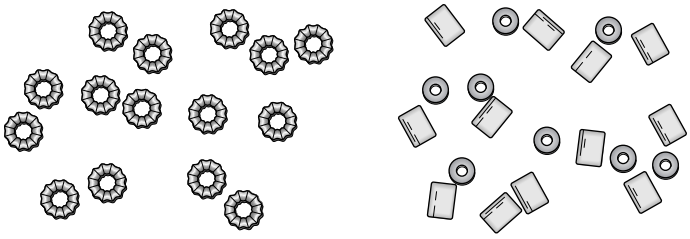

Figure 1-7: Crimp beads and tubes help you make professional jewelry quickly.

We recommend that you use a set of crimp pliers, shown in Figure 1-1, to flatten these components in the most professional manner. Check out Chapter 5, an entire chapter dedicated to all things crimped.

Jump rings

Jump rings are the consummate connectors. These little, perfectly round loops of metal aren't completely solid; they have a break or opening in them, as shown in Figure 1-8. Using pliers, you can gently twist these open and put them to 1,001 uses. You can connect them to dangles, chain, beads, or anything else with a hole in it.

If you do a lot of work with jump rings, consider investing in a set of pliers, called *jump ring pliers,* designed to help you open and close them easily without warping the nice roundness. For the projects in this book, we don't require these pliers, and instead use two pairs of smooth-tipped pliers (like chain-nose pliers, for example) to open and close them. Take a look at the appendix to see how to open and close a jump ring properly.

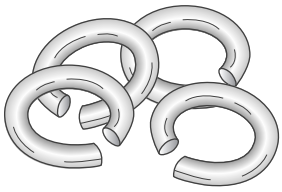

Figure 1-8: Jump rings allow you to connect clasps, dangles, and more to your jewelry creations.

Bead tips and clamshells

Ever wonder how a simple piece of thread sturdily connects to a metal clasp without an obvious, clunky knot? *Clamshells* and *bead tips,* shown in Figures 1-9a and 1-9b respectively, are the answer. These handy little connectors have a cup to hold knots and a metal hook to wrap around your favorite clasp.

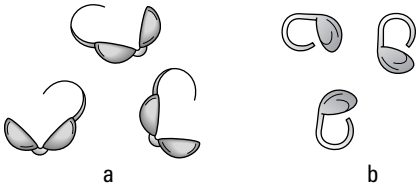

Figure 1-9: Clamshells and bead tips are great to use with knotting and crimping techniques.

To get some practice working with bead tips and clamshells, take a look at Chapter 5. We use them in several designs in that chapter.

Spacer bars

These useful findings hold multiple strands of beads together. *Spacer bars* are great for creating cuff bracelets and chokers, or any time you need similarly sized strands of beads to stick closely together. Look for spacer bars with two, three, or more holes to create multistrand masterpieces.

Designing with ear hooks and head pins

You need a few essential items to create the most beloved of all handmade jewelry items — earrings. *Ear hooks* and *ear wires* allow you to hang your creations from your ear lobes. *Head pins* and *eye pins* let you stack beads and hang them with ease.

Ear hooks and ear wires

Ear hooks and ear wires, like most metal components, are available in just about any material and color you can imagine. In general, experiment to see what you like (like anything from the assortment in Figure 1-10), and you can't go wrong.

That "anything goes" rule has one exception. With ear wires and hooks, people tend to have more problems with metal sensitivity, an allergic response to metal. They may be able to wear a loose necklace or bracelet made out of complete junk, but when metal is close to or even inserted into their bodies (like earrings), they have trouble with anything but precious metal. Precious metal is always safe, so when in doubt, go with gold-filled or sterling silver wire.

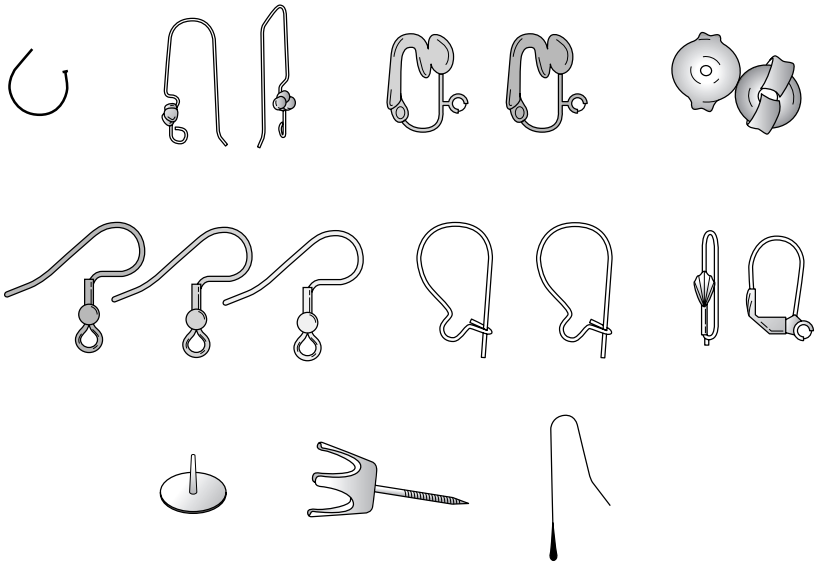

Figure 1-10: Ear hooks and ear wires are essential findings.

Chapter 10 gives you instructions for making your own ear hooks (or turn to Chapter 7 if you want to use a wire jig). Until you feel up to the task, feel free to buy ear hooks ready made at any craft or bead store.

Head pins and eye pins

These findings are terrific for making dangles of all different sizes. The most common use for head pins and eye pins is making the body of an earring, but many designers use them to create dangles for necklaces and bracelets too. They work in basically the same way, but the base of each is slightly different.

- A **head pin** is a fairly stiff wire with a base on it, designed to allow you to string on beads without them falling off. Often the base, or *head,* is flat, like the one in Figure 1-11a. Some head pins have a jewel or a detailed metal component as the base.
- An **eye pin** is similar to a head pin, but instead of ending in a head, it terminates with a small loop called an *eye* (check out Figure 1-11b). Eye pins are a great choice if you're planning to connect several dangles together. Use chain-nose pliers to gently open the loops, connect pieces together, and then close them up again.

In Chapter 2, we give you instructions for making eye loops. After you master that, you can use wire to make your own eye pins, customized to any size you need.

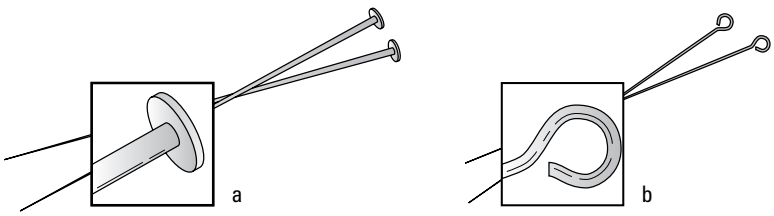

Figure 1-11: Head pins and eye pins.