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- > **Paint Your Own** Custom Floorcloth
- > **Add Curb Appeal** With Carriage Doors

easy-to-build

storage lockers

cut the clutter— for under $200!

+

BUYER'S GUIDE TO PRESSURE WASHERS

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"Need more storage in your entryway? These great-looking lockers offer seating, hooks for hanging clothes, and cubbies to corral life's clutter."

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WorkbenchMagazine.com
Get even more information about the projects and articles in this issue:

- Builder's Plans, Cutting Diagrams & Materials Lists: Entryway Organizers
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TIME IS RUNNING OUT FOR

Insulation Tax Credit

The Internal Revenue Service wants to reward you for adding insulation to your home. But you better hurry! The offer is only good until December 31, 2007.

If you've put off installing additional insulation in your home, here's a good reason to do it this year: Besides saving energy, you can also save money on your taxes.

Insulate your home, and you can qualify for a tax credit equal to 10 percent of the insulation cost, up to $500. But you have to act fast. The credit is only available for insulation installed by December 31, 2007.

Here's how to get it:

1] Purchase the insulation you need, and save the receipt that shows the price.

2] Install that insulation (or hire someone to do it) by December 31.

3] Print a "manufacturer's certification statement" (available on the manufacturer's website) for the insulation you bought, such as this one from Johns Manville *(below right)*, and fill in the information.

4] Download and complete IRS Form 5695 *(right)* and include it with your 2007 Federal Income Tax Statement.

For more information about the tax credit, visit JMHomeInsulation.com.

Photo Courtesy of John Manville

Everyone knows that rolling out extra batts of insulation in your attic can reduce your heating and cooling bills. But if you act fast, it can reduce your income tax burden, too.

In order to claim your insulation credit come tax time, you'll need two forms: A manufacturer's certification statement and an IRS Form 5695. Fill them out and include them with your tax return.

HERE'S A BRIGHT IDEA:

Recycle Fluorescent Bulbs

By now, you're probably used to recycling cans, bottles, and newspapers. It has become second nature to most of us.

But probably only the most ardent recyclers have ever thought about recycling light bulbs. If you're using compact fluorescent bulbs (the energy-efficient spiral bulbs commonly called CFLs), though, you'll want to include them in your household recycling routine, as well.

It's important to recycle CFLs for two reasons. First, like all fluorescent bulbs, they contain mercury, which can contaminate soil and groundwater if it ends up in landfills. Second, CFLs also contain plastic and electronic components that can be recycled.

To find out where to recycle your CFLs, you can contact your local waste-removal authority or the department of natural resources in your state. You can also find recycling information from online sources, such as EPA.gov and LampRecycle.org.

TAKE A PILLOW WHEN YOU

Pick a Paint Color

Picking the right paint colors is always a chore. You head to the store, stare at the sea of color chips, finally find a few that you like, and then take them home and try to match them with the furnishings in your home. At least that's the way most of us do it, according to a recent survey put together by Kilz, a manufacturer of stain-blocking primer and other painting products.

In the Kilz survey, 61 percent of respondents stated that paint color is the first thing they consider when they begin working to redo a room. But Lisa LaPorta, co-host of HGTV's *Designed to Sell* and consultant on the survey, says that approach is backward. She believes it results in a lot of wasted time (and wasted paint) trying to match furnishings and accessories in the room with the paint you've selected.

Lisa says that you should instead match the paint to what's in the room, such as a pillow, couch cushion, or window treatment that has colors you'd like to complement. Take that item to the paint store with you. Grab paint samples that coordinate well with the item, and take them home with you to see how they look in your room and in different types of light.

When you find a color you like, get a sample pot or have a quart of paint mixed. Then paint a section of wall to make sure the color matches your expectations.

The best way to make sure you choose the right paint color is to take an item with you that you want to match. Match paint samples to the item, and then take home test batches to try.

SO, JUST HOW LONG

Will a Home Last?

Buying or improving a home is a huge investment—probably among the biggest many of us will ever make. So we understandably want to make sure that the home we buy and the components that we put into it will last as long as possible.

Unfortunately, homes and many of the components that are used to build and outfit them don't come with life-expectancy ratings, so it's tough to gauge how long they'll last. To solve the problem, the National Association of Home Builders (NAHB) recently teamed up with Bank of America to conduct a study aimed at determining the life expectancy of homes and their components.

The study concludes that a few important variables can greatly affect longevity. Those include the quality of products used, quality of installation, intensity of use, and maintenance.

But the study also concedes that some home components get replaced long before they reach the end of their life expectancy. Those items often simply become obsolete due to changing needs, style trends, or advances in technology.

The good news is that much of what you put into your home can last for a long time. The *Chart* at left gives a few examples of what the life-expectancy study found.

10+ YEARS	Washing Machine *(10 years)* Termite Proofing *(12 years)* Refrigerator *(13 years)* Kitchen Faucet *(15 years)* Exterior Paint *(15 years)* Gas Furnace *(18 years)*
20+ YEARS	Wood Deck *(20 years)* Linoleum Flooring *(25 years)* Aluminum Downspouts *(30 years)* Wood Windows *(35 years)* Thermostat *(35 years)* Electric Radiant Heater *(40 years)*
50+ YEARS	Acrylic Kitchen Sink *(50 years)* Stucco Siding *(50-100 years)* Tile Floor *(75-100 years)* Cast-iron Pipe *(100 years)* Wood Floors *(100+ years)* Insulation *(Lifetime)* Gypsum Drywall *(Lifetime)*

LOOK AT SIZE & TYPE TO DETERMINE

Best Ladder for the Job

Q: I need an extension ladder for painting my house, but I can't figure out what length to buy, or whether to get aluminum or fiberglass. Can you help me decide what ladder is right for me?

Jim Martin
Roanoke, VA

A: Selecting an extension ladder takes more than just measuring how high you need to reach. To get the right ladder, you need to determine the ladder length needed, decide on the duty rating, and choose the ladder material.

Length—An extension ladder needs to be longer than either the highest point you need to reach or the highest support point *(Illustrations, below)*. There are two reasons why.

First, the ladder sections have to overlap by several feet to keep the ladder rigid. Second, you shouldn't stand above the fourth rung from the top of the ladder, which means your reach will be only slightly higher than the top of the ladder.

Duty Rating—Next, you'll need to determine the duty rating you'll require. This specifies how much total weight the ladder can handle. Thankfully, all ladders adhere to the same standard. And the color of fiberglass ladders corresponds with their duty ratings *(Chart, below)*, making them easy to identify.

Material—If you compare ladders of equal length and duty rating, you'll find that aluminum ladders are usually less expensive. And aluminum is lighter, which makes the ladder easier to carry and set up. But aluminum ladders are conductive, so they shouldn't be used near electrical wires.

Fiberglass ladders cost more and weigh more, but are stiffer and have nonconductive rails, which makes them safer around electrical wires.

I actually own two ladders: an aluminum Type III for light chores and a fiberglass Type IA for big tasks. But if I owned just one, it would be a fiberglass Type I.

A ladder label lists its duty rating, length, and maximum reach *(above)*. To determine the length and reach needed, calculate the height of the ladder support points *(illustrations, below)*.

DUTY RATINGS DEMYSTIFIED

Type III, Light Duty (200-lb. load capacity): Light-duty household work
Type II, Medium Duty (225-lb. load capacity): Painting and "handyman" use around the house
Type I, Heavy Duty (250-lb. load capacity): Heavy household or light commercial use
Type IA, Extra-Heavy Duty (300-lb. load capacity): Frequent heavy commercial use
Type IAA, Special Duty (375-lb. load capacity): Extreme-duty commercial use
NOTE: Load capacity includes your weight plus weight of tools and supplies

GOT QUESTIONS? WE HAVE ANSWERS!

Include your full name, address, and daytime phone number. You'll receive a free one-year subscription to ***Workbench*** *(or a one-year extension to your current subscription) if we publish your question.*

HOW TO SEND YOUR QUESTIONS:

Email: Ask@workbenchmag.com
Forums: forums.woodnet.net
Mail: Ask Workbench, 2200 Grand Ave., Des Moines, IA 50312

When sealing up the exterior of your home, don't waste your time filling large gaps with caulk. Insert foam backer rod first to fill most of the void, and then add caulk.

FILL VOIDS WITH BACKER ROD TO

Seal Exterior Gaps

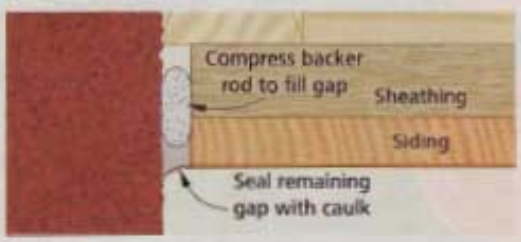
Q: I'm caulking gaps around my house to get it sealed up before winter and have found a few gaps that are pretty big. Where the siding meets the brick chimney, for example, there's a gap about ⅜" wide and an inch deep. Do I just fill it with caulk, or is there a better way to seal this gap?

Josh Burke
Maryville, GA

A: Don't try to caulk a gap more than ⅜" wide by ⅜" deep. If you fill a larger gap with caulk, the caulk will shrink, and then split or pull away from one side of the opening.

Instead, fill most of the gap with foam backer rod. It's available in several diameters, so you should be able to find one just larger than the width of the gap.

To use backer rod, start off by simply cutting the length you need from the roll. Then press the rod into the gap—a wide putty knife works great—so it sits about ¼" below the surface *(Photo, above)*. If the gap is deep, you can double up the backer rod to fill more space. Then apply caulk over the backer rod as usual to seal the gap *(Illustration)*.



TRIMHEAD STAYS OUT OF SIGHT FOR

Hidden Screws

Q: I noticed several of your projects lately have been assembled using "trimhead" screws. How are they different from regular flathead woodscrews?

Mark Johnson
Des Moines, IA

A: The trimhead screw was designed for installing trim, molding, and cabinets. It offers more holding power than a finish nail but installs almost as inconspicuously.

As the *Illustration* at left shows, the diameter of the head on a trimhead screw is much smaller—only slightly larger than a finish nail. That makes these screws ideal for installing trim and molding because the small hole can be filled with putty, rather than having to be filled with a wood plug.

Also, the shank on a trimhead screw is straight and has a small diameter, rather than being tapered like a woodscrew. Plus the tip is self-tapping. That helps the screw drive easily, hold well, and resist stripping.

WHAT FINISH IS SAFE FOR A BABY CRIB?

The truth is that any clear finish, whether polyurethane, lacquer, or water-based, will be safe once it cures completely.

But curing is different than drying. All of the finishes described above will dry to the touch in a day or less. But it will take anywhere from a few days to a few weeks before the solvents, metallic driers, and other volatile organic chemicals (VOCs) in the finish have evaporated. Once that happens, the finish is fully cured.

As long as you get the crib finished at least 30 days before it's needed, you'll be fine. If you want to double-check that the finish is cured, simply put your nose right against the crib. If no solvent smell remains, then the finish is cured and safe for baby.

QUICK FIX RESTORES A SMOOTHLY

Flowing Faucet

Q: The flow of water from my kitchen sink is uneven. Could there be a clog, or is there a problem that needs repaired?

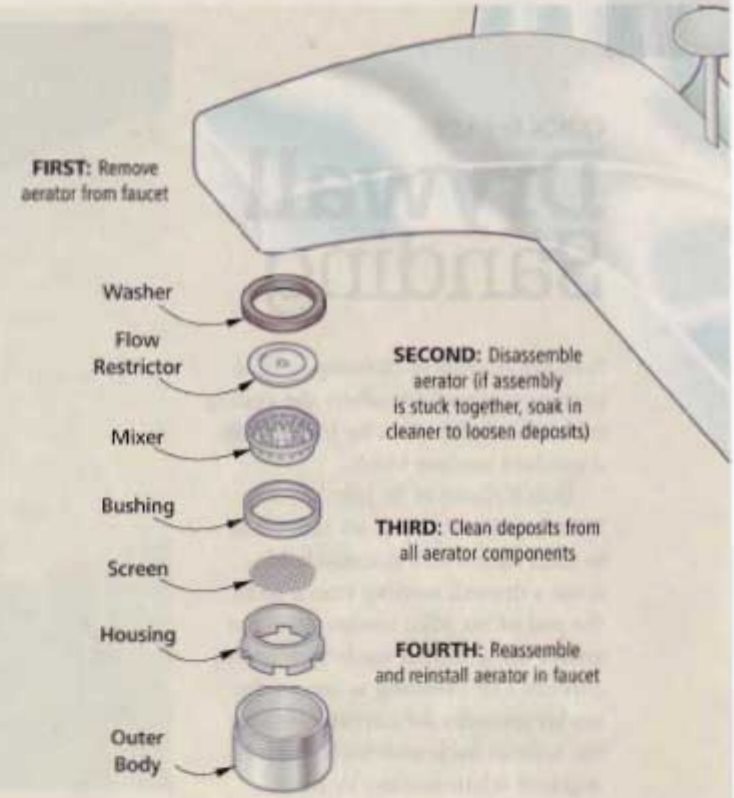
Lori Hendricks
Milwaukee, WI

A: If the faucet works fine otherwise, then the aerator has simply clogged with sediment *(Illustration, right).*

To unclog it, first unscrew the body of the aerator. You may need to use pliers to remove it. But first, wrap masking tape around the body to prevent marring the finish. When you remove the aerator, note how the parts fit together.

Now soak the aerator parts and housing in a cleaner such as Lime-A-Way or CLR to remove the deposits. If necessary, scrub the parts with an old toothbrush, and use a toothpick to clean out the holes. Then reassemble the aerator.

Before you reinstall the aerator, turn the faucet on for a few seconds to flush out deposits. Then shut the faucet off, and reinstall the aerator. You may need to use pliers to tighten the body. But don't get overzealous — it just needs to be snug.



QUICK & EASY

Drywall Sanding

Sanding drywall joint compound in corners—especially where the ceiling meets the walls—can be tricky with a standard sanding block.

Bob Kelland of St. John's, Newfoundland, found an easier way to sand these corners smooth. He trims a drywall sanding screen to fit the pad of his palm sander, turns the sander on, and then sands up into the corners. The vibrating action of the sander smooths the corners without the tedious back-and-forth motion required when sanding by hand.

TEE OFF ON STRIPPED HOLES

When a screw hole gets stripped out, John Karek of Toronto, Ontario, turns to a tee. He squeezes glue in the hole, inserts a golf tee, and trims it flush when the glue dries. Then he just re-drills the hole and drives in the screw.

» **Straight Shooting.** The heads of finish nails are so small that it's easy to load a clip in the nailer upside down. To prevent that, Serge Duclos of Delson, Quebec, marks arrows that point to the tips.

» **Clean Living.** Greg Jones of Bellevue, Washington, got tired of taking off his muddy boots every time he came in from working in the yard or garden, so he keeps some plastic bags by the door. By slipping the bags over his boots, he keeps the house clean without the hassle of taking his boots off.

BEST TIP WINNER!

For his tip, Bob Kelland wins an HTC Port-A-Mate PM7000 Miter Saw Workcenter—a $220 value!

SEND US YOUR GREAT TIPS

Mail: Workbench DIY Tips
2200 Grand Ave.
Des Moines, IA 50312

Online: WorkbenchMagazine.com

THE MANY HANDY USES OF A

Coat Hanger

Mike Schott of Ankeny, Iowa, made a versatile "multi-tool" out of an old metal coat hanger. He bends a small loop in one end in order to fish electrical wire through a wall *(Photo)*. Or he places double-sided tape on the loop and uses the hanger to pick up small parts that fall into hard-to-reach spaces.

EASY INSULATION CUTTING

To cut thick insulation, Tom Robinson of Carlisle, Pennsylvania, uses a framing square to compress the insulation on the desired cutline and then runs a utility knife along the edge of the square.

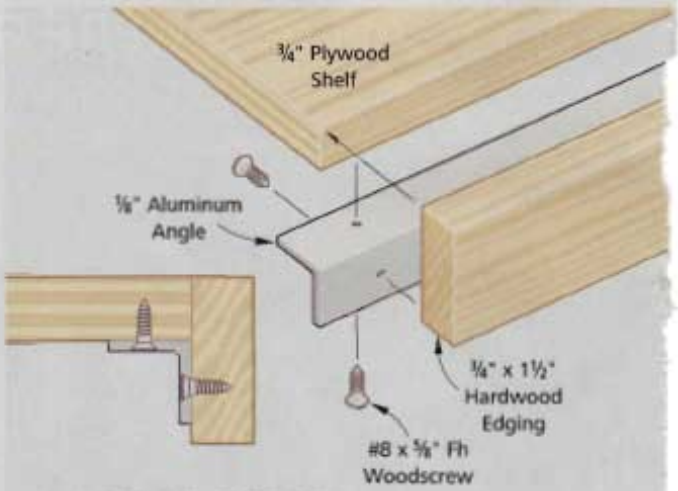
BOXES SQUARED

Serge Duclos of Delson, Quebec, builds square boxes by using a framing square. He just clamps the square to the worksurface and aligns the parts with the square as he glues and clamps them together.

PLIERS PRY

Paint Lid

Using a screwdriver to open a paint can often deforms the lid, preventing a good seal. Bob Kelland of St. John's, Newfoundland, uses a needle-nose pliers instead. It provides two points of contact with the lid to prevent dents.



BEEFED-UP SHELVES

A strip of solid-wood edging can strengthen a plywood or MDF shelf. But if the shelf is intended to hold something heavy, Karl Downey of Dayton, Ohio, cuts a strip of aluminum angle to fit under the shelf, drills countersunk pilot holes, and then mounts the angle with screws.

TIME-SAVING

Masking

When you have to paint something small and intricate—like the muntins on this glass window—you can often spend more time taping off the areas you *don't* want to paint than you spend actually painting the areas you do.

Brian Mayer of Omaha, Nebraska, came up with a faster way to tape off these areas. Instead of carefully aligning the tape with the edge of the muntins where they meet the glass, he lets the tape overlap the muntins slightly. Then he comes back with an Xacto knife to trim the tape precisely along the glass.

This trick can work anywhere. Just be careful not to cut into the surrounding material with the Xacto knife.

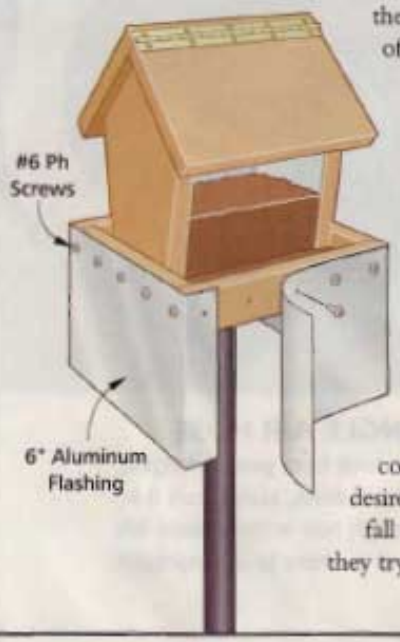
NO-TANGLE AIR HOSE

To keep air hose from getting tangled, Kyle Schulte of Boise, Idaho, coils it in a plastic pot. A hole in the bottom lets him connect the hose to a compressor.

SQUIRREL-PROOF

Bird Feeder

No matter where you mount your bird feeder, crafty squirrels always seem to find a way to get in and eat the seeds. Bud Erickson of Urbandale, Iowa, put a stop to scavenging squirrels for good. He just drilled pilot holes in aluminum flashing, and then used panhead screws to secure it around the base of the feeder, creating a lip that the squirrels can't climb over. (**Note:** You could also use copper if desired.) Now the squirrels fall to the ground when they try to climb the feeder.



SIMPLE, INEXPENSIVE DECK SPACERS

If you have a deck project on your horizon, take a tip from John Alexander of Ravensdale, Washington. He found a simple way to guarantee identical spacing between deck boards. He picks up paint stir sticks at the home center. Then, he drills holes in each stick and inserts a nail to keep it from falling through the deck.

MAGNETIC HARDWARE HOLDER

It's always frustrating to lose small pieces of hardware when you're assembling a project. To prevent that, Serge Duclos of Delson, Quebec, recommends investing in one of these flexible magnets *(left)*. Available at auto parts stores, the magnet keeps all your hardware in one place as you work.

GUIDE TO HOME

WINTERIZING

- ✓ **Get an Energy Audit.** Most utility companies will perform an energy audit free of charge every few years to help you determine how to make your home more energy-efficient. Some even offer rebates for the energy-saving changes you make.

- ✓ **Look for Leaks.** In addition to the audit, check for drafts by shining a light around doors and having someone check on the other side for light. (You shouldn't see any.) Also, feel for cold spots with your hand. Another method is to place a dollar bill between the door and jamb or the window sash and sill. The bill should not slide out easily.

- ✓ **Caulk & Strip.** Now that you know where the leaks are, replace weatherstripping around doors and windows. Also, check pipes, vents, or other fixtures that pass through an exterior wall, and seal those with exterior-rated caulk.

- ✓ **Add Insulation.** Ask your local home center staff how much insulation is recommended in the attic in your area, and then make sure you have enough. If not, roll out or blow in more.

- ✓ **Fire Up the Furnace.** To get your furnace ready for winter, call a local heating professional for an inspection and cleaning. Also change the furnace filter, and vacuum ducts and vents.

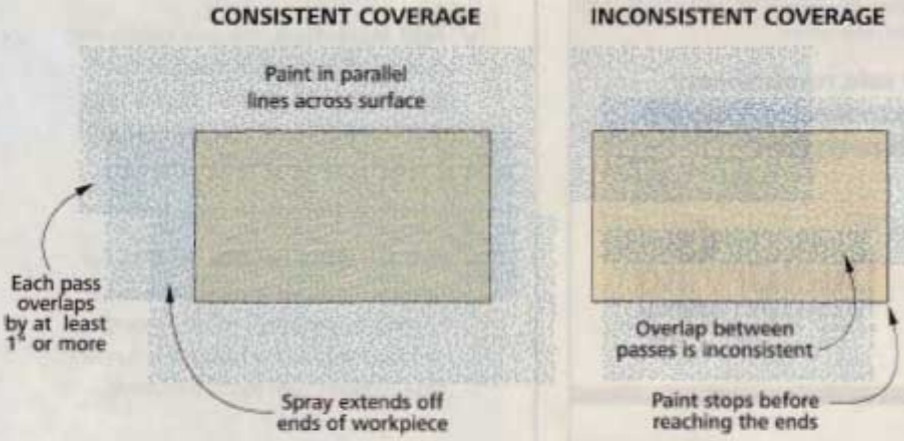
15 TOP TIPS FOR

Spray Painting

It's easy to spray paint from a can. Just point and shoot. But it takes more to get a perfectly painted finish. Tune in to these 15 tips, and you'll be painting like a pro.

Runs, drips, and uneven paint coverage — these are the signs of a less-than-perfect spray-can paint finish. And as anyone knows who has had to deal with these irregularities, it's nearly impossible to fix them once the paint dries.

The obvious solution is to apply the paint correctly from the start. Of course, the directions on the can give you a few basic guidelines on how to do that. But to end up with a perfectly painted finish (one where you don't have to hide those telltale runs), try out the following tips:



1 Shake, Shake, Shake. The directions on a spray can say to shake it for a minute after the mixing ball releases. The longer you shake the can, however, the finer the spray mist, and the smoother the finish. I always shake it an extra minute for good measure. It's also a good idea to give it a few shakes now and then as you're painting.

2 Use an Auxiliary Handle. Pick up an auxiliary handle for about $3 to make spraying easier *(Photo, above)*. The handle snaps onto the top of the spray can, and it puts your hand in a more natural position, resulting in a better finish. Plus, the trigger is easy to squeeze, so you won't end up with finger fatigue (or a painted index finger).

3 Brush Sealer on End Grain. When spraying plywood or MDF, seal the edges with sanding sealer

To ensure even coverage on plywood edges, brush on two coats of sanding sealer. Sand the edge with 400-grit sandpaper, and wipe off dust after each coat dries.

Even with sanding sealer, a single coat each of primer and paint color allow the grain and the edge plies on these scraps of plywood to show through *(left)*. Multiple coats of primer and paint create a smooth, even finish *(right)*.

before painting *(Photo, above)*. The reason is simple — without this sealer, paint will soak into the porous edges, making full coverage nearly impossible *(Photos, above right)*. I recommend two sealer coats, with a light sanding after each coat dries.

4 Prime Before Painting. A spray can delivers an extremely fine mist of paint, so several coats are required for full coverage. To "build" the finish quicker, spray on a primer coat before the color coat (even if the directions on the can say it isn't necessary). For light paint colors, select a white primer, and for darker colors, use gray.

5 If It's Wood, Prime It Again. Projects made of wood, plywood, or MDF soak up paint like a sponge. To get good coverage, just apply additional coats — three to four coats each of primer *and* paint is a good rule of thumb. As you can see in the *Photo* above, the difference between that and a single coat is significant.

6 Apply Light Coats. Regardless of the material being painted, it's always best to apply several light coats rather than one heavy coat. Spray paint dries quickly, which means you can apply additional coats within a few minutes.

7 Use A Continuous Motion. In addition to spraying light coats, always keep the can moving at a consistent speed as you spray, without stopping midway through a pass. Slowing down or stopping is a surefire way to cause runs or drips.

8 Get Closer Than You Think. Another way to ensure smooth coverage is to hold the can about 6" to 8" away from the surface. Get any further away, and the paint may actually dry in the air, leaving a rough surface.

9 Spray Off the Edges. As you approach the edges of a project, spray completely off those edges, as shown in the *Illustrations* on page 26. This keeps the paint coverage at the edges consistent with the coverage in the field of the project. Place Kraft paper, cardboard, or newspaper under your project to catch the overspray.

10 Exaggerate Overlap. Another way to ensure complete coverage is to overlap each coat of paint by roughly 1" *(Illustrations, page 26)*.

11 Make Perpendicular Passes. A good way to avoid inconsistencies as you spray on additional coats of paint is to use a "crosshatch" pattern. In other words, spray the second coat perpendicular to the first.

12 Keep Paint Thinner on Hand. If you do experience a run or drip, the best solution is to wipe that area down with paint thinner, let it dry, and re-spray it. It only takes a few extra seconds, and it ensures a smooth, even finish.

13 Check it with a Worklight. In a poorly lit work area, it can be difficult to tell if your paint is smooth and even. By shining a worklight over the surface at a low angle, you can easily detect any inconsistencies *(Photo, below)*.

14 Sand between "Stages." You don't need to sand between every coat. But it is a good idea to sand between each "stage," such as between the primer and the color coat. Let the paint dry thoroughly, sand lightly with 400-grit sandpaper, and then remove dust before applying the coats for the next stage.

15 Consider a Clear Coat. For added protection, you may want to consider spraying on a clear coat. Both lacquer and polyurethane are available in spray-on finishes in satin, semi-gloss, and gloss sheens.

To ensure even paint coverage, move a worklight over the piece at a low angle to check for runs, drips, or any other inconsistencies.

Whether it's a durable outdoor finish, a coating for specialty materials, or a decorative faux finish, chances are good there's a spray paint for the project.

5 COOL NEW SPRAY PAINT OPTIONS

Think of something you'd like to paint—or a unique texture you'd like to apply to that "something"—and chances are there's a spray paint for the job. Here's a sampling of five cool new spray paints.

Water-Based Paint—One recent advance in spray-painting technology is water-based spray paint *(Photo, left)*. It sprays on just as smoothly and dries just as quickly as standard spray paint. But the advantage of water-based paint is the low odor and lack of fumes compared with other spray paints. Plus, it's easy to clean up with soap and water when you're done working. As for the finish, it's just as durable as a solvent-based spray paint once it dries.

A "Hammered" Finish—Though many textured spray paints are available, one of the most interesting is this "hammered" finish *(Photo, below)*. The finish looks like thousands of tiny hammer marks have been made in the glossy metallic finish of the paint. It creates a particularly attractive look on metal items such as buckets and toolboxes. Plus, it's more durable than conventional spray paint, making it great for preventing rust or for exterior use.

Spray-on Stone—This unique product is really more like a spray texture than a spray paint, but the stone look it creates is one of a kind *(Photo, below)*. It uses thick, multi-colored paint particles to produce the look of natural stone on things like clay pots and other decorative items.

One thing to be aware of about this stone spray paint is that it takes longer to dry than other spray products (about 3 to 4 hours).

Crackled Coat—Yet another popular textured finish is this "crackle" finish from Rust-Oleum *(Photo, above right)*. It actually comes in a kit with two spray cans: a metallic base coat that goes on first, and a colored crackle coat that goes on when the base coat is dry (in about 30 minutes).

As you spray on this top "crackle" coat, it reacts with the base coat, and the texture begins to appear. You can create larger cracks in the surface by immediately making another pass with the crackle coat.

Paint for Plastics—In the past, spray paint would not bond and dry properly on plastic. But special formulations from both Rust-Oleum and Krylon form a strong bond with plastic and dry evenly in 15 minutes. These specialty paints allow you to completely transform dull or faded plastic patio furniture, toys, and any other plastic parts around your house that need a dash of color *(Photo, below)*.

For more information on any of the spray paint products mentioned here, visit Rust-Oleum's website at Rustoleum.com, or Krylon's at Krylon.com.

IMPROVE YOUR HOME'S CURB APPEAL WITH A

Carriage-Style Garage Door

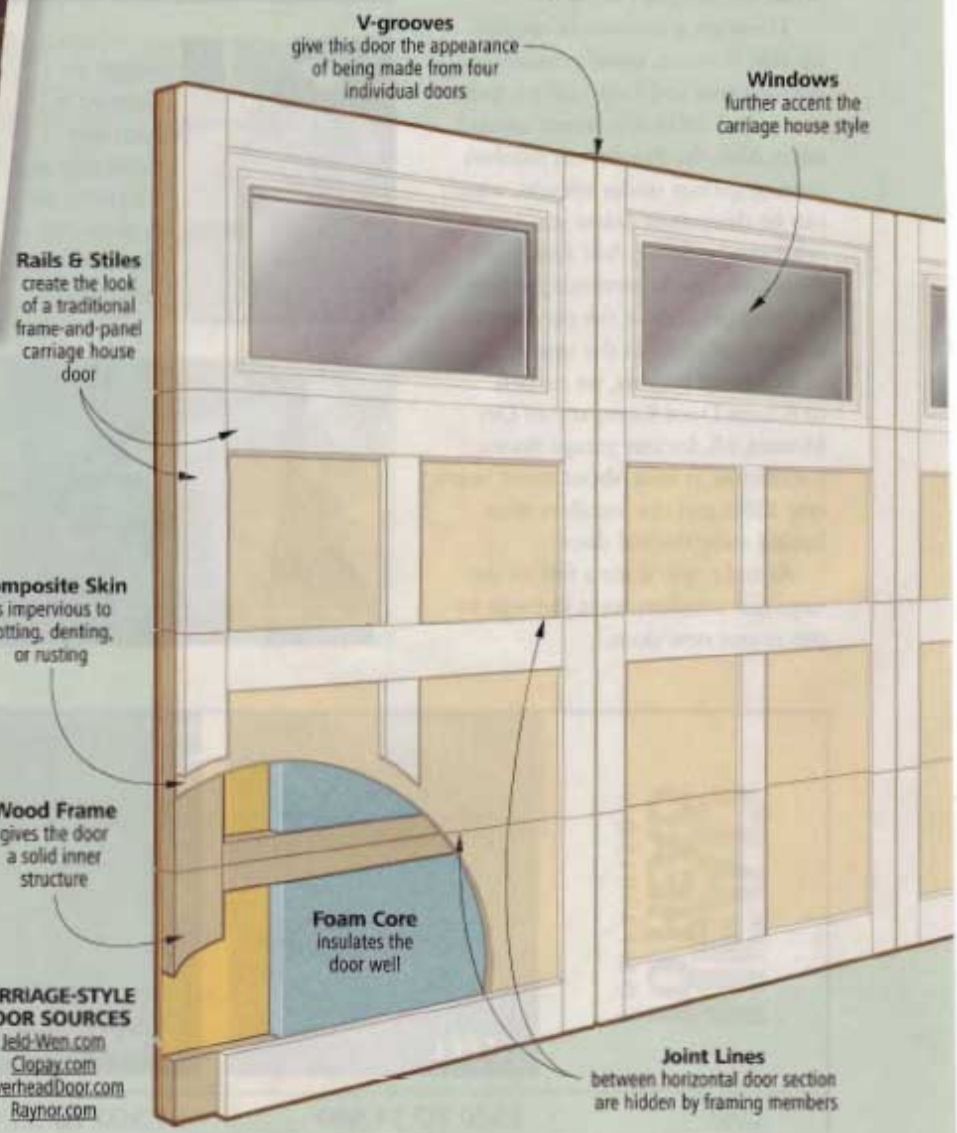
A garage door typically occupies 30 percent or more of the front face of a home. Any way you look at it, that makes the garage door a major contributor—either positively or negatively—to the home's curb appeal.

Desire to make this facade appealing has driven the growing popularity of carriage-style garage doors, a new stylized breed that several door manufacturers are now offering. From the street, these doors appear to swing open like a traditional carriage house door. But when you open and close the door, it's made up of segmented horizontal panels that roll up and down on a track.

The transformation these doors bring is dramatic, as you can clearly see when you compare the great-looking door above to the plain slab in the *Before Photo*. Now this highly visible facade makes a statement that helps define the home's style, rather than detract from it.

From Roll-up to Swing-out—How do manufacturers make a roll-up garage door look like a swing-out carriage door? To see how this is accomplished, look at the *Illustration* on page 31. Note that on this door, each segmented panel is made up of a rigid frame surrounding a foam core. Panels with wood "grain" are applied over

CARRIAGE-STYLE DOOR ANATOMY



CARRIAGE-STYLE DOOR SOURCES
Jeld-Wen.com
Clopay.com
OverheadDoor.com
Raynor.com

this core, and then rails (horizontal members) and stiles (vertical members) get applied to these wood-grain panels.

To trick the eye, the rails and stiles are strategically placed to draw attention away from the horizontal joint lines between the panels. On this particular door from Jeld-Wen's Carriage House collection, vertical V-grooves in the stiles create the appearance of four individual doors.

The door shown here represents just one of many styles offered by garage door manufacturers, by the way *(Sources, above)*. You can see more in the photos on page 32. That variety makes it easy to match most any architectural style.

Hardware Optional—Although we chose not to add hardware to this door, it can be used to carry the swing-open illusion even further. These hinges door pulls, and faux latches offer a great way to further personalize the style of the door.

Door Materials—Styles aside, these new carriage-style doors also are available in a range of materials, including steel, composite, and wood. Check out the chart on page 32 for the relative advantages and disadvantages of each type of material, as well as a glimpse at how the door gets installed.

A GLIMPSE AT THE INSTALL

Most garage door manufacturers recommend leaving the details of the installation in the hands of a professional installer, and we agree.

There are a number of reasons for this. For one, some garage door components and hardware are quite heavy and difficult to move around safely. Also, the installation involves putting springs under tension, which can be dangerous unless you know what you're doing. And finally, the door could rack, preventing it from opening properly if the parts aren't aligned correctly in the opening.

For these reasons, we turned to Adams Door Company of Des Moines, IA, for our garage door installation. It took about three hours, cost $250, and the installers even hauled away the old door.

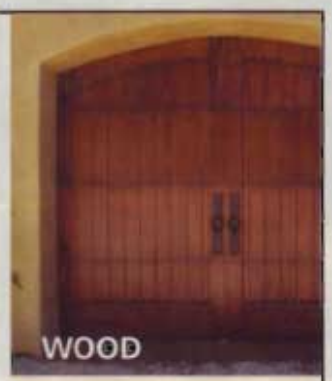
At right, you'll see a few of the steps our installers went through to put in our new door.

After leveling the first door panel *(left)*, the other panels get stacked on and temporarily tacked in place *(right)*.

Hinges are fastened to each door panel after all the panels are in place *(left)*. Then the track gets installed.

With the track in place *(left)*, the installers tensioned the spring *(right)*, and made final adjustments to the door.

HEAD TO HEAD COMPAIRISON



	STEEL	COMPOSITE	WOOD
COST:	$500 TO $1,500	$1,500 TO $3,000	$2,000 TO $10,000
APPEARANCE:	Details stamped into surface look very convincing from the curb. Always painted.	Applied rails and stiles look like wood, even on close inspection. Can be painted or stained.	The most authentic carriage house appearance. Usually stained and finished.
ENERGY EFFICIENCY:	**Good** (R-values range from R-4 to R-12)	**Excellent** (R-values range from R-6 to R-12)	**Fair** (Usually R-values don't exceed R-6)
DURABILITY:	**Good** (Can dent or rust)	**Excellent** (Won't rot, dent, rust or delaminate)	**Fair** (Can warp, crack, or rot if neglected)
MAINTENANCE:	**Low** (Requires occasional painting)	**Low** (Requires occasional painting)	**High** (Requires a fresh coat of finish every few years)

SIMPLE TIPS FOR

Cutting Sheet Goods

The biggest challenge when working with heavy sheet goods like plywood and MDF is cutting them. These tips and tricks make it easy.

Materials such as MDF, particleboard, and plywood—commonly known as "sheet goods" because they're produced in large 4-ft. x 8-ft. sheets—have become the materials of choice for building cabinets and built-ins. (The storage lockers on page 42, for example, are built using MDF and plywood.) Sheet goods make sense because they allow you to create large panels that are flat and stable, and they greatly simplify project joinery and assembly.

For all their advantages, though, sheet goods have a big drawback. Their large size makes the sheets heavy and awkward to handle: A sheet of ¾"-thick MDF weighs about 100 pounds. So moving sheets around and cutting them up can be challenging.

But you can get great results without a table saw or a fancy workshop, and without having to heft the sheets around. All you need are a circular saw, a saw guide, a jig saw, and a few measuring and marking tools, along with these simple tricks and tips.

CREATE A CUTTING BOARD

Rather than cutting sheets on sawhorses, simply lay a sheet of 2" thick foam insulation on the ground, and then lay the sheet to be cut onto the foam. The foam supports the sheet and the cutoff as you make your cuts (Photo, *right*). Set the saw so the blade cuts about ¼" into the foam. You can reuse the foam many times.

USE AN EDGE GUIDE

The easiest way to keep a circular saw tracking straight is to use an edge guide (Photo, *right*). We bought this one, made by Swanson Tool Company, at Lowe's for less than $20. It has two 50"-long sections and comes with clamps. You can use each section alone when cutting across a sheet, or join them to cut a sheet lengthwise.

TAG TEAM CURVES

If you need to make a cut that starts straight and then curves (such as when shaping the sides of the storage lockers), use both a circular saw and jig saw. First, make the straight cut with the circular saw, stopping the saw before the curve (Photo, *far left*). Let the saw stop, and then lift it off the sheet. Now lower the jig saw blade into the cut, and complete the curved portion (Photo, *near left*).

GET THE CORRECT GEAR

Along with a straightedge, you'll need several simple tools to ensure precise layouts and smooth cuts in sheet goods. A tape measure, framing square, compass, and a pencil handle the layout. To make sure the cut is smooth, use a blade made for cutting sheet goods. The 40-tooth carbide-tipped blade shown hereworks great, yet sells for less than $20.

PAINT POWER >>>

Art you can walk on? Sounds crazy, but that's just what you'll get with a painted canvas floorcloth. Following an old tradition and using today's modern materials, floorcloths are as practical as they are fun and easy to paint. Using acrylic paints, a few brushes, and a little imagination, you can create unique, durable, and functional art for your floor.

Fancy Floorcloths

How do you protect your beautiful hardwood floor from grime and scuffs? Paint a colorful work of art on a durable canvas floorcloth, of course!

Having a stylish, custom work of art underfoot isn't the only reason to consider making a floorcloth. Unlike woven rugs, canvas floorcloths are easy to clean with soap and water. And they're extremely durable, as well.

Those attributes are a result of the material a floorcloth is made of — canvas. Although you could use off-the-shelf canvas, preparing the material to paint on can be a fussy, time-consuming process. So I recommend using canvas made specifically for floorcloths. It's made from the heaviest weight canvas, and it's primed on both sides. A second primer coat on one side creates a superior paintable surface. You can buy primed and ready-to-paint floorcloth canvas in a roll from online art materials suppliers *(see Supplies)*.

After purchasing your material, you'll need to find a large worksurface where you can work on your floorcloth and let it lie flat for several days as you apply layers of paint. I just set a sheet of plywood on a pair of sawhorses for that.

Sizing the Canvas—To get started, you'll need to decide what size your finished floorcloth will be. Add 4" to the length and width of those dimensions, and then cut your canvas to that size. The extra material will get folded under when you hem the edges of the floorcloth.

Now you're ready to start painting the floorcloth. Lay the canvas, double-primed side up, on your worksurface. You can tell which is the double-primed side because it's whiter and smoother than the single-primed side.

To seal the canvas and get it ready for subsequent coats of paint, you'll need to apply a basecoat of color to the entire canvas. I used gray for the basecoat on this floorcloth because it's the predominant color of the finished cloth. To apply the basecoat, use a 2"-wide trim brush and paint the entire surface. Brush the paint in all directions, scrubbing it into the canvas weave. If the canvas bubbles or warps while it is wet, don't worry. It will flatten out once it's dry.

Hem the Edges—The next step is to hem the canvas in order to create a finished look around the edges of the floorcloth. To do that, flip the canvas over, and then measure and mark 2" from each edge all the way around the perimeter *(Illustration, page 41)*. At the corners, measure and mark 4" from each corner, draw a diagonal line across the corner from mark to mark, and trim the canvas as shown in *Fig. 1*.

To complete the hem, crease the canvas along the layout lines. Then apply double-sided carpet tape, and press the hem in place *(Figs. 2 and 3)*.

SUPPLIES

Paint:
Sherwin-Williams Satin Latex Link Gray (#6200), Well-Bred Brown (#7027), Mannered Gold (#6130), Navajo White (#6126), Aloof Gray (#6197), Illusions Glazing Medium (SherwinWilliams.com)

Other Supplies:
Tara Floorcloth Canvas, (DickBlick.com), Straightedge, Chalk, Scissors, Carpet Tape, 2" Trim Brush, #10 Round Brush, Painter's Tape, Wall Magic Double-Roller Kit (HomeDepot.com), Squeegee, Xacto Knife, Water-based Varnish, Paste Wax

// HEM THE EDGES //

1] To prevent the canvas from bunching at the corners, make a straight trim cut followed by a 45° cut *(shown)*.

2] Apply double-sided carpet tape to one edge of the floorcloth at a time and press down firmly along its entire length.

3] Crease the hem along one side at a time, then firmly press along the edges for good contact with the carpet tape.

// LAY OUT & PAINT A MOTTLED DESIGN //

4] Use a metal rule and chalk to lay out the center rectangle, borders, and corner blocks on the floorcloth.

5] Use a double roller to apply one light gray and one dark gray color on the center and corner floorcloth sections.

6] Before painting the border sections, seal along the edge of the tape by applying dark gray paint.

Lay Out the Design—Once the canvas is hemmed, the next step is to lay out the basic design. This floorcloth design features a large center rectangle, surrounded by long, narrow rectangles and punctuated with smaller corner blocks *(Illustration, page 41)*.

Design Overview—Although it has several design elements, this floorcloth is easy to paint. I employed two background techniques along with two detail motifs, which produced a simple but dynamic contemporary design. One technique results in a mottled effect for the center and corner blocks, and the second technique creates a linear effect as a background for the detail motifs.

Mottling Magic—The center rectangle is painted first. I wanted a two-tone gray mottled effect for this area and also for the corner blocks. That effect is accomplished using a Wall Magic double-roller kit.

Start by using low-tack painter's tape to mask off that area. Then pour two paint colors into the divided paint pan provided in the kit (light and dark gray for this floorcloth). Now load the double roller, and apply the paint using overlapping W-shaped strokes *(Fig. 5)*. Don't over-work the paint; simply let it create a random effect. Remove the tape, and let the area dry. Then tape and paint the corner blocks the same way.

Creative Combing—The decorative gold borders are painted next. Here, I used a combed effect. The borders will get basecoated with a light ivory paint to begin the process.

To avoid having the ivory color run under the painter's tape, seal the edges of the tape with the initial basecoat color (dark gray) to form a barrier *(Fig. 6)*. Now apply the ivory basecoat, and let it dry.

The combed effect is created with glaze and a "comb" that's made from a squeegee *(Photo, above right)*.

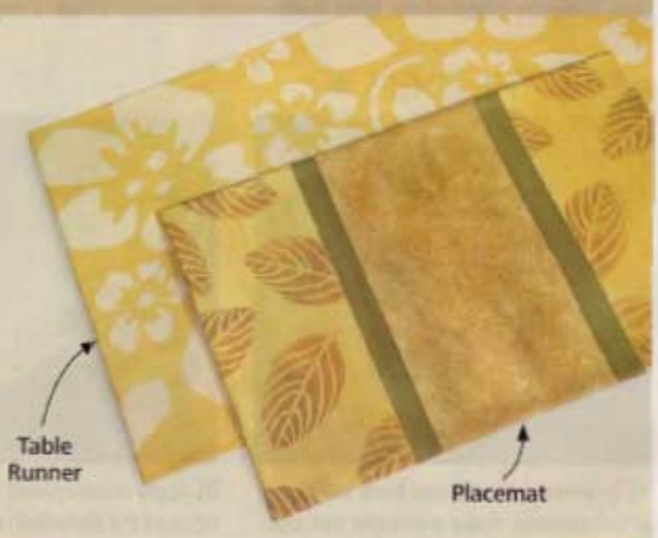
First, you'll need to make a glaze mixture from four parts glaze medium and one part gold paint. Next, using

QUICK & EASY DECORATIVE ACCENTS

Before throwing out those leftover scraps of floorcloth canvas, you may want to explore two more ideas using the same painting techniques: a table runner and a placemat.

For the table runner, basecoat the canvas with ivory first, and then brush on a gold glaze using long, horizontal strokes. After that, use a stencil and ivory paint to add an oversized floral motif.

To make the placemat, first basecoat the canvas with ivory. Next, glaze the outside sections with gold just like the table runner. Then, stencil on leaves using dark gold accented with green. Now, sponge the inner section with ivory and gold. Finally, tape off and paint the colored bands between sections with light green followed up with a dark green glaze.



Create a homemade faux comb by cutting V-shaped teeth along the length of a 10"-wide squeegee blade.

long, straight strokes, brush on a thin coat of glaze *(Fig. 7)*. Now lay a straightedge along one long edge, hold one end of the squeegee comb against the straightedge, and pull a continuous stroke from one end of the rectangle to the other *(Fig. 8)*. Let it dry thoroughly.

Decorative Details—Finally, it's time to paint the decorative details. Using the swirl motif pattern provided online at WorkbenchMagazine.com and the *Illustration* at right as a guide for placement, trace the swirls onto the floorcloth. Use a small round artists' brush to paint the swirls dark gray, and let them dry *(Fig. 9)*.

The decorative swash strokes are the final design elements to paint. Use a trim brush to paint light gray strokes between the swirls. This stroke is done in a drag-and-lift motion to create the streaky effect at each end of the swash *(Fig. 10)*. After they dry, lightly stroke across the light gray swashes with gold glaze, letting the light gray show through. Continue to tape, glaze, and paint the detail motifs on the remaining border sections.

Accent the Borders—Painting the accent lines around the borders is last. Tape them off, and paint them one color at a time. The inner accent line is dark brown, and the outer line is dark gray.

The Big Finish—To protect the paint and ensure durability, you'll want to apply a finish to the floorcloth. First, apply two coats of acrylic polymer water-based varnish.

After the varnish has dried, there's one final step—applying paste wax. Wax creates a barrier that keeps dirt from damaging the finish. Look for a good quality paste wax, such as bowling alley wax. It can be used with light colors without discoloring the paint.

Use clean, soft rags for applying and buffing the wax. After applying the paste wax, you can safely scrub the surface of the floorcloth. If you rewax periodically and keep it clean, your floorcloth will wear well and give you years of enjoyment.

Installing the Floorcloth—After painting and finishing the floorcloth, lay it flat on the floor for a day or two, so it can flatten out and "relax." Then move your furniture into place and enjoy your personalized floor art.

—Written and designed by Patricia Garrington, illustrated by Erich Lage

// COMB THE BORDERS //

7] Apply gold glaze to one border section by pulling the brush in long, straight strokes lengthwise over the section.

8] Using a straightedge as a guide, pull the squeegee comb in one continuous stroke along the length of the section.

// ADD DETAILS //

9] Use a round artist's brush to paint dark swirls on the border, letting some of the motifs "bleed" off the edge of the section.

10] Using a drag-and-lift motion, paint brush swashes between the swirls, first with light gray and then with gold.

clutter-busting

Storage Lockers

under $200!

Need more storage space in your entryway? Looking to add a little style, as well? Want to do both without spending much money? Look no further. This stunning storage system offers seating space, hooks for hanging clothes, and cubbies to corral life's clutter.

This locker system is modular, too, which makes it versatile. You can build one, two, or more to suit your needs. And best of all, you can put together the entire set shown for less than $200, thanks to the fact that it's made from inexpensive, sturdy construction materials.

This locker system proves that you don't need a lot of tools or complicated construction techniques to build a great-looking project.

For starters, the lockers are made from medium-density fiberboard (MDF), which costs only about $20 per sheet. And you can cut all the parts for one locker unit from two sheets.

Second, all the parts are cut with two saws you probably already own: a circular saw and a jig saw. We also used a router equipped with a ⅛" roundover bit to ease the edges on some of the pieces.

Aside from those tools, all you'll need is a drill and a device called a pocket-hole jig (which you can pick up for about $45). The jig lets you drill angled holes for special screws that allow you to attach most of the pieces without visible screws. You can learn more about pocket-hole jigs at WorkbenchMagazine.com.

Though there's nothing complicated about building with MDF, the sheets are heavy. That means a complete locker will weigh in at close to 150 pounds. For that reason, this project is built as three separate units, as shown in the *Construction View* at right.

If you're building multiple units that you plan to join together, as we did here, there is one more thing you'll need to note. Look at the *Construction View* again, and you'll see that the seat and top panels on the locker unit, as well as the top of the cubbies, overhang on each side. That makes for an interesting design detail. But if you join two or more units, these overhangs prevent them from fitting tightly together. The solution, though, is simple. Just trim these panels flush if you'll be joining units side by side.

BEGIN WITH THE BASE— The base is the logical unit to build first, as it serves as the foundation for the rest of the project. The base is built with two curved end panels and a curved divider that form the "legs" of the locker *(Base Construction)*. The ends and divider are attached to a back panel, and two stretchers span between the ends and divider to add rigidity. Here's how it all goes together:

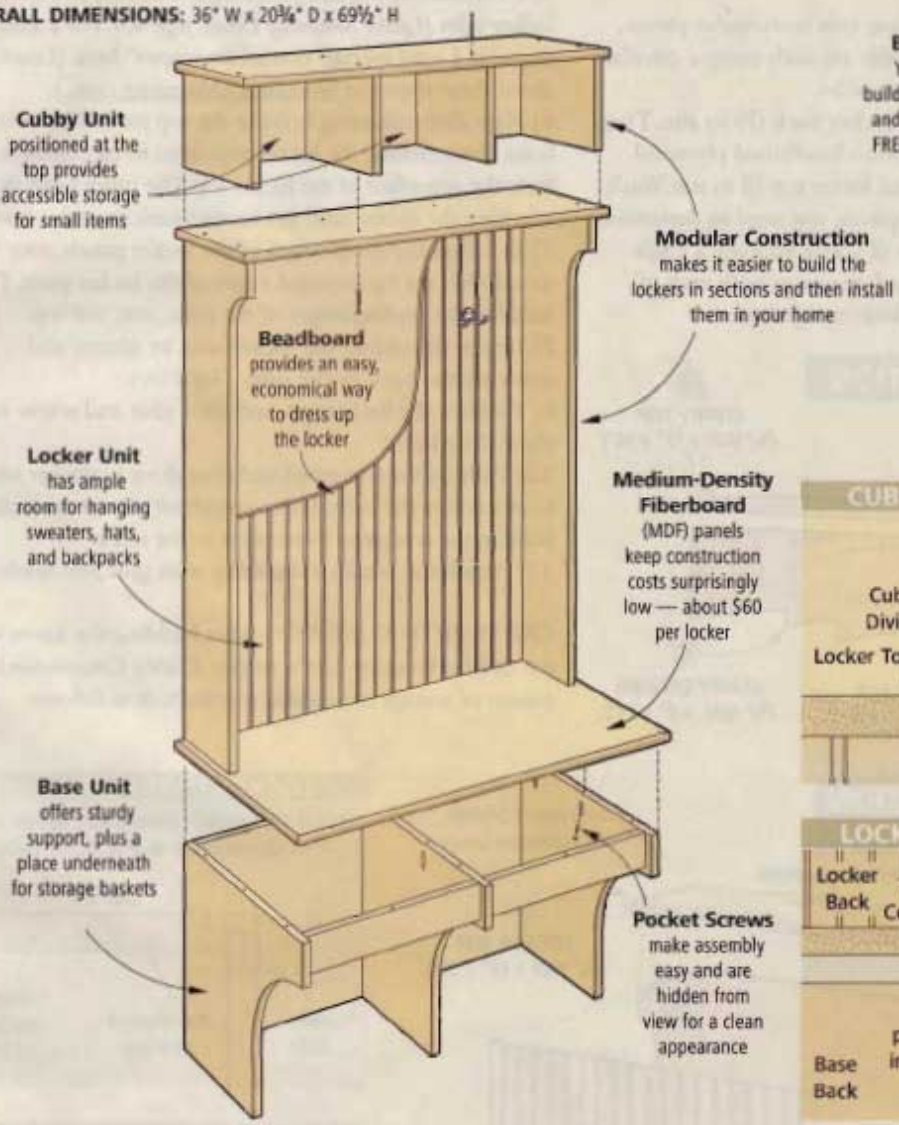
1] Start by cutting the base ends (A) to size. The easiest way to do this is to cut rectangular pieces first, and then come back with a jig saw to cut them to shape *(Base End Pattern)*.
2] Cut the base divider (B) to size using the same techniques. Note that it's ¾" narrower since it butts against the back panel.
3] Next, cut the base back (C) and two stretchers (D) to size.
4] Now drill pocket holes in the base ends, back panel, and stretchers. The exact locations for these holes are shown on the builder's drawings that you can download free from WorkbenchMagazine.com.
5] Before assembling the base, rout ⅛" roundovers on the curved edges of the ends and the divider. Don't round over the top, bottom, or back edges.
6] Also rout a roundover on the outside lower edge of each stretcher.
7] To assemble the base, start by gluing and pocket-screwing the base ends to the back panel *(Photo, below)*.
8] Then glue and screw the center divider to the back panel.
9] Now position the stretchers, and glue and screw them in place.

To assemble the base, start by clamping the ends to the back panel. Make sure the back panel sits flush with the rear edge of each base end. Then drive in the pocket screws.

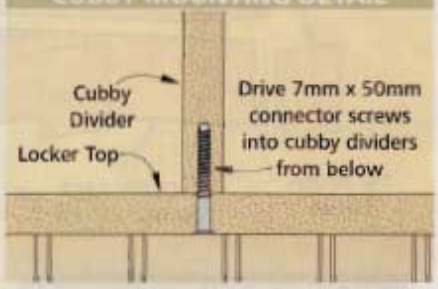
CONSTRUCTION VIEW

OVERALL DIMENSIONS: 36" W x 20¾" D x 69½" H

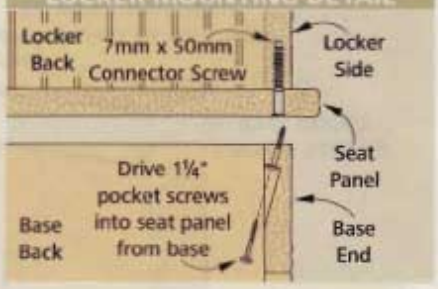
Builder's Plans & More
You can download complete builder's drawings, cutting diagrams and a materials list for this project FREE at WorkbenchMagazine.com



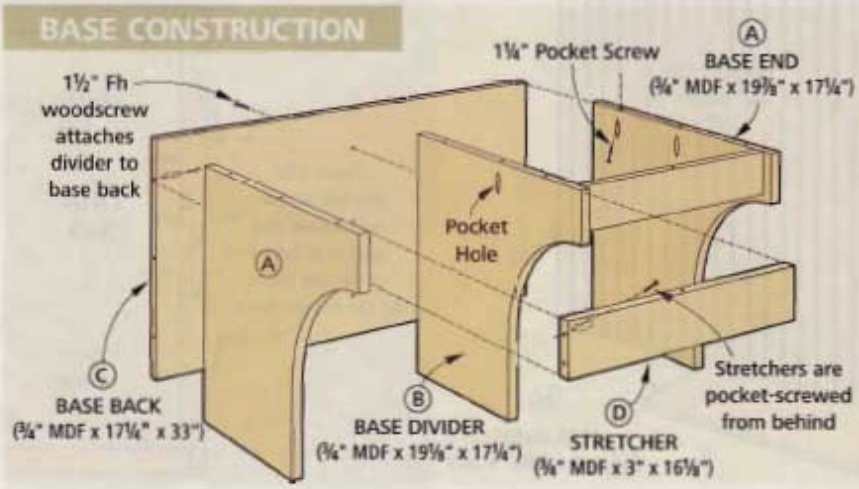
CUBBY MOUNTING DETAIL



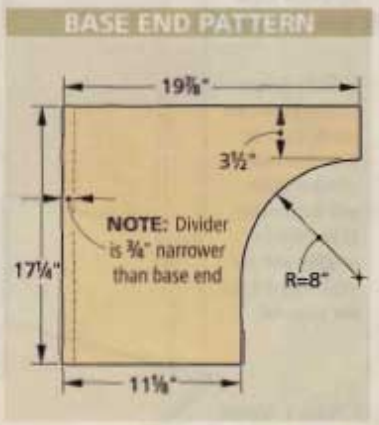
LOCKER MOUNTING DETAIL



BASE CONSTRUCTION

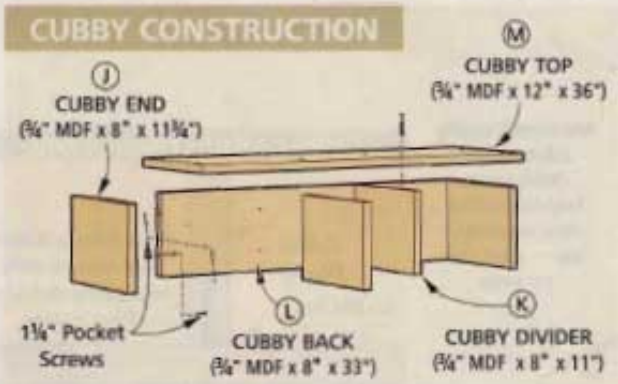


BASE END PATTERN



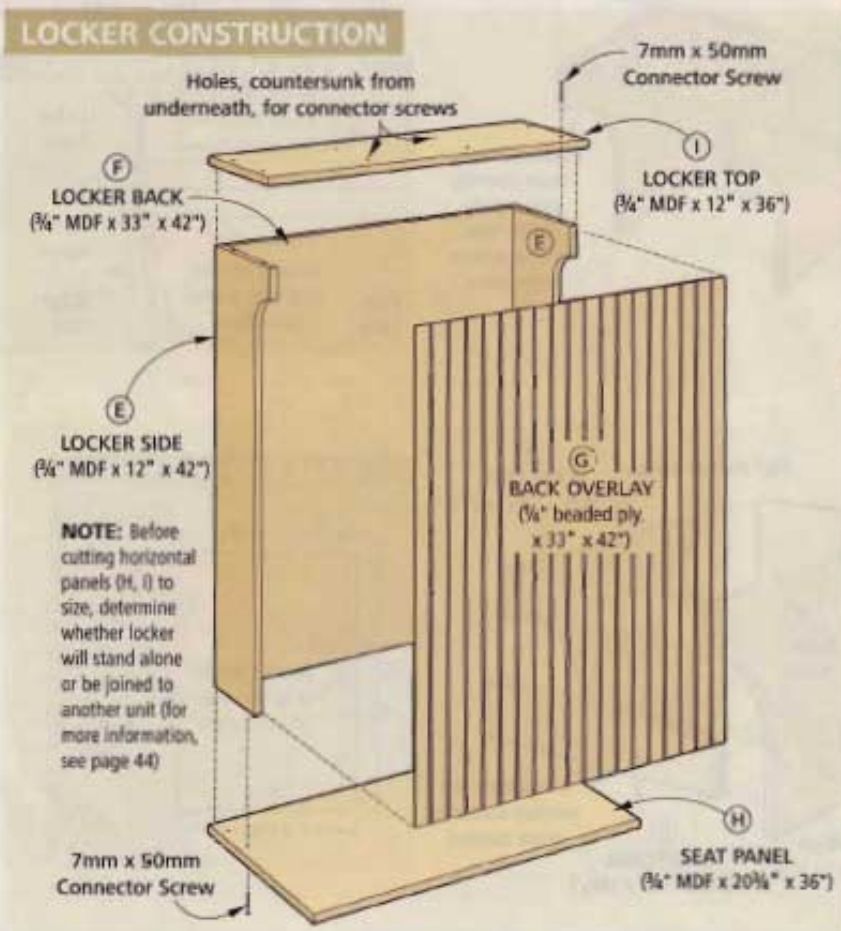
LET'S BUILD THE LOCKER—Now it's time to build the center "locker" unit. It's built using techniques similar to the base. Here's how the locker unit goes together:

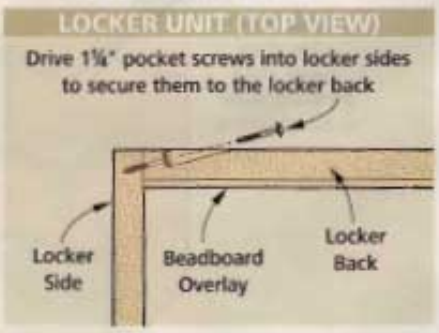
1] Make the sides (E) by cutting two rectangular pieces, and then cutting the front profile on each using a circular saw and jig saw, as shown on page 34.
2] The next step is to cut the locker back (F) to size. Then cut the overlay (G) to match from beadboard plywood.
3] Now cut a seat panel (H) and locker top (I) to size. You'll recall that before cutting these pieces, you need to determine if they'll overhang at both ends (if you're building a single locker), or if they need to fit flush at one or both ends (if you'll be joining two or more lockers together).

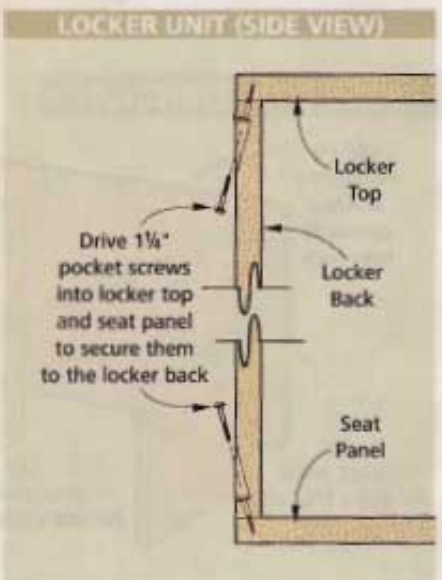


4] Now lay out and drill pocket holes around the perimeter of the locker back. These will hold screws used to attach the sides, seat panel, and top to the locker back *(Side View, below)*.
5] Drill holes in the seat panel for screws that will secure the locker sides *(Locker Mounting Detail, page 45)*. For a sturdy assembly, I used special "connector screws" here. (Learn more about these screws at WorkbenchMagazine.com.)
6] Now drill mounting holes in the top panel. The outermost holes (for attaching the locker top) need to be countersunk from the *upper* face of the locker top. The inner holes (for attaching the cubby unit) get countersunk from the *lower* face.
7] To soften the sharp edges of the locker panels, rout ⅛" roundovers on the exposed edges of the locker parts. That includes the leading edges of the sides, seat, and top.
8] Begin assembling the locker unit by gluing and screwing the back to the sides *(Top View)*.
9] Position the locker top, and then glue and screw it in place *(Side View)*.
10] Position the seat panel, and then drive in pocket screws to attach it to the back. Drive connector screws through the holes in the seat panel to secure it to the sides.
11] Attach the beadboard overlay with glue and brads.

CAP IT WITH CUBBIES—After building the lower units, the overhead cubby unit is simple *(Cubby Construction)*. It consist of just six rectangular pieces, built as follows:







1] Start by cutting the cubby ends (J), dividers (K), back (L), and top (M) to size.
2] Now drill pocket holes in the back panel. These will hold pocket screws that attach the back to the cubby ends and top (and to the top of the locker unit later).
3] Drill holes in the cubby back and top for screws that will attach the dividers.
4] Use a router to round over the leading edges of the dividers, as well as the front edges and ends of the cubby top.
5] After that, glue and screw the cubby unit together.

INSTALL THE LOCKERS— With all the pieces built, you're just about ready to move on to installation. But before you do, it's a good idea to prime and paint everything now. You'll have an easier time working on the pieces and won't end up making a mess in the house.

Once the lockers are painted, you can install them in your home. You'll want to recruit a helper to assist you with carrying, steadying, and attaching the pieces. Then just follow the sequence in these *Photos* to install your lockers and put them to use.

—Written by David Stone, illustrated by Erich Lage, project designed by Mike Donovan

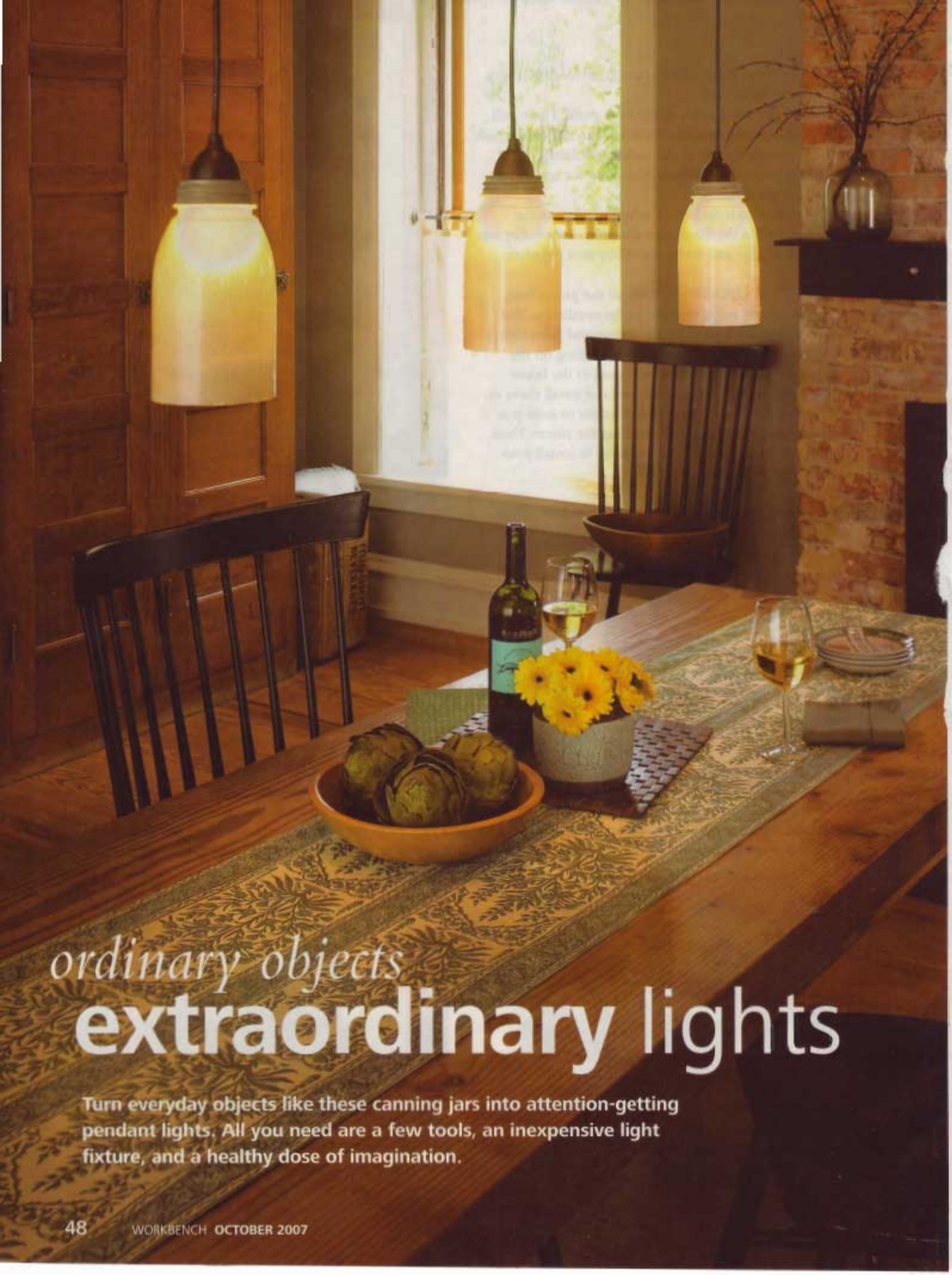
5] Make sure the locker assembly sits level from front to back and side to side. Then screw it to the wall studs.

1] Set the base in place and mark the baseboard. Then cut out the baseboard, so the locker can fit tight to the wall.

2] With the base sitting away from the wall, set the locker unit on the base. Align the seat panel, making sure that it sits flush or overhangs where necessary *(left)*. Then drive pocket screws that secure the locker unit to the base *(right)*.

3] Add the overhead cubbies next. Apply a bead of construction adhesive to the bottom edge of the cubby ends, and then set the cubbies in position.

4] To secure the cubbies, drive connecting screws through the holes in the locker top and into the cubby dividers. Then drive pocket screws in through the back panel.



ordinary objects

extraordinary lights

Turn everyday objects like these canning jars into attention-getting pendant lights. All you need are a few tools, an inexpensive light fixture, and a healthy dose of imagination.

Lighting is one of those decorating touches that can really make the look of a room. Unfortunately, lighting can also break your decorating budget, especially if you want something more unique than the off-the-shelf fixtures found in home centers.

But what if I told you that you can create one-of-a-kind pendant lights at home for as little as $25 to $30 each?

The key is starting with a pre-wired pendant lighting fixture. We found one at Lowe's that comes already assembled with the cover plate, an adjustable-length cord, and light socket *(Illustration, right)*. See the *Buyer's Guide* on page 50.

Once you have your fixture, you can go out and find objects that can be turned into interesting pendants. The pendants at left provide a great example of what's possible. They're made from half-gallon canning jars from the early 20th century. I found them at a local antique shop, complete with lids, for about $5 each.

The jars also came with loads of personality. Bubbles and inconsistencies are abundant in the old glass, and the logos ("Atlas," in this case) are unique. I found ample supplies of these jars through eBay and other online venues, as well.

Transforming the jars into pendant lights is surprisingly simple. I'll walk you through the process beginning on page 50.

After making these pendants, I started noticing a lot more off-the-wall items in other antique shops, and even big retail stores, that would make fun and functional one-of-a-kind pendants, as well. On page 51, you can see four other variations that are also simple to make. They can serve as inspiration to let you shed your own light on this project.

Position the jar on the bottle cutter, and then rotate the jar five or six times, pressing firmly, to score the glass.

MADE IN(TO) THE SHADE

The lighting effect that the canning-jar pendant creates is dramatic. This is due to the fact that the bottom of each jar gets removed, allowing the light from a modest 20-watt bulb to illuminate objects below the pendant.

The remainder of each jar gets a frosted finish that produces a soft, diffuse light. That finish is on the *inside* walls of the jar, so the outside retains its original look. This way, the bubbles, imperfections, and color of the glass still show.

You might imagine that cutting the jar would be difficult. But it's easy if you use a bottle cutter to score the glass. (I found one at BottleCutter.com.) You can see how to do that in the *Photo* at left.

After scoring the glass, you need to break the bottom off at the score line *(Figs. 1 and 2, below)*. Then you can smooth and frost the glass *(Figs. 3 and 4, below)*, and prepare the lid *(Figs. 5 and 6, right)*.

Oh yeah, you'll need to add the wiring, of course. But that's a no-brainer thanks to the pre-wired fixture. Just slip the socket in place in the lid *(Fig. 7, right)*.

—Written by David Stone, illustrated by Kurt Schultz, project designed by Mike Donovan

SUPPLIES NEEDED

Portfolio Mini Pendant #127026; Lowes.com.
BC Quick-Silver Bottle Cutter kit (with diamond file); BottleCutter.com

Other Tools:
1⅛" Spade Bit, Candle, Hammer, Drill, Frosted Spray Paint

1] Hold the jar with the score line directly over the flame of a candle and rotate it several times to heat and stress the glass.

2] Run cold water over the jar to crack the glass. If it doesn't crack completely, use the cutter again to complete the cut.

3] Use a diamond file and cutting oil (both come with the bottle cutter) to smooth the edge, making it safe to touch.

4] The frosted finish comes from a spray can. Simply aim through the jar neck first, then through the cut end.

FROM LID TO LIGHT FIXTURE

5] If the old glass seal remains in the lid, you'll need to remove it. Either pry the seal free, or break it with a hammer and remove the pieces.

6] Drill a 1⅛" hole in the lid for the socket. The soft zinc lid drills easily with a standard spade bit. Use a clamp as a handle to hold the lid. That way, if the bit grabs, it won't pull the lid from your hand.

7] Slip the light socket through the hole and install the lock ring. Hand tighten it only so you don't deform the lid or break the socket.

MR. SPEAKER

This pendant starts with an Atwater Kent speaker housing from an antique shop. To accept the light socket, drill a ring of ¼" holes, then cut the center out to make a hole.

LIGHT BOX

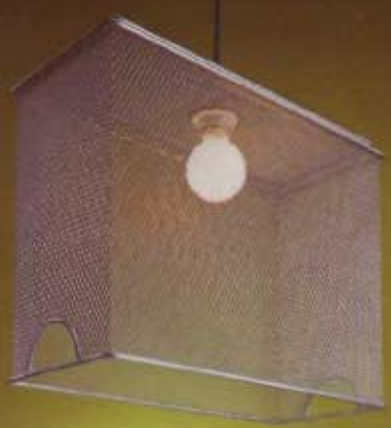
A 10"-long storage box for compact discs (Target.com) becomes a colorful pendant by gluing the lid to the box bottom, boring a hole through both, and then slipping in the light socket.

CUBE LIGHT

Start with a Walnut Medium Wall Cube (Target.com). Add a ¼"-plywood top, and then drill a hole for the socket. Drill holes, and then add decorative 3/16" steel rods.

UNDER WIRE

Take home organizers to a new height by turning a wire-mesh "Tabletop File" (Target.com) into an industrial-chic pendant. Just cut the wire mesh to create a hole in the bottom.




VAN HALEN
Supertramp
AC/DC
YELLO

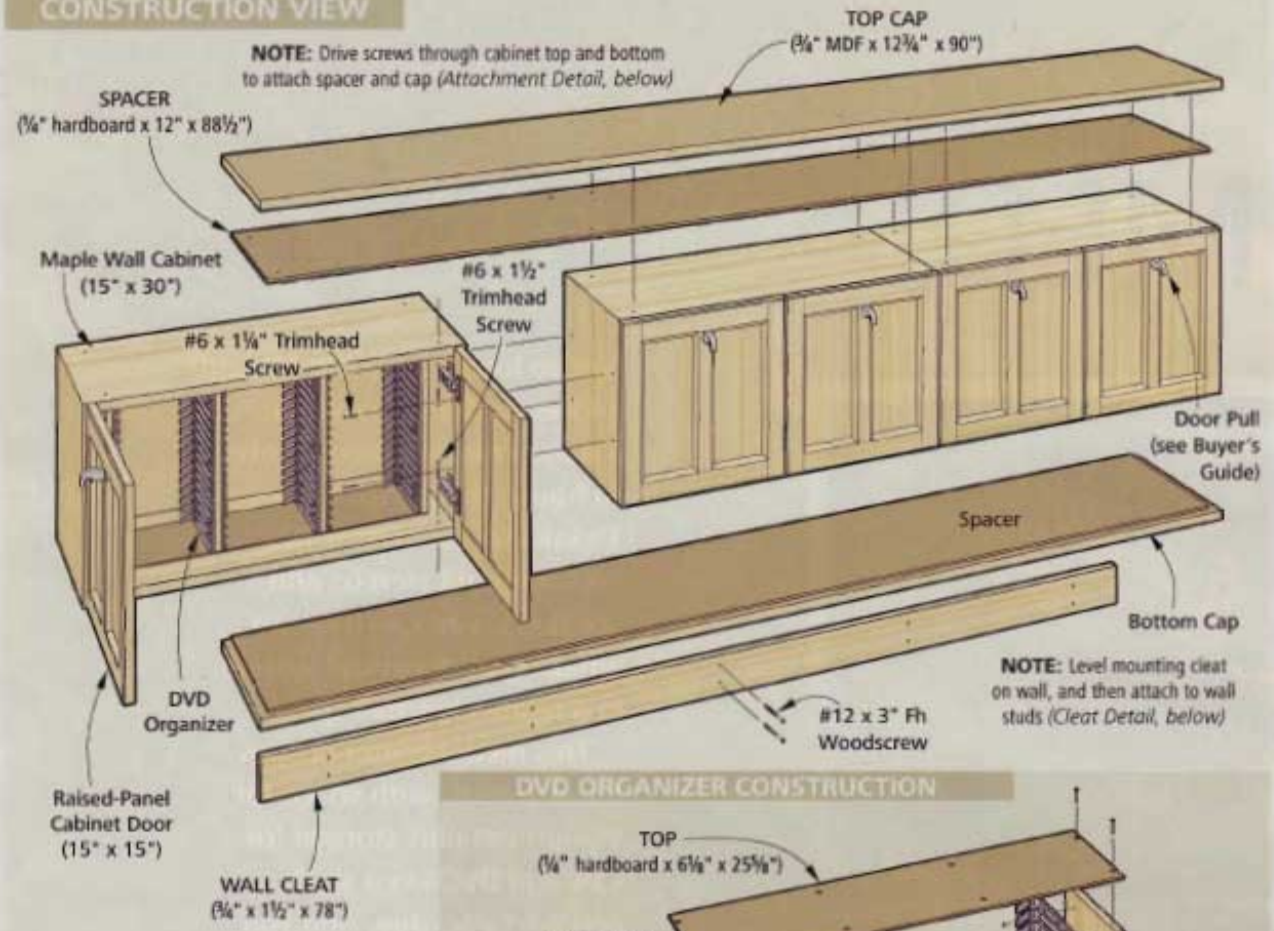
HIGH DEFINITION >>

MEDIA center

Not so long ago, a big TV and a killer audio system required a huge entertainment center to house them. Not anymore. Thanks to flat-screen TVs and compact stereos and speakers, you can have an amazing audio-visual system in a relatively small space.

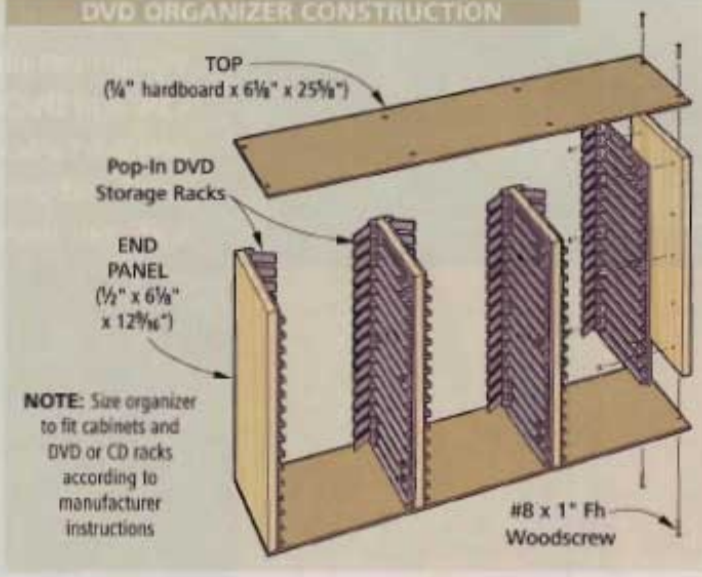
This media center echoes those trends, with space for equipment plus storage for CDs and DVDs in a sleek, compact package. And you can build one customized to suit your needs in a weekend.

CONSTRUCTION VIEW

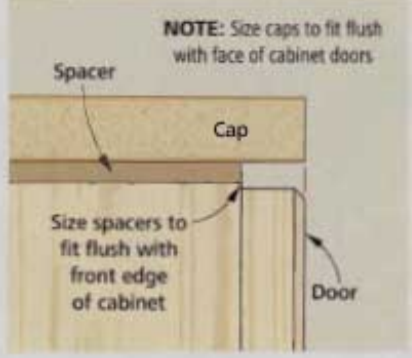


NOTE: Select the quantity and size of cabinets first, and then size the top/bottom caps and spacers to fit

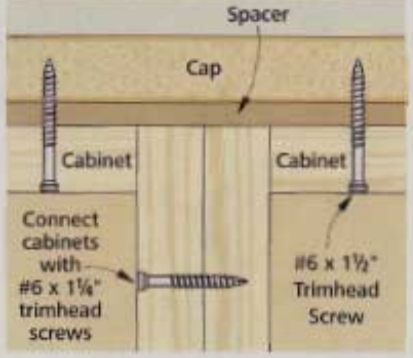
DVD ORGANIZER CONSTRUCTION



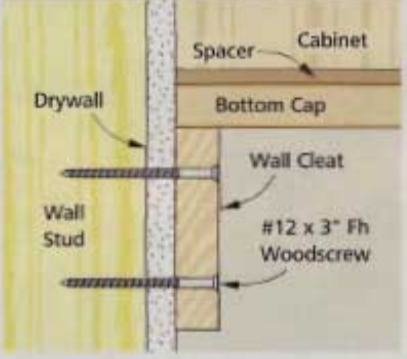
CAP & SPACER DETAIL



ATTACHMENT DETAIL



CLEAT DETAIL



When we say this media center is a weekend project, we mean it. We kept the construction simple to ensure that you could build and install it in a couple days.

Keep it Simple—The secret to that simplicity is starting with pre-finished kitchen wall cabinets *(Construction View)*.

Using these cabinets makes it easy to adapt the center to the size and style you need. For this center, we went with three 15"-tall by 30"-wide upper cabinets.

For style, we chose clear-finished maple cabinets. They're "flat-pack" units from the home center that go together with a few screws *(Buyer's Guide)*. You'll also find these cabinets in oak, cherry, and other species. For doors (sold separately), we chose a frame-and-panel design.

The cabinets get screwed together, then sandwiched between top and bottom caps made from medium-density fiberboard (MDF). You can learn how to cut this material on page 34.

The caps are set on spacers made from ¼"-thick hardboard that create an attractive shadow line *(Cap & Spacer Detail)*. Both the caps and the spacers get painted.

Get It Together—With this in mind, you can build your media center.

Start by carefully aligning your cabinets. Then drill pilot holes, and attach them end-to-end. I used trimhead screws designed for use with cabinets *(Attachment Detail)*.

Cap It Off—Now make the MDF top and bottom caps. To do that, measure the total depth of the cabinets, including the doors, and rip two pieces of MDF to that width. Measure the length of the cabinets, and cut the caps to match.

To make the spacers, just subtract ¾" from the width of a cap, and rip the spacers from ¼" hardboard. Then subtract 1½" from the length of the cap, and cut the spacers to that length.

You'll want to paint the spacers and caps before installing them. I sprayed on two coats of flat black, and then sprayed a topcoat of clear satin polyurethane.

That done, position one spacer and cap, and attach them. Then flip the cabinets over, and add the others.

Keep your DVDs organized and out of the way, but still easy to get to, by building this handy organizer. It slips into one cabinet in the media center and holds 48 DVDs in their protective cases.

A cleat that's mounted to the wall and screwed to the studs helps support the weight of the media center and TV.

Hang It Up—Installing the center is even simpler than building it. First mount a cleat to the wall studs, making sure it's level, for the center to rest on *(Cleat Detail, left, and Photo, above)*. Have someone help you lift the center onto the cleat, and then drive screws through the mounting rails in the cabinets and into the studs.

Fill It With Function—To give the center more than just great looks, we added a simple organizer that holds DVD or CD cases *(Photo, top)*. Here, we started with pre-made plastic holders from a mail-order supplier *(Buyer's Guide)*. The holders fit into a case made of maple and leftover hardboard *(Organizer Construction)*.

To make the case, just cut the pieces to size, screw them together, and attach the plastic holders.

—Written by David Stone, illustrated by Matt Scott, project designed by James R. Downing

BUYER'S GUIDE:

CABINETS

Mill's Pride Cabinetry
Cabinets: Natural Maple (W3015M), Doors: "Fairfield" (DRPIMFD)
800-441-0037; MillsPride.com
(Available at HomeDepot.com.)

Atlas Housewares
Pulls: Euro-Tech Hook Knob, Brushed Nickel (#A808)
800-799-6755
AtlasHousewares.com

DVD STORAGE INSERT

Rockler Hardware
Pop-In DVD Holder (#53872), (Also available: Pop-In CD Holder #92908)
800-279-4441
Rockler.com

AUDIO/VISUAL COMPONENTS

Dell
42" Plasma TV (WD4200)
800-999-3355
Dell.com

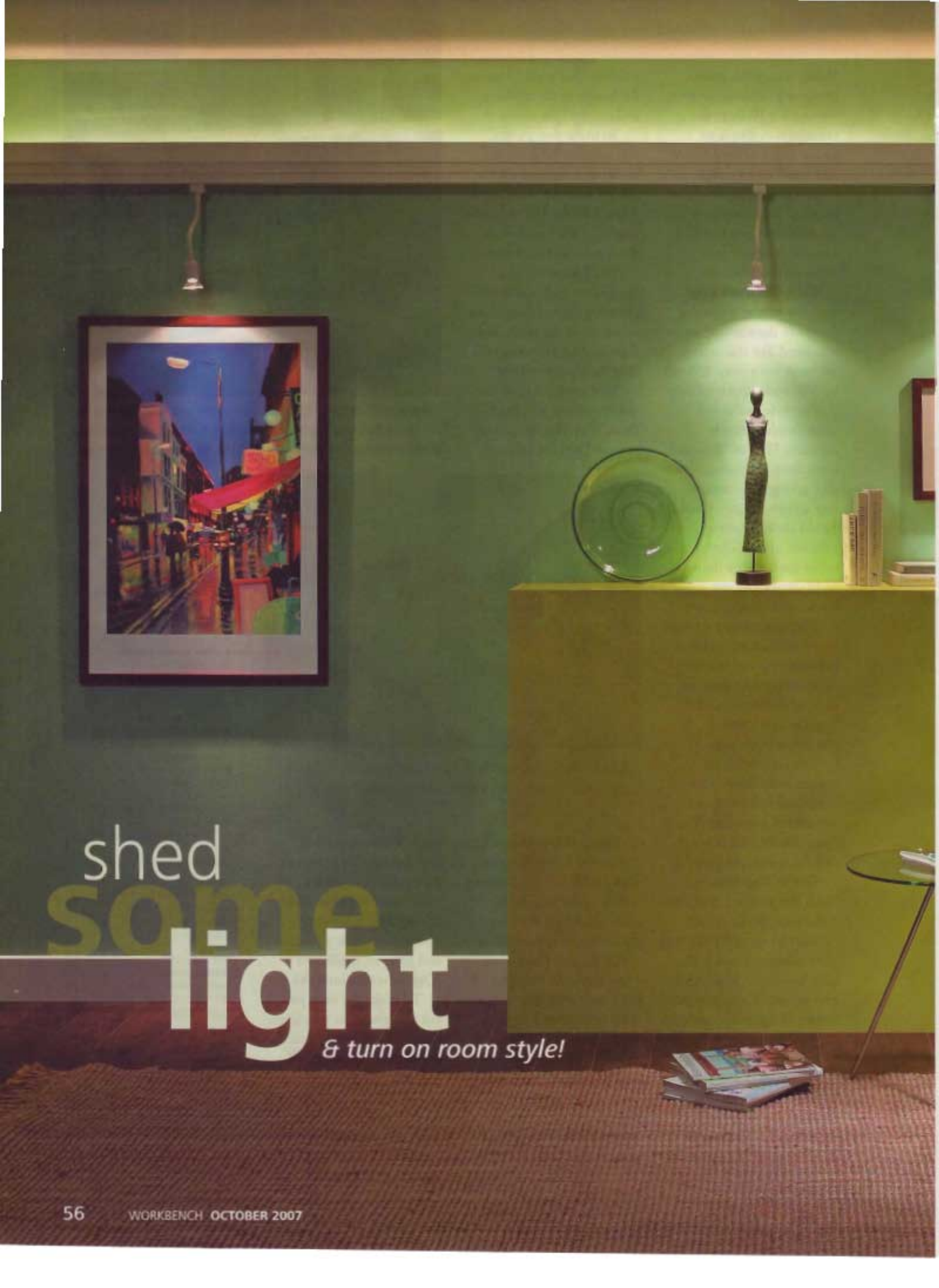
Bose
3-2-1 GS Series II Home Entertainment System
800-999-2673
Bose.com

ACCESSORIES

Hobby Lobby
Record Album Frames
800-888-0321, ext. 1275
HobbyLobby.com or CraftsEtc.com

Pier One Imports
Wood Statue
800-245-4595
Pier1.com

Floor Lamp
Homemade, using photographer's light stand and umbrella reflector, plus a track-light fixture.



shed some light

& turn on room style!

Add drama to any room with this simple "light bar." All it takes are a few pine boards and some off-the-shelf lighting from the home center.

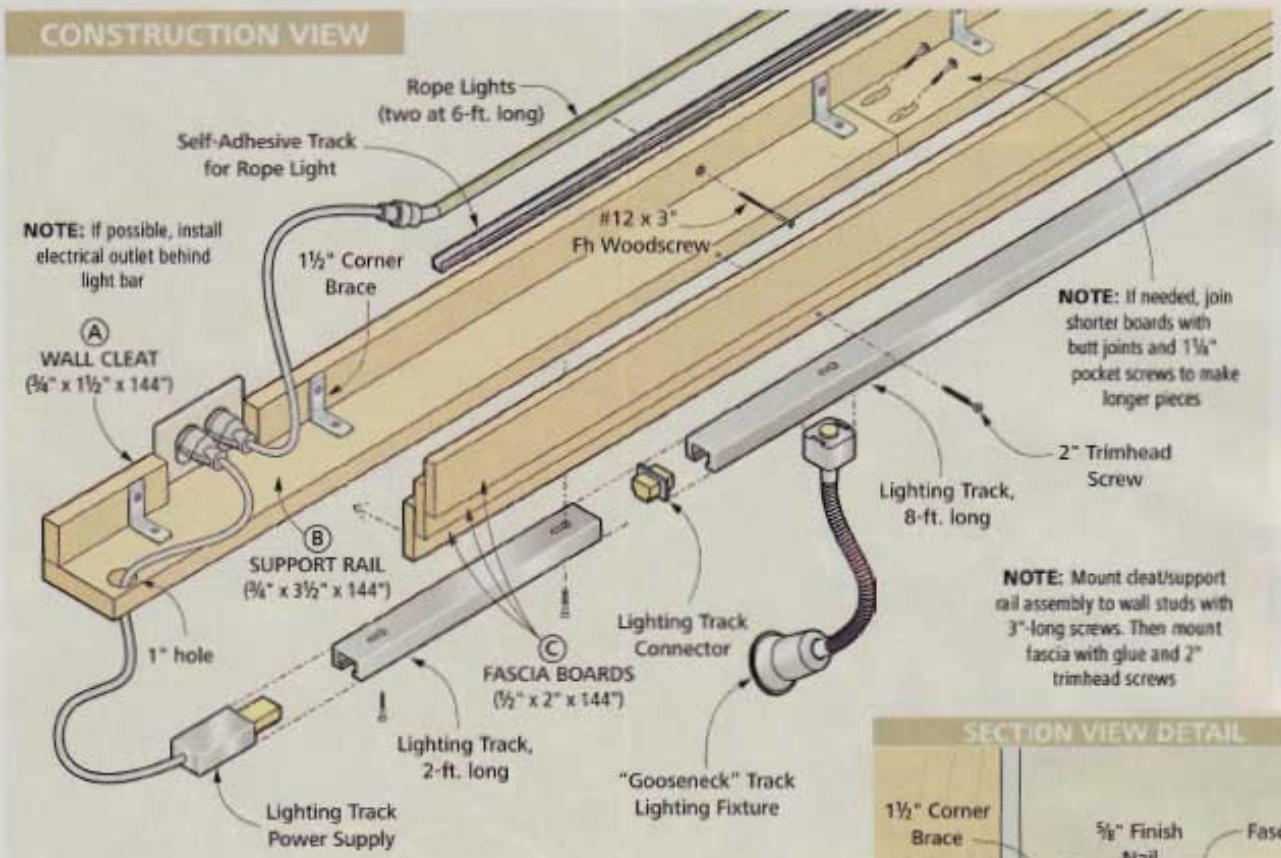
Decorative moldings and accent lighting are two ways to completely change the look and feel of a room. But if you were to combine these two elements, just imagine the dramatic impact. That's exactly what we accomplished with this unique "light bar."

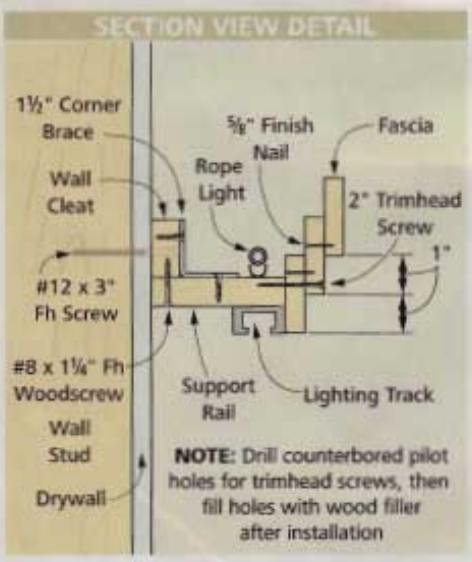
Simple Project, Amazing Look—The "bar" consists of pine boards that are assembled to create a built-up molding. This molding houses two types of lighting: accent and ambient lighting.

Accent Lighting—Underneath the bar, we attached a track light system. It accepts flexible "gooseneck" light fixtures that highlight special pieces of art. Other fixtures can also be used to create different visual effects.

Ambient Lighting—Above the bar, an attractive wash of light illuminates the wall and ceiling. This "ambient" lighting is created by L.E.D. rope lights, which are mounted to the bar in a self-adhesive track. (To learn more about both kinds of lighting, see the *Sidebar* on page 59.)

All told, the material to create this light bar cost around $100. Not bad for a project that totally transforms a room.





BUILD YOUR OWN

Light Bar

Before you begin building your light bar, you need to decide how long it will be. We made ours about 12-ft. long to span a single wall. You could also "wrap" an entire room with light bars, or make shorter bars for specific areas.

The electrical requirements also need to be taken into account. I recommend installing an outlet behind the bar to hide wires from the track and rope lighting *(Construction View, above)*. You'll also want to install light switches in a convenient location.

As for the parts of the light bar, they consist of a 1x2 wall cleat, a 1x4 support rail that holds the fascia and track lighting, and three ½"-thick boards that get built up in "steps" to form the fascia.

When selecting boards, there are a couple things to keep in mind. First, if you want a long bar, you may need to make long pieces from shorter boards. To do that, simply butt short pieces together, and join them with pocket screws.

You also might have a hard time finding straight boards in the required widths for this project. If that's the case, you can purchase wider stock and rip it to width using a table saw.

The complete instructions for building the bar shown above are covered in the following steps. Also, see the top of page 59 for a couple of alternative design ideas.

Assemble the fascia upside down, using a spacer to create the reveals and scrap blocks to steady the assembly.

1] Start by cutting the cleat (A), support rail (B), and "stepped" fascia boards (C) to size using a table saw and miter saw.

2] If you're planning to create a long bar by butting the pieces together, stagger the crosscuts, so they don't align from one piece to the next. (This will give you the strongest possible assembly.) Now drill pocket holes at the butt joints, and drive pocket screws to create the

long boards. Fill and sand any gaps between the boards.

3] Dry-clamp the cleat and support rail, and drill pilot holes through the underside of the support rail and into the cleat. Now glue and screw the two parts together *(Section View)*.

4] To reinforce the assembly, screw a corner brace between the support rail and the cleat every 18" or so.

5] Now it's time to make the "stepped" fascia. It consists of three long strips that are glued and nailed together. The tricky part is keeping these pieces aligned as you assemble them. To do that, I used a 1"-wide spacer to establish the "reveal" between each strip. It's also a good idea to have a few ½"-thick scrap blocks on hand to prevent the assembly from tipping as you glue and nail the fascia together *(Photo, below left)*.

6] Clamp the fascia to the cleat/support rail assembly, and drill pilot holes in the fascia to accept trimhead screws, but don't mount the fascia yet. Now prime and paint both assemblies.

7] Attach the track lighting to the underside of the support rail with screws, and attach the rope lighting to the top of the rail using self-adhesive mounting tracks.

8] Now recruit a friend, level the cleat/support rail assembly, and attach it to the wall by driving long screws into wall studs.

9] Next, position the fascia on the support rail, and attach it by driving screws into the holes drilled earlier.

10] Fill the holes with wood filler, sand it smooth, and apply a final coat of paint to the fascia.

11] Accessorize the track with light fixtures of your choice.

—Written by Wyatt Myers, illustrated by Erich Lage, project designed by James R. Downing

DESIGN OPTIONS

Flat Fascia. To create a contemporary look, use a single board for the fascia rather than the built-up "steps."

Classic Crown. For a more traditional look, attach crown molding to a front cleat that also hides the track light.

2 GREAT WAYS TO LIGHT IT RIGHT

Two types of specialty lighting make these light bars possible: track lighting and rope lighting.

Track Lighting—As its name implies, track lighting consists of a track and an assortment of fixtures that plug into it *(Photo, right)*. We used lighting from the Hampton Bay Dimensions line at Home Depot. The track is available in different lengths, and you can add connectors to put two or more tracks together to cover a long run.

As far as fixtures go, you have many options. We chose "gooseneck" lights that allowed us to bend them away from the wall and then back toward it to highlight artwork.

Rope Lighting—This L.E.D. rope lighting is also from Hampton Bay. The lights are available in varying lengths and connect together at the ends *(Photo, right)*. The ropes fit in a self-adhesive track that's sold alongside the lights.

Connectors on the rope lights let you plug in additional lights to create a rope up to 250 feet long.

A filthy car, a stained driveway, a faded deck, peeling paint, clogged gutters—what do these homeowner headaches have in common? None of them stand a chance against...

High-Pressure H_2O

Photo Courtesy of Briggs & Stratton

"The proper application of water, pressure, and detergent is key to pressure-washing success."

It's remarkable how many home-maintenance challenges can be overcome with the proper application of pressure. Combine that pressure with water, and perhaps a bit of detergent, and even the worst jobs—cleaning a stained driveway, reviving a faded deck, stripping old paint, and cleaning the gutters—become almost recreational.

That certainly explains the recent popularity of consumer-sized pressure washers that do just that: combine water and detergent at pressures up to 100 times greater than a garden hose can deliver.

Pressure Principle—When shopping for a pressure washer, there are a few important factors to consider. The first is pressure, expressed in pounds per square inch or PSI. More than anything else, this number indicates a pressure washer's ability to remove stubborn stains from a surface. More PSI means more stain-removing power.

Volume Control—But pressure isn't the only important gauge. There's also the matter of water volume to consider. This is measured in gallons per minute or GPM. More GPM means you can clean larger surfaces more quickly.

Versatility—Of course, let's not forget that it's the *proper* application of water, pressure, and detergent that's key to pressure-washing success. To achieve this, you'll need to match a particular cleaning job to the best spray pattern to accomplish it. Fortunately, there is no shortage of wands, nozzles, and attachments to maximize the performance of any pressure washer and even give it capabilities it wouldn't otherwise have.

Over the next few pages, we'll help you sort through all of those factors, beginning with a comparison of the two types of pressure washers: electric and gas-powered. Then we'll show you how to harness all that power with the best nozzles and accessories for your pressure-washing work. Finally, we'll tell you about a few accessories that no homeowners will want to be without once they've added a pressure washer to their collection of outdoor power equipment.

Photo Courtesy of Briggs & Stratton

For quick jobs where an electrical outlet is nearby, like rinsing a patio or porch *(left)*, the ease and convenience of an electric pressure washer is ideal.

PLUG & SPRAY

When comparing pressure washers on the measures I listed earlier (PSI and GPM), it might appear at first as though electric-powered models are at a decided disadvantage to their gas-powered cousins. And for the most demanding jobs, that's true. After all, even the smallest gas-powered washer delivers greater PSI and GPM than the largest electric model.

However, an honest assessment of how you will most often use a pressure washer may reveal that a "plug and spray" electric model is your perfect choice. What they lack in pressure and volume, electric pressure washers make up for in cost, convenience, and ease of use.

Cost—Electric power washers can cost as little as $100, and they rarely cost more than $300. So right off the bat, they'll save you money over gas-powered models. But the cost of operating them over the long run is also significantly less. The high price of gasoline is probably evidence enough to that point, but don't forget that an electric model won't require oil, spark plugs, air filters, or fuel stabilizer—all regular maintenance items for gas-powered models.

Convenience—Electric power washers also excel on this score. After all, what's easier than connecting the garden hose, plugging the washer into an outlet, and flipping the switch? Certainly not checking and filling fuel and oil, cleaning or replacing the air filter, priming the fuel pump, and then choking and pull-starting the cold engine on a gas-powered pressure washer.

Ease of Use—Once running, it may seem that operating an electric- or gas-powered washer is essentially the same—just point and shoot. But what about those times when you will use the washer intermittently, such as when washing your car or boat? Typically, you'd rinse the car, spray on the soap or pre-soak, and then scrub a section by hand, rinse, and repeat. And for on/off operations like this, electric models have a decided advantage.

That's because gas-powered models are meant to be running only when you are actually spraying to avoid building up excess pressure in the water pump. So that means shutting off the engine and then restarting it each time you need to hand wash, or even just take a break.

Electric washers cycle on and off automatically, so if you're not spraying, they're not running. There's no danger that they will run too long without a pressure release and damage the pump.

Finally, electric motors are quieter than gas engines. And because they only run intermittently, you aren't subjected to annoying and even harmful sound levels throughout the entire project.

Electric pressure washers also excel when low pressure and small volumes of detergent are called for, such as when washing your car or boat.

Photo Courtesy of Briggs & Stratton

A combination of high pressure and large water volume make gas-powered pressure washers the best choice for large jobs.

"How you plan to use a pressure washer will decide whether a "plug-and-play" electric model or a gas model is the best choice."

When Electric Works—For most pressure washer jobs, affordable electric-powered models will fill the need nicely. They provide enough PSI and GPM for washing a car, boat, or camper, knocking the gunk off the barbecue grill, and even blowing the crud off a lawnmower. And you can set them up and get to work quickly without any maintenance or starting hassles. Best of all, while they are powerful, they don't generate the kind of pressure that can damage surfaces.

When It Won't—Admittedly, there are jobs that demand more pressure and volume than electric models provide. Examples include cleaning a badly stained driveway, revitalizing a wood fence or deck, or stripping old paint from siding. For jobs like these, when you're trying to remove something that doesn't want to be removed, and when you have a lot of area to cover, a gas-powered pressure washer is what you need.

THE POWER OF PETROL

Hopefully I haven't scared you completely away from a gas-powered washer. Because there are certainly times, as I just pointed out, that the power and volume of these big machines is precisely what you need.

However, one misconception that I want to clear up right away is that more power is always a good thing. Think back to the car washing scenario I talked about earlier—rinse, soap, hand wash, rinse, repeat. You might be thinking, why not just crank up the pressure and skip the hand washing step? Well, you could. But the pressure that some of these gas units can achieve is high enough to remove wax, and even paint. Better to spend a little time with a sponge than risk damaging an expensive paint job.

Where these high-pressure, high-volume washers really shine, though, is on the tough jobs. For example, removing oil from a concrete driveway or returning the natural color to a faded fence or deck are perfect tasks for gas-powered models. And it's at times like these when the complexities of maintaining and operating one of these units is worth the effort.

A lot of that has to do with the fact that these are big jobs, as in they cover a big area. And being able to pump out as much as 2½ GPM means you can move quickly to cover the space. Additionally, a concrete surface, or even a wood surface that's slated for refinishing or painting anyway, isn't as susceptible to damage from pressures as high as 3,000 PSI.

Soap's On—One more advantage that gas-powered units have in tackling these tough jobs is detergent capacity. Let's face it, there are some blemishes that no amount of water or pressure can remove, which is why a wide selection of specialty detergents are available, from car-wash soap to degreasers and paint-prep detergents. Typically, gas-powered units can hold a lot more detergent than their electric counterparts. Some models even draw the detergent directly from

A turbo nozzle provides a narrow, rotating stream for breaking up tough grime.

A telescoping pole, a U-shaped gutter attachment, and a low-pressure nozzle make quick, safe work out of cleaning the gutters.

Aftermarket nozzle kits are available to fit most popular pressure washers.

the container. That means you don't have to stop to refill the soap supply nearly as often.

Have Gas, Will Travel—Another strength of gas-powered models is portability, though not in terms of being able to carry them more easily. In fact, they weigh quite a bit more. But as long as you have a gas can, you can take these pressure washers to remote areas of your property where extension cords just won't reach.

At What Cost?—That brings us to the cost of owning and operating a gas-powered washer. That goes well beyond the initial purchase price, which at $250 to $600 is a sizable investment just to get started. From there you'll have to add gas. And while it's difficult to express the fuel consumption of these pressure washers in easily understood terms (they don't have an estimated MPG), I can tell you that washing one average-sized deck (12-ft. x 12-ft.) burned through about one gallon of gas. Oil, although not as large an expense as gas, is another ongoing cost.

Pick a Power—Perhaps you've already decided which class of pressure washer best suits your purposes. If not, take stock of how you'll use the tool. If your projects include large surfaces that get heavily soiled and require at least annual cleaning, then a gas-powered washer is an easy choice.

If you're more interested in shining up the family car a couple of times each month or sprucing up the siding once a year, then save a few bucks and go electric. You can always rent a bigger pressure washer for the occasional tough cleaning jobs.

HARNESS THE POWER

Having decided on the best pressure washer for your purposes, your next step will be to team it with the right wands, nozzles, and accessories to accomplish your cleaning challenges.

At the very least, your pressure washer will come with a standard wand that allows you to adjust the shape of the spray from a wide, relatively gentle pattern to a focused, intense stream *(Top Photos, page 65)*. A wand like this provides adequate cleaning pressure for a wide variety of jobs.

Many pressure washers also include some version of a "turbo" wand. These create a high-pressure, narrow stream of water that rotates to attack stains and crud from several directions. A nozzle like this makes quick work of cleaning up the lawnmower or wheelbarrow *(Photo, bottom right page 63)*.

Another way to adjust the pattern of the stream is with interchangeable nozzles. Both Craftsman and Briggs & Stratton offer pressure-washer models that include three cleaning nozzles for delicate, general, and maximum streams, and one low-pressure nozzle for applying detergent *(Photo, below)*. There are also aftermarket versions that include as many as four different stream intensities plus a soap nozzle *(Photo, above)*. Most of these nozzles require a wand with a quick-couple connector, which is also available as an aftermarket accessory.

Interchangeable nozzles provide various spray patterns and intensities.

A focused stream can clean dirt and weeds out of concrete seams.

Standard **Turbo**

Standard nozzles let you adjust the spray pattern. Turbo nozzles shoot a narrow stream that rotates.

One particularly useful variation on this theme is Briggs & Stratton's Precision Spray Selector wand. This has all the same spray patterns as their interchangeable nozzle system, but they're all built into the wand, so you simply dial the setting you need and keep cleaning.

For especially grimy surfaces, where letting the detergent soak in awhile is in order, a HydroFoam Launcher, also from Briggs & Stratton, provides an extra-thick stream of detergent that clings to vertical surfaces while it breaks up the stain.

SPECIAL ACCESSORIES

While a good assortment of nozzles will certainly extend the usefulness of any pressure washer, specialized accessories can take your washer to new highs. And new lows.

First of all, can you imagine an easier way to clean gutters than with the outfit shown on page 64? This is actually the combination of a telescoping wand, a gutter cleaning attachment, a low-pressure (soap) nozzle, and a back belt to help you support the entire apparatus. It sure beats climbing a ladder. And the wand, minus the gutter attachment, is also perfect for cleaning windows and siding on the second or third story of your home.

For working closer to the ground, a water broom is a great accessory *(Photo, right)*. This quick-connect accessory divides the water through four nozzles, each of which aims a fan pattern of water directly at the driveway or sidewalk. This allows you to cover a big area quickly without having to bend over to direct the spray at the surface.

CONCLUSION

Clearly, any pressure washer will put you miles ahead of an ordinary garden hose for most cleanup jobs around the home. And fortunately, you don't have to buy the most powerful washer available to get that increased cleaning power. Just choose a model that fits your needs, and then outfit it with a few accessories to make the most of its cleaning muscle. ■

—Written by Bill Link

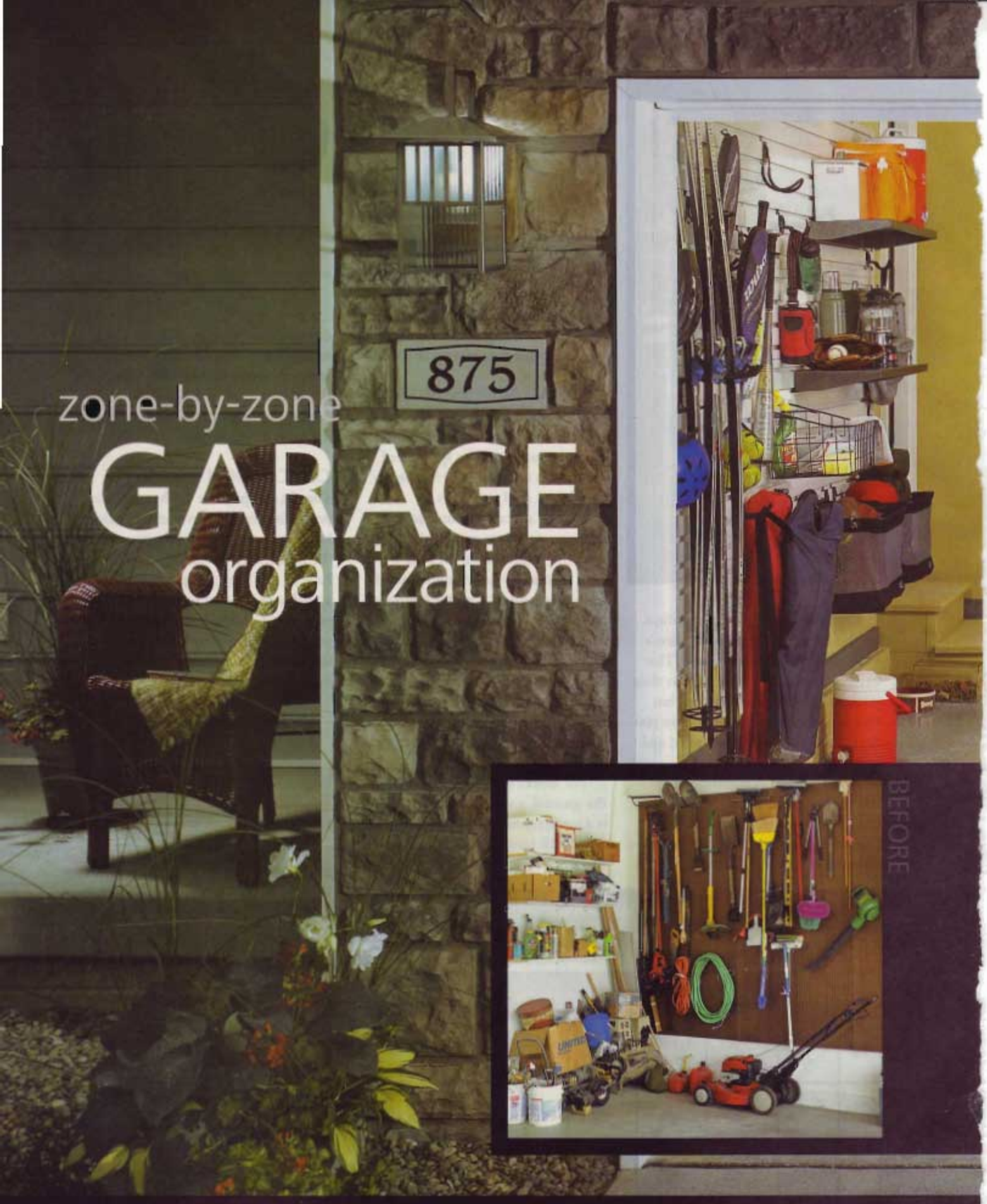
PRESSURE WASHER BUYER'S GUIDE

	Electric			Gas		
	Small	Medium	Large	Small	Medium	Large
PSI	1,300-1,400	1,500-1,600	1,700-2,000	1,800-2,200	2,300-2,500	2,600-3,000
GPM	1½	1½	1½	2	2-2½	2½
Cost	$100-$150	$125-$200	$200-$275	$250-$400	$350-$500	$450-$600

Rinse a big area quickly by attaching a water broom to your pressure washer.

zone-by-zone

GARAGE organization



BEFORE

If you think about it, the garage is really the ultimate multipurpose room. Sure, your spare bedroom may double as a home office, and your family room may transform into a home theater, but where else in the house can you park your car, store your sports gear, build projects, make household repairs, and tune up the lawn mower?

Of course, for any garage to fill those multiple roles, it must be exceptionally well organized. Fortunately, there is an abundance of "plug-and-play" garage storage systems that make organization easy. To organize this "garage gone wild," we used Gladiator's Ready-to-Assemble cabinets, along with GearTrack, GearPanel, and an assortment of hooks, hangers, baskets, shelves.

find

1 projects

3 sports/rec

your zone

The secret to an organized garage is to divide the space into "zones." For example, this garage is divided into a Project Zone, a Lawn & Garden Zone, and a Sports/Rec Zone. And if you think about it for a moment, you'll see how the items in your garage can be grouped into just a few zones, though they may go by different names. Then, once you've identified your zones, you can assign a space in the garage to each one and choose the best products to organize those zones. We'll talk more about how we assigned our garage space in the following pages. But first, I want to familiarize you with the products we selected to organize our garage.

Gladiator's Ready-to-Assemble line made perfect sense for us because the collection is so extensive. It seems for every storage problem we had, Gladiator had a solution. It's also readily available through several home improvement retailers and specialty stores, so much of what we needed, we purchased locally. Everything else we ordered through the website, GladiatorGW.com, and had delivered. And figuring out what we needed was simple using the Project Blueprint Estimator that's also on the Gladiator website. For a complete list of the components we used, visit WorkbenchMagazine.com.

2 lawn & garden

A set of casters and an MDF top convert two GearBoxes into a mobile workbench. The beveled edge of the tiled floor makes it easy to roll the cabinet in and out of its zone.

zone one: projects

The first project for our project zone was to assemble it. Everything in this zone, from the wall cabinets, to the workbench, right down to the tile floor, arrived in boxes of various shapes and sizes. It seemed a bit overwhelming at first, but it all turned out to be easy to assemble, and it took two of us just a few hours to assemble the cabinets and hang the GearTrack (see *Component Support* sidebar, page 71).

Next came the snap-together plastic tile floor. The benefits of a floor like this are many. First of all, it's much more comfortable to stand on than hard concrete. Secondly, it protects the garage floor from paints, solvents, and other chemicals that you use in your projects. Finally, if a tool or project piece should fall off the bench, the chances of survival are much higher if it lands on a plastic tile than if it hits the concrete.

Then we moved the 8-ft. modular workbench into place. With over 16 square feet of solid maple worksurface and tubular steel legs, this bench has the space and the backbone to support just about any project we plan to work on.

Tucked underneath the workbench is yet another worksurface. This one is comprised of two modular GearBoxes conjoined by an

MDF VersaTop. And since the GearBoxes are mounted on casters, this worksurface has the added benefit of being mobile. This makes it ideal for rolling into the center of the garage or even into the driveway for automotive maintenance, bicycle care, or any project that doesn't require a full-fledged workbench. And the doors and drawers of the GearBoxes enclose ample storage so you can easily stock them with the tools and supplies you need to avoid running back and forth to the project zone.

Note that there is space under the workbench for a third GearBox. But knowing that some projects are sit-down jobs, we opted to leave the space open and tuck a shop stool under there.

Flanking the workbench are two Large GearBoxes. These 6-ft. tall lockers have two adjustable shelves and one fixed shelf, along with a strip of pegboard on the inside of each door. We dedicated one Large GearBox to portable power tools and the other to paint, stain, oil, antifreeze, and other chemicals. Both remain locked when not in use as a safety measure.

Above the workbench, we installed two Wall GearBoxes. These mount directly to two of the GearTrack channels we installed earlier.

These GearBoxes, include an adjustable shelf and, like all Gladiator cabinets can be locked to keep the contents or the curious safe. There's also an open bottom shelf on these cabinets which has a large power cord grommet, so this space is ideal for battery chargers or a radio.

As for the GearTrack between and below the Wall GearBoxes, we used this space to add a shelf, along with a variety of hooks, hangers and tools holders. And because all of these components snap in and out out of GearTrack (and GearWall) channel quickly and easily, we can rearrange this space as often as we need to.

// COMPONENT SUPPORT //
GEARTRACK & GEARWALL

Nearly every Gladiator component is designed to snap easily in and out of their GearTrack and GearWall channel systems. Both systems get screwed to wall studs with Gladiator's color-matched screws.

GearTrack (*Photo, right*) is a 6"-tall, 48"-wide channel, that can accommodate a single row of hooks, baskets, and shelves. GearWall *(Photo, below right)* comes in panels that measure 12" tall and 96" wide, allowing you to arrange accessories in three rows.

All Gladiator GearBoxes can also be mounted to both GearTrack and Gearwall.

GearTrack

GearWall

zone two: lawn/garden

We used GearTrack as the foundation to organize our lawn and garden implements. We reasoned that the design of the shovel, rake, and wheelbarrow have scarcely changed in the past several hundred years, so it isn't likely that we will have to rearrange this wall once we make a home for each lawn and garden tool, so there would've been no advantage to using GearWall for this space.

Note also that we located this zone on the wall with the service door. This way we can take tools from garage to yard and back again without having to open and close the overhead door repeatedly, or have it standing open while we work.

We used several general-purpose hooks and hangers to outfit this area, along with one specialized wheelbarrow hanger to open up some floor space.

Locating the lawn and garden zone near the service door provides easy access. A specialized wheelbarrow hook saves floor space.

zone three: sports/rec

All work and no play makes the garage a dull bay. So our grand reorganization had to include a sports & recreation zone. We located this zone on the wall immediately adjacent to the house so we could quickly "gear up" on our way out the door, and then "gear down" on the way back in.

And with growing kids and changing seasons, we knew we'd have to make use of every square inch of storage space to organize the bikes, balls, bats, tents, tennis rackets, and everything else that goes along with an active lifestyle.

We also wanted the flexibility that GearWall offers to rearrange things as we transitioned from golf to skiing, or when the kids hang up their skates for their cleats.

Of course, covering the entire wall means working around light switches, electrical outlets, and in our case, a water spigot. Fortunately, GearWall is easy to cut with any hand or power saw, and then you can place GearWall Trim around the opening for a more finished look *(Photo, below)*. The trim can also be used to cover the exposed panel edges if you don't butt the panels into an adjoining wall.

Another great accessory that we used in this zone is the Vertical Bike Hook. This hook uses a bike's own weight to hold it vertically on the wall *(Photo, below right)*. And because the bike is only connected at one point, it's easy to lift on and off.

Otherwise, arranging our sporting gear was a simple matter of matching the best hooks, hangers, and baskets to each piece of equipment.

—Written by Bill Link

// FLOOR COVERINGS //
SOLIDS, GRATES, OR ROLLS

We chose solid tiles with a beveled ege border for the small floorspace we covered. But that isn't the only option from Gladiator. For example, if you've got a floor drain in your garage, you can substitute a grate tile for any solid tile to keep the drain open. Or, if you'd like to cover the entire floor without the expense and time of individual tiles, you should consider Gladiator's Roll Floor Covering.

GearWall panels can be cut and trimmed to fit around switches and outlets.

A Vertical Bike Hook holds a bike securely without crowding the wall.

garage storage options

power tools
kids toys
pet supplies
car tools
sports gear
bicycles
yard stuff
kayak
gardening
golf clubs
baseball stuff
wrenches
cleaning supplies
automobiles
recycling
lawn mower
boat motor
camping stuff

Ever since the first garage was attached to a home, this one-time lowly carport and outbuilding has been evolving into a full-fledged member of the floorplan. And now this utilitarian space ranks with the kitchen and bathroom as one of the most important rooms in the home.

Not surprisingly, this has spawned an industry devoted to providing more, better, and increasingly stylish products for furnishing this space. Whether your garage storage challenges are limited to a couple of wayward garden hoses or an entire stable of high-performance bicycles, there's a solution out there. Or if your garage tastes go more to the lavish than the industrial, there's something for you, as well. While we can't catalog all of the products currently on the market, we did want to highlight a few that we feel offer something truly unique.

21st Century NAILS

Anyone born prior to 1990 should be able to recall at least one instance of their father or grandfather solving a garage storage problem by driving a nail into an exposed wall stud. The offending item was hung, however precariously, from the nail and then surveyed for the likelihood that it would bend the nail and crash to the floor. If there was a better than 50-50 chance of that, a second nail was called for. My own father seemed to favor frighteningly long, pre-rusted nails for this work. The result was a garage that looked something like an inverted porcupine that had swallowed a rummage sale.

Today's garage demands a more elegant solution. And few solutions are as elegant as the Racor InterChange for item-by-item storage.

Many of Racor's best solutions are designed to optimize vertical space, from stacking bicycles on a self-standing rack to lifting totes to the ceiling.

Interchangeable hangers that snap on and off a Wall Dock make the Racor Interchage system highly adaptable.

The core of the InterChange system is a Wall Dock Mounting Bracket *(Inset Photo, below)*. This attaches to a wall stud with a couple of screws that get hidden when the unit is assembled. Then you can connect general-purpose or specialized hangers to the Wall Dock. The hangers clip on and off the dock easily, so you can move or change them anytime. Each InterChange hanger comes with a Wall Dock, or you can buy Wall Docks in packs of three.

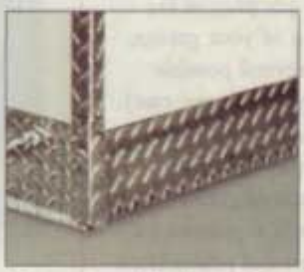
Cycle Storage—You can also count on Racor to solve your bike storage problems. The company offers nine different ways to store bikes in groups *(Photo, above left)* or individually. One of those single-bike solutions is a hoist that lifts the bike up to the ceiling.

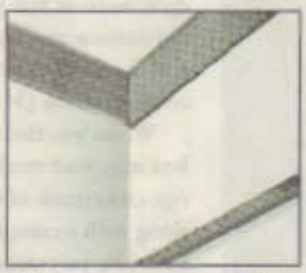
Storage is Looking Up—Speaking of hoists, Racor also makes a 4-ft. x 4-ft. platform, called the HeavyLift, that allows you to lift up to 250 pounds of gear up and out of the way *(Photo, above right)*.

Pegboard PIZZAZZ

Gone are the dark days of plain-brown pegboard. Now your tools can bask in the glow of diamonds when you hang them from Diamond Life's Pegboard X2 panels or strips *(Photo, below left)*. This pegboard requires no additional framing (it has clearance for hooks built into it) and is made from durable metal. A single 8-ft. strip can hold up to a half-ton of gear.

The only downside to this stuff is that it's really hard to draw tool silhouettes over all those little diamonds. But perhaps being able to deck out your entire garage with matching base, crown molding, corner bead, and switch plates *(Photos, below)* will ease the disappointment.





More than just pretty faceplates, Gupta Permold's line of Diamond Life Gear storage and trim accessories are durable and easy to install. Other components in this system include diamond-plate shelves, flooring, and slat wall.

RIDE THE FREEDOMRAIL

If the FreedomRail Garage system from Schulte Storage looks familiar, it's because you might have seen something very similar to it in your closet. Schulte has a long history of organizing closets, pantries, and home offices, so it only made sense to start with the same standards and shelves as the foundation for a garage system.

But don't think for a minute that this is just a closet organizer installed in the garage. Schulte added several components to the system that are specifically designed for use in this demanding space.

GO-Boxes—For example, FreedomRail Garage includes four cabinets built specifically to withstand the rigors of garage organization. The cabinets, called GO-Boxes, are made of durable melamine and finished in granite gray. They're also highly versatile because you can choose just open cabinets or you can outfit them with doors, drawers, adjustable shelves, or "cubbies."

The largest GO-Box is a locker that's large enough to hold two sets of golf clubs *(Photo, below right)*. Or this cabinet can serve as a place to store winter coats and other seasonal items.

All of the GO-Boxes are intended to be mounted on the FreedomRail standards to keep the garage floor completely clear.

Get on the Grid—Another excellent component of this garage system is the "Grid" *(Photo, right)*. As the name implies, this is a 2-ft. x 4-ft. steel grid that can be mounted vertically or horizontally. Once the Grid is mounted, any of Schulte's dozens of hooks and hangers can be locked in place without additional hardware. It's a highly versatile, fully adjustable way to store tools, lawn and garden equipment, and sporting goods. And it's perfect for odd spaces (such as between two windows) where other racks or shelves won't fit.

Online Design—Schulte even makes it easy to figure out how to organize your space with their products by providing a design tool on their website. You simply plug in the dimensions and layout of your garage, and the tool returns several possible configurations (34 options in my case).

When you find the design that best suits your needs, you can print out a schematic of the configuration, along with a complete components list, including part numbers and prices. Then use the Dealer Locator feature to find the nearest supplier to fill your order.

Based on the same infrastructure of standards, adjustable brackets, and shelves that Schulte employs in closets, pantries, and offices, FreedomRail Garage is a complete system of multipurpose and item-specific organizers.

PRODUCT GUIDE:

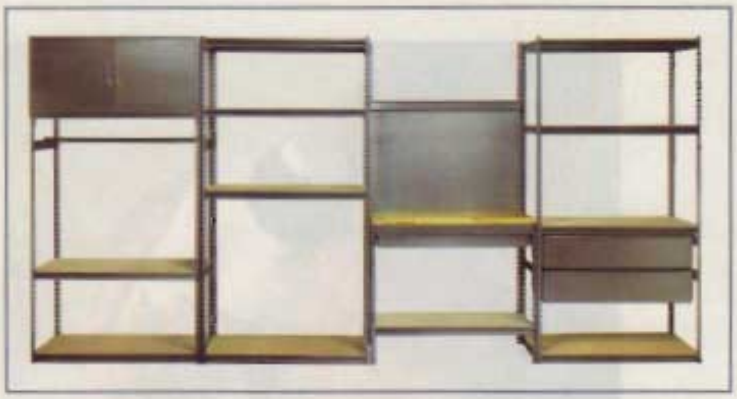
Racor
800.783.7725
Racorinc.com

Gupta Permold (Diamond Life Gear)
888.983.4327
DiamondLifeGear.com

Schulte Storage (Freedom Rail)
800.669.3225
SchulteStorage.com

Gorilla Rack
800.736.7225
GorillaRack.com

Slide-Lok
866.835.1759
Slide-Lok.com



Gorilla Rack calls on their experience in industrial pallet-racking to deliver consumer-grade storage in complete packages or individual components.

GARAGE GORILLA

In the category of nearly indestructible storage, Gorilla Rack can thump its chest as the alpha primate. That's not surprising when you consider that this line evolved from parent company Rapid Rack's collection of industrial warehouse racking.

But the system isn't completely without frills. Along with the pallet-rack style shelves, a locking storage cabinet, and two big storage drawers *(Photo, above left)*, the Gorilla Garage System also includes an integrated workbench with a butcher block top, metal pegboard backdrop, and a shallow storage drawer underneath.

On a smaller scale, Gorilla Rack also offers a worktable *(Photo, above right)*. The K-shaped legs of the table provide plenty of support while opening up the space underneath it just a bit. The worktable is available with either a solid alder or galvanized steel top.

GARAGE GRANDEUR

If you've embraced the idea that a garage is just another really big room in your house, without the hassle of wall-to-wall carpet, then Slide-Lok has a garage storage system for you. In fact, the company's literature presents their modular system of cabinets, worksurfaces, slat wall, and color-coordinated floor coverings as "garage interiors" rather than garage storage.

And that's not just marketing rhetoric. The cabinets, in particular, have many of the same qualities you'd expect in high-end kitchen models, such as plywood rather than particleboard construction, sliding dovetail assembly (thus the name Slide-Lok), European hinges, full-extension drawer glides, and laminate countertops. You can even coordinate the countertop color with your floor coating.

Slide-Lok combines style with storage by offering cabinets in four finishes, along with laminate countertops and color-coordinated floor coatings.

The Slide-Lok system is available in a variety of packages or as individual components. You can choose to install them yourself or hire a certified Slide-Lok installer in your area.

—Written by Bill Link

HOMAX "DIAL-IT-IN"

Texture Selector

Select the perfect spatter pattern to blend new texture with old after a drywall patch or repair.

Select your spatter by dialing in the adjustable nozzle on the new Homax Spray Texture can.

The smallest details often make the biggest difference in a project. Wall texture is a perfect example of that. After completing a perfect drywall patch job, if you can't match the existing texture, the repair will stick out like a sore thumb.

The availability of aerosol spray textures has at least eliminated the need to rent a professional texture gun and compressor. Unfortunately, the orange peel or knockdown texture that comes out of a can is rarely a perfect match for what's already on the wall. And until now, there really wasn't much you could do about it.

Fortunately, a new line of adjustable-nozzle aerosol textures from Homax lets you fine-tune the spray pattern until it blends perfectly with the existing surface. Each can of texture has an adjustable nozzle that lets you select a heavy or light spatter, or somewhere in between.

The spray texture is available in a water-based formula for low odor and easy clean up, and an oil-based version for faster drying. Both orange peel and knockdown texures are available in either formula.

Depending on how heavy a coat you apply, each 20-ounce can will cover between 60 and 110 square feet. Expect to pay about $10 per can.

Call 800-729-9029 or visit HomaxProducts.com for additional information and a store locator.

Gorilla Glue now offers a "dries-white" formula that's just as strong and waterproof as the original.

GORILLA GLUE

Goes Pale

For all its strength and qualities, one problem with polyurethane glue is its unattractive brown color. That's generally not a big deal for dark wood or painted projects, but for household repairs, a big brown glue line is just plain ugly.

Fortunately, Gorilla Glue is now available in a clear formula that dries white. That makes it perfect for working with lighter woods, crafts, and home-repair projects.

Other benefits of the new formulation are a faster set time (between 30 and 60 minutes) and a fast initial tack with about 10 minutes of open time.

An 8-ounce bottle of Gorilla Glue sells for about $15. Visit GorillaGlue.com or call 800-966-3548 for more information.

PRESTO PATCH

No mixing, comes in a square bucket that fits a 6" putty knife, has a smooth working consistency, dries in 30 to 60 minutes, and can be sanded, filed, drilled, nailed, and painted—Presto Patch, indeed. It comes from DAP and you can use it to fill and repair a multitude of interior and exterior surfaces, including concrete, plaster, stucco, and wood. Check out DAP.com or call 888-327-8477 for more.

REPAIRS ARE ON A ROLL WITH HENKEL'S

Loctite Power Grab

Small repairs or installations—like replacing a broken shower tile or hanging a mailbox on the house—can turn into big messes when the only solution is a powerful adhesive from a can or tube.

But now, thanks to Henkel Adhesives, you can get the same construction-adhesive strength without messing with a caulking gun. The answer is Henkel's new Loctite Power Grab On a Roll. But don't mistake this for tape. It's actually a solid strip of acrylic polymer adhesive—no cloth, foam, or paper, like conventional adhesive tapes.

The adhesive is permanent, clear, waterproof, and resistant to UV light. It bonds instantly and withstands temperature fluctuations from -40°F to 248°F. Just a 6" strip of the adhesive will hold up to 11 pounds.

A complete roll is 60"-long and sells for about $7. For more information, including a list of retailers in your area, visit the Loctite web site at LoctiteProducts.com or call 800-321-0253.

As strong as construction adhesive, but convenient as tape.

POWER PADLOCK

Whether it's a table saw or a television, there are times when limiting access to an electrical device is in everyone's best interest. A great way to do that is with a simple new device called the VoltBolt.

Just plug the VoltBolt into the wall, and plug the tool or appliance into the VoltBolt receptacle. Then simply turn the key to lock the cord plug in and the power out.

The VoltBolt sells for $25 and is available at TheVoltBolt.com.

Tool Report

Multiple miter saws, cord control, and a metal-detecting stud finder.

1 Evolution
Rage III

MIGHTY MITER—In the February issue of *Workbench*, we honored the Evolution Rage 7¼" circular saw as one of our Top 10 Innovative Products for 2007. The saw earned the distinction for its ability to cut steel, aluminum, and wood with equal ease. It even cut the metals with virtually no sparks, burrs, or heat.

Now Evolution has applied the same technology to a 10" sliding compound miter saw, dubbed the **Rage III (1)**. So if you've been waiting to erect that battleship in the backyard, this might be just the tool you need.

Of course, you may want to start off with smaller stuff, just to get the feel of it. Metal fence posts, iron railings, steel studs, and rebar would all make good practice. And of course, feel free to cut lumber as wide as a 2x10 without changing the blade. When you're ready for the battleship, the Rage III will be, too. This one will cost you about $275.

2 Craftsman
7¼" Miter Saw

MINI MITER—Or perhaps your mitering needs run to a slightly smaller scale, such as trim, molding, or 2x4s. In that case, you'll want to consider the **Craftsman 7¼" Miter Saw (2)**. This compact powerhouse weighs in at just 16 pounds but sports a spunky 9-amp, 5,000 RPM motor driving the blade. And it's certainly not short on versatility. With a 90-degree miter range (45 degrees in each direction) and dual bevel capability (including preset stops at 0, 33.9, and 45 degrees), it's ideal for compound cuts in most molding, as well as spindles, stair rails, and other small parts.

The combination of a D-handle, a 40-tooth, carbide-tipped blade, and a laser cutline indicator enhance the control, quality of cut, and accuracy of this mini-miter saw. Not bad for $90.

3 CordPro
CordPro Mini

CORD CONTROL—It seems some tools still come with cords. And sometimes those cords are quite long and difficult to manage, especially for storage. In those cases, **Cordpro Mini (3)** is a good solution. You may be familiar with the full-size Cordpro, the big, plastic donut-shaped cord reel that's been around for years. This is simply a more compact version that's perfect for corded power tools, vacuum cleaners, or even small household extension cords.

Just like its big brother, the Cordpro Mini divides the cord into two compartments. This lets you unwind only as much cord as you need, from just one end of the cord or from both. Any extra cord remains inside the reel where you can't trip over it or wrap it around something. A three-pack of Cordpro Minis goes for about $20.

4 Zircon
MetalliScanner m40

METAL SCAN—Electronic stud finders have come a long way from their early days when they were scarcely better than tapping on the wall until the sound changed. Now these finders do a commendable job of distinguishing an empty cavity from a solid framing member. One place where they have continued to lag, though, is in scanning through lath and plaster walls to determine stud locations. The new **MetalliScanner m40 (4)** from Zircon has eliminated that shortcoming, though. The m40 is a metal-detecting scanner that locates the nails that connect lath to the framing. It can locate ferrous metals (magnetic) up to 4" below the wall surface and non-ferrous metals (non-magnetic) up to 2" below the surface.

Additionally, the m40 has both wide-field and pinpoint scanning capabilities. For wide-field scanning, hold the blue coil in full contact with the surface. For pinpoint scanning, simply point the tip of the coil at the surface. LED lights will alert you as you approach and ultimately locate the nail.

Besides locating nails, the m40 is also great for determining the location of ductwork, conduit, or metal plumbing inside your walls. Expect to pay about $40 for this model.

5 ProTool Manufacturing
Ratcheting Hex Key Wrench

FOR MORE INFO:

Evolution Power Tools
EvolutionPowerTools.com
866-386-8665

Craftsman
Craftsman.com
800-377-7414

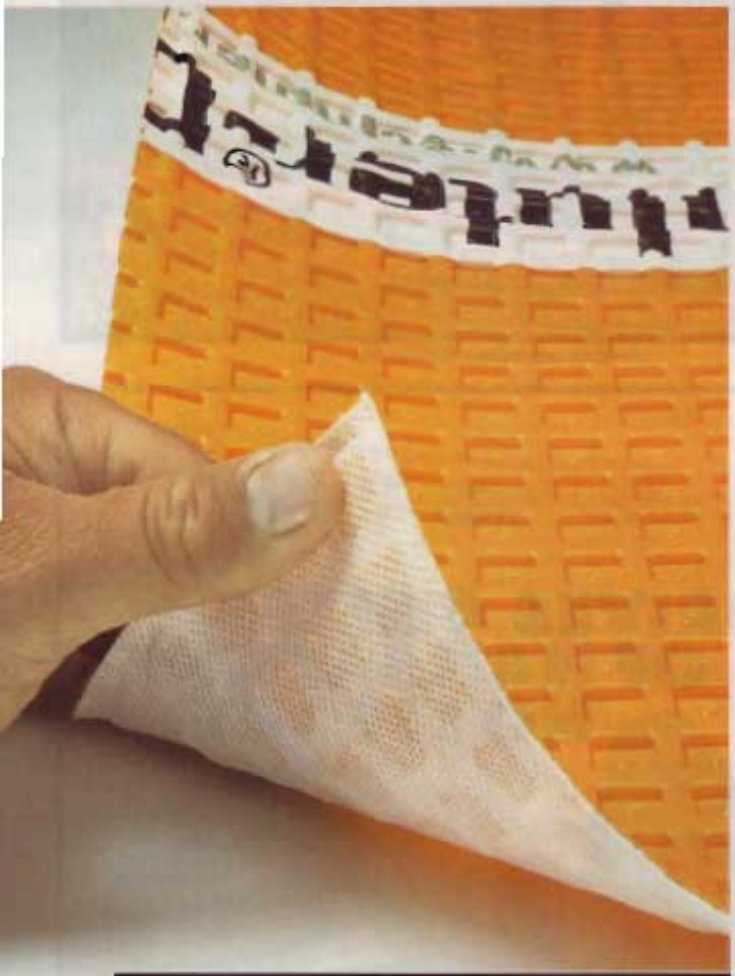
CordPro
CordPro.com
800-700-6784

Zircon
Zircon.com
800-245-9265

Professional Tool Manufacturing
RatchetingHexWrench.com
800-597-6170

RATCHETING HEX WRENCH — Ratcheting tools may be the greatest innovation of our time. Never mind cell phones, laser surgery, or the Clapper—the ability to reposition a lever without disengaging the fulcrum is truly life-changing. In other words, if you don't have to take the socket off the nut every time you need to move the handle, that's pretty cool.

And now the hex wrench has joined sockets, box-end wrenches, and screwdrivers in benefiting from ratcheting technology with the new **Ratcheting Hex Key Wrench (5)** from Professional Tool Manufacturing. The wrench comes in metric and SAE versions, and both include nine key sizes. The ratchet is built into the adjustable handle to allow for quick, easy operation even in confined spaces. Look for the Ratcheting Hex Key Wrench to sell for about $17.



Fleece on the underside of Ditra wicks away moisture. A waffle pattern on top holds mortar to create a solid structure.

DITRA—A BETTER WAY TO LAY

Tile Floors

Ceramic, stone, and porcelain tile are attractive and easy to install. But they can also be fragile. This solution "uncouples" tile from the underlying problem.

For all the qualities of a tile floor — ease of installation, beauty, simple maintenance — there is one fundamental flaw: It's only as durable as what lies beneath.

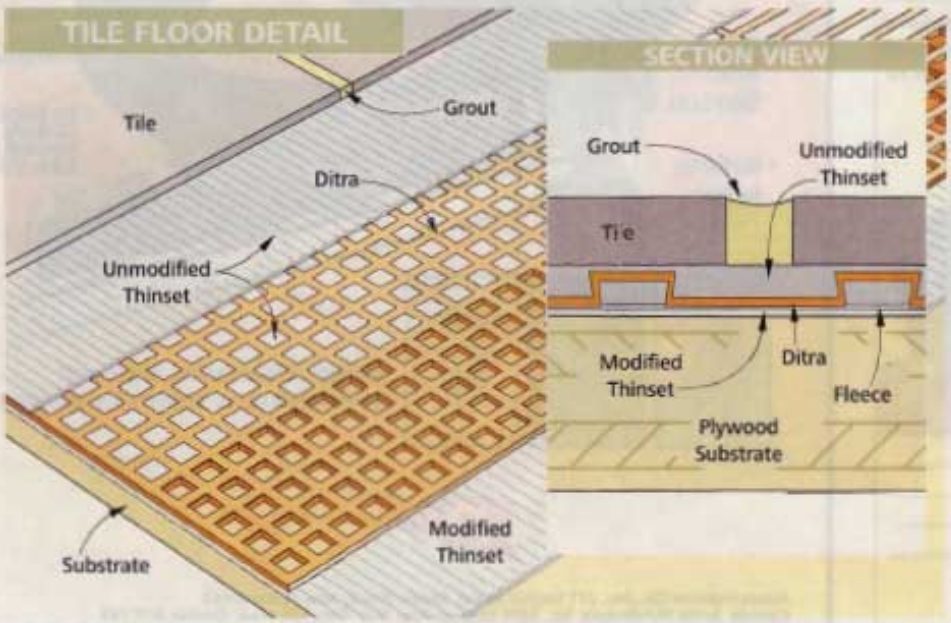
For example, if the wood subfloor underneath a tile floor flexes, the tile can separate or "delaminate" from the mortar. Or if the concrete floor beneath the tile cracks, the tile will crack along the same line.

Since building an indestructible substrate isn't realistic, the only solution is to "uncouple," or islolate, the tile from what's underneath it. This was a standard practice years ago when masons installed tile over a thin bed of sand. The sand acted as a barrier that absorbed cracking and flexing without affecting the tile. Unfortunately, the complexity of this technique caused it to go by the wayside.

Now, however, there is a much simpler solution from Schluter Systems called Ditra *(Photo, left)*. It's a polyethelene mat that gets installed between the subfloor and the tile. This creates an "uncoupling" layer to isolate the tile from movement or cracking in the substrate *(Illustrations, below)*. But Ditra is better than sand because it also provides a moisture barrier and increases a tile floor's durability under heavy loads.

Uncoupling—According to Schluter, Ditra protects tile "by neutralizing the differential movement stresses between the substrate and the tile"—which is a fancy way of saying that even if the substrate moves, the tile won't. That's because the "open-rib structure" of the Ditra absorbs the movement without transferring it to the tile.

Vapor Barrier—One other important role of Ditra is to stop the movement of moisture through the tile floor structure, whether that moisture comes from above or below.



1] Apply a bed of latex-modified thinset mortar directly to the substrate using a ¼" x ¼" notched trowel.

2] Roll Ditra onto the mortar with the fleece side down. Simply butt pieces of Ditra together to cover the entire floor.

3] Press the Ditra using a sponge float to solidly embed the fleece layer into the thinset mortar.

4] Use the flat edge of your notched trowel to apply a "scratch" coat of unmodified mortar to fill the cavities.

5] Now use a ¼" x ¼" notched trowel to apply the "bonding" layer of unmodified mortar directly over the scratch coat.

6] Install the floor tile as usual, using spacers to ensure uniform alignment. Be sure to set the tiles firmly in the mortar.

In the case of excess moisture coming from below, such as from new concrete or a damp basement floor, open channels in the mat provide a route for the moisture to escape before it can damage the mortar directly beneath the tile. When water comes from above, whether from spilling or mopping, Ditra stops the moisture before it can penetrate the substrate. This is especially valuable with wood subfloors, which can warp if they get wet.

Load Bearing—Ditra may not look all that tough, but don't be fooled. All those dovetail-shaped cavities that give the mat its waffle-like appearance also make this stuff incredibly strong. Each cavity gets filled with mortar, which creates hundreds of tiny pillars. And the shape of the cavities locks the thinset bed into the mat, so the tile won't lift off the mat.

The end result is that Ditra and the tile become a virtually incompressible and inseparable assembly. That means heavy appliances, furniture, or extreme traffic won't cause the tile to flex and break.

Installation—Installing Ditra is quite simple, as you can see in the *Photos* above.

One interesting point is that it requires two different types of mortar: unmodified (no latex) between the Ditra and the tile, and modified (latex added) between the substrate and the Ditra. The reason for this has to do with the way these different mortars cure.

Unmodified mortar requires moisture to cure. So when sandwiched between the impervious Ditra and the nearly impervious tile, the mortar retains enough hydration to cure to its full strength.

By contrast, latex-modified mortar relies on air for its curing process. Being sandwiched between Ditra and tile would starve the mortar of air and cause it to be weak. But when placed directly on concrete or wood, enough air is allowed in and around the mortar to ensure that mortar cures to full strength.

For a more detailed explanation of how Ditra works, along with installation instructions and a dealer locator, visit the company's website, Schluter.com. Or request literature by calling 800-472-4588. ■

—Written by Bill Link, illustrated by Erich Lage

take a seat... & reinvent it!

Recycling certainly helps save the environment. We all know that. But recycling can save your decorating budget too. Take these chairs for example. After purchasing them from thrift stores for a grand total of $34, we used paint, stain, and fabric to breathe new life into them. The result? Stylish accent chairs—and a deed well done for the planet!

Trace the designs, then paint them with gold, orange, and green.

For the flower centers, dab on brown paint with a round craft sponge.

Dip the brush handle into gold paint, and make dots on the flower center.

Paint the outline accents on the petals and leaves with a detail brush.

flower power

IDEA Perk up an outdated plastic chair with a mod floral motif using paint specially made for plastic.

COST $26

TIME 6 hours

HOW Start by cleaning the chair, and then prime it with a spray-on primer for plastic.

Using a brush-on paint for plastic, apply a base coat of light ivory. Once it's dry, you can add the flower-and-leaf designs using the patterns available at WorkbenchMagazine.com. After transferring the patterns to the chair, follow the steps shown at *left* to paint the designs.

When the paint is dry, brush on a coat of sealer for plastic, and let it dry.

SUPPLIES **Chair:** Purchased locally; **Primer:** Rust-Oleum Primer For Plastic, RustOleum.com; **Paint:** Plaid Paint for Plastic and Sealer for Plastic, PlaidOnline.com

stunning stripes

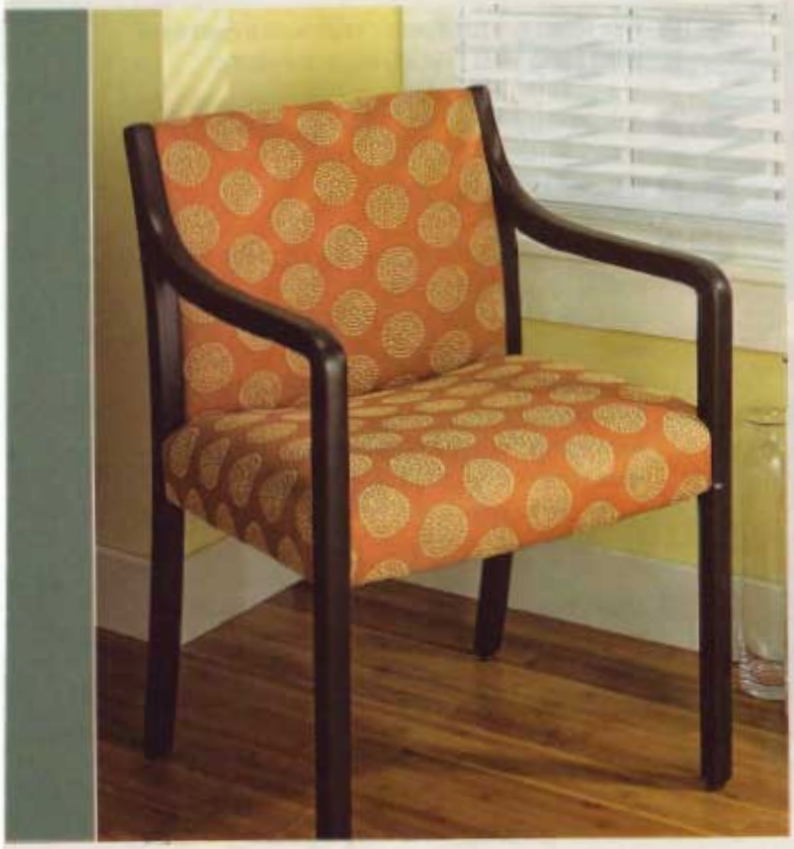
IDEA Refresh a classic wood dining chair with a coat of spray paint and a coordinating striped fabric.

COST $16

TIME 9 hours

HOW If the chair has a build-up of paint, you'll need to strip it first. After stripping, sand thoroughly, apply a coat of spray primer, and let it dry. Now apply a couple coats of spray paint in the desired color, letting it dry between coats. Upholster as desired.

SUPPLIES **Chair:** Purchased locally; **Paint Stripper:** HomeDepot.com; **Paint:** Rust-Oleum Painter's Touch (Oregano), RustOleum.com; **Fabric:** Waverly #669861, JoAnn.com



modern medallions

IDEA Give a curved-frame armchair up-to-the-minute style with walnut stain and new upholstery in a contemporary pattern.

COST $110

TIME 8 hours

HOW Remove the old upholstery, and save the old fabric. (You'll use it to create patterns for the new fabric.) Strip and sand the old wood finish, apply a walnut brown stain, and brush on a couple coats of polyurethane finish. Reupholster the chair seat and back cushions.

SUPPLIES **Chair:** Purchased locally; **Stain:** Minwax Gel Stain, Walnut, Minwax.com; **Fabric:** Duralee #14767-681 Banana/Mango, Duralee.com

Close-Up: Kreg R3 Jig

A POCKETFUL OF FASTENING POWER

To attach the rear part of the cabinet top, and to assemble the trays, we relied on pocket-hole joinery. The reasons are simple: pocket-hole joinery is fast, easy, and sturdy.

If you're not familiar with pocket-hole joinery, you'll want to be. It's a versatile method that can be used in everything from cabinetmaking to deck building *(Photos, above)*.

The pocket joint is easy to understand. There's an angled hole (the pocket) in one workpiece that has a smaller screw shank hole at the bottom. By driving a screw into this hole, it pierces the mating workpiece and draws the two tightly together.

Pocket-hole joinery has been around for many years, but one company, Kreg Tools, has made it easy with their well-designed pocket-hole jigs. The company's latest model, the R3 *(Photo, above)*, is aimed at do-it-yourselfers and is available at Lowe's.

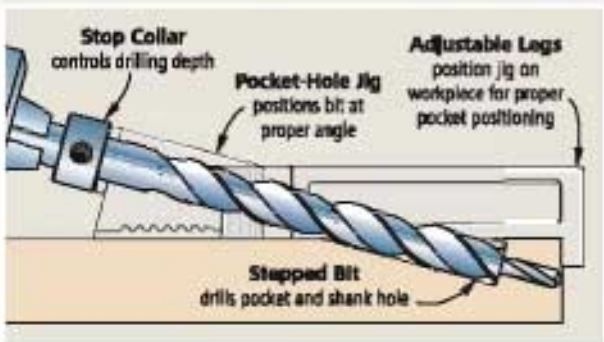
To use the jig, first adjust the legs to match the thickness of material you're using. Then set a stop collar on the stepped drill bit. That ensures that the bit will bore the correct depth pocket, and it locates the screw hole centered on the stock thickness.

To use the R3, clamp the jig to one of the workpieces to be joined, slip the drill bit into the sleeve, and then drill until the stop collar bottoms out *(Illustration, below left)*. You don't have to drill into the mating workpiece.

After drilling the pockets, align the two mating pieces, and then drive in the screws. The screw shank is smaller than the hole it fits into, so the screw won't grab the workpiece that has the pocket. The threads bite into the mating piece only. The "washer-style" screw head seats into the bottom of the pocket and pulls the two pieces together *(Illustration, below right)*.

Once the screws are tight, the joint is very unlikely to come apart, even without glue (though glue can be used). The pockets can usually be hidden, or they can be filled with a special plug.

For more information on the R3, as well as other pocket-hole jigs made by Kreg Tools, visit KregTools.com.



1] After positioning the pocket-hole jig on the workpiece and setting the stop collar on the bit, drill until the bit bottoms out.

2] To complete the joint, drive a screw into the mating workpiece. This draws the two pieces tightly together.

workbench® STORAGE LOCKERS

Issue 303 Volume 63 Number 5 October 2007

MATERIALS LIST

MATERIAL LIST

	Part	Qty	Size	Material
BASE				
A	BASE ENDS	2	¾" x 19⅞" x 17¼"	MDF
B	BASE DIVIDER	1	¾" x 19⅛" x 17¼"	MDF
C	BASE BACK	1	¾" x 17¼" x 33"	MDF
D	STRETCHERS	2	¾" x 3" x 16⅛"	MDF
LOCKER UNIT				
E	LOCKER SIDES	2	¾" x 11" x 42"	MDF
F	LOCKER BACK	1	¾" x 33" x 42"	MDF
G	BACK OVERLAY	1	¼" x 33" x 42"	Beaded Ply.
H	SEAT PANEL	1	¾" x 20¾" x 36"*	MDF
I	LOCKER TOP	1	¾" x 12" x 36"*	MDF
CUBBY UNIT				
J	CUBBY ENDS	2	¾" x 8" x 11¾"	MDF
K	CUBBY DIVIDERS	2	¾" x 8" x 11"	MDF
L	CUBBY BACK	1	¾" x 8" x 33"	MDF
M	CUBBY TOP	2	¾" x 12" x 36"*	MDF

*These pieces are sized to overhang locker by ¾" on each end. Shorten accordingly if you will be joining multiple lockers side by side.

HARDWARE:

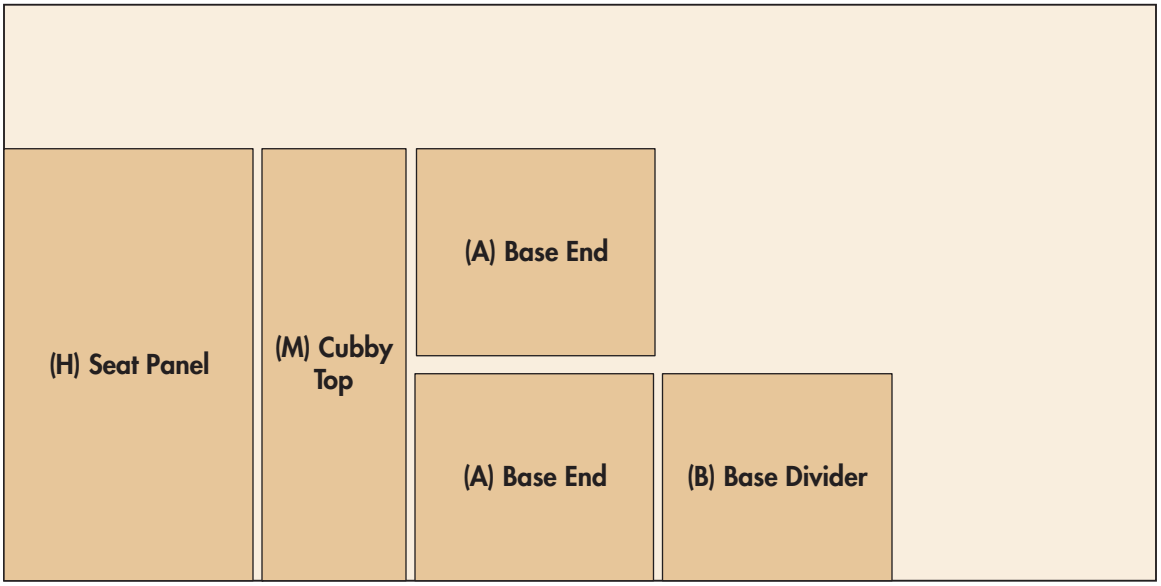
- (45) 1¼" Pocket Screws
- (16) 7mm x 50mm Connector Screws
- (20) ⅝" Wire Brads
- (4) #12 x 3" Fh Woodscrews
- (2) Coat Hooks with Screws
- (20) ⅝" Wire Brads

CUTTING DIAGRAM

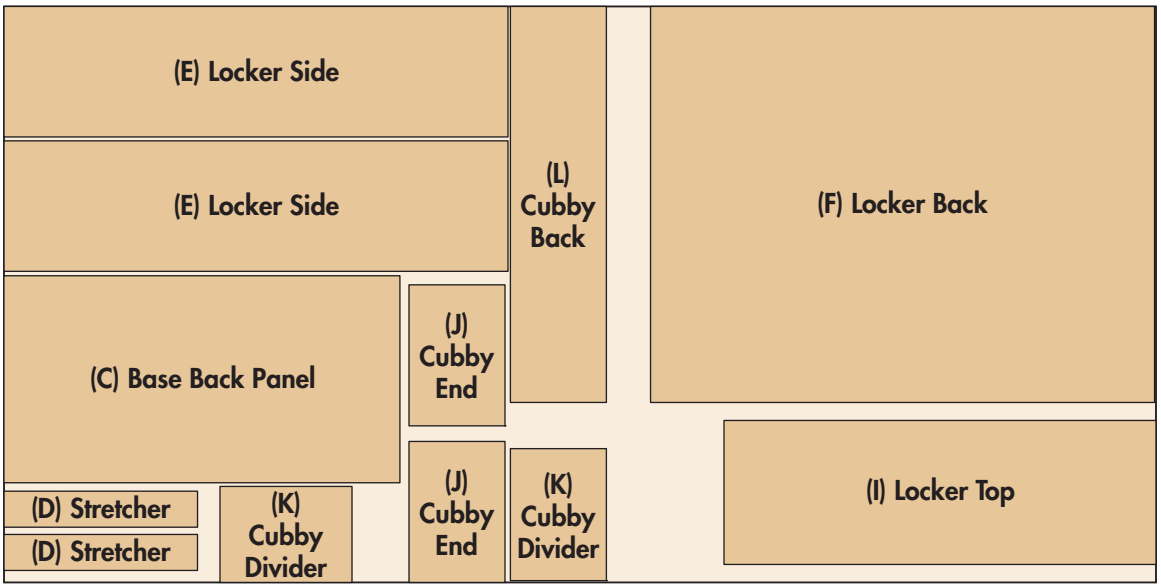
¾" x 48" x 96" MDF

Issue 303 Volume 63 Number 5 October 2007

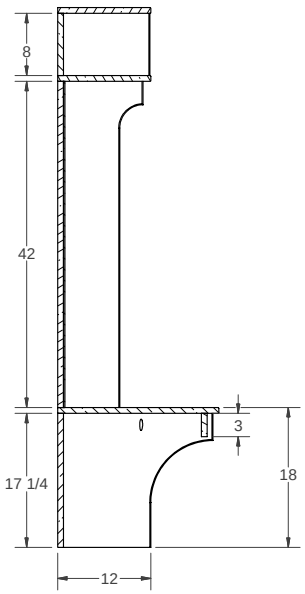
CUTTING DIAGRAM



¾" x 48" x 96" MDF



¾" x 48" x 96" MDF



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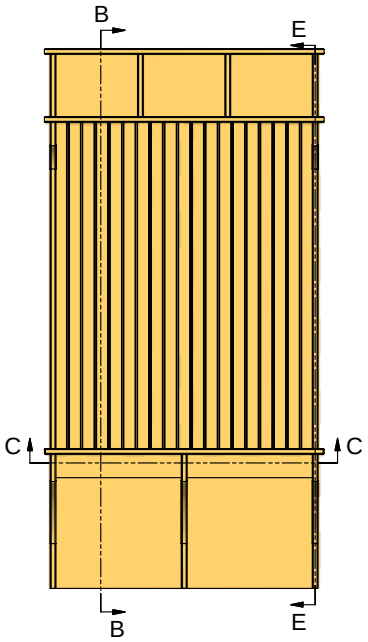

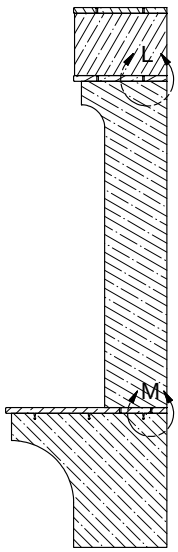

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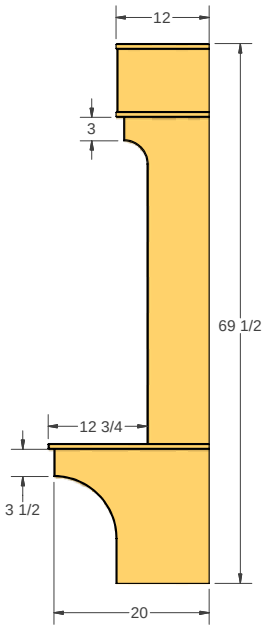

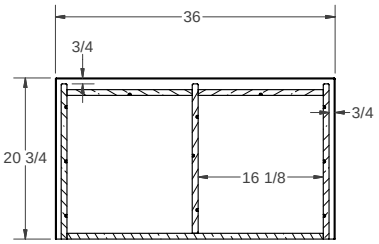

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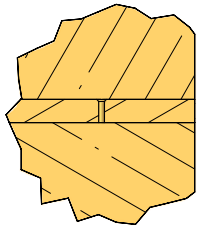
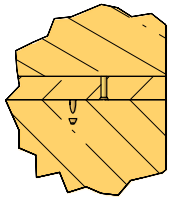


DETAIL L



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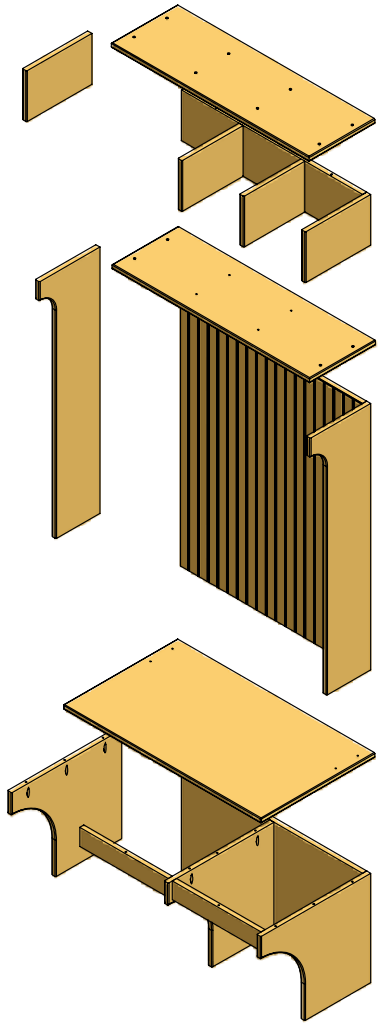
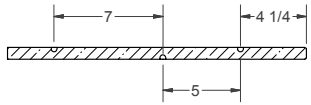
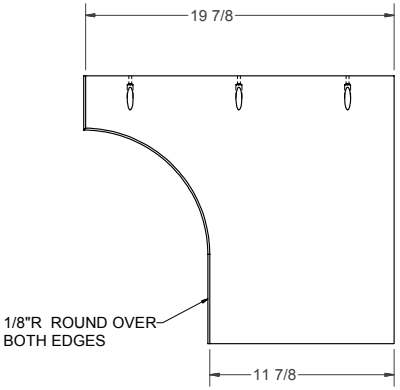


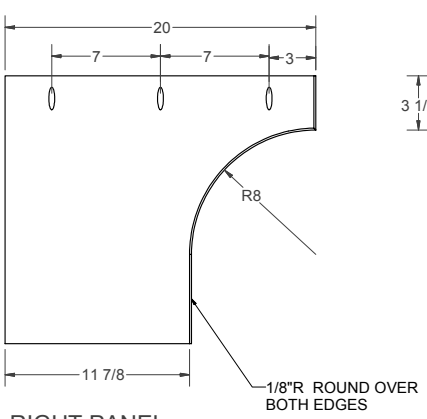
WORKBENCH #303	MUDROOM LOCKER	DONOVAN	DATE: 5.14.07	SHEET: 1



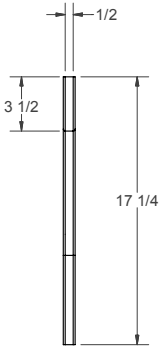
SECTION A-A

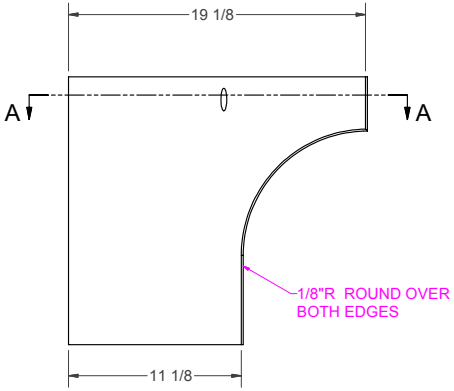


LEFT PANEL

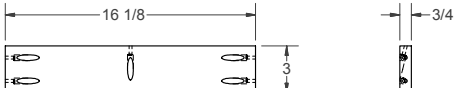


RIGHT PANEL



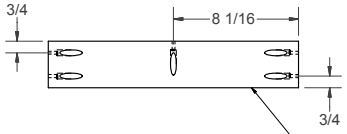


CNTR PANEL



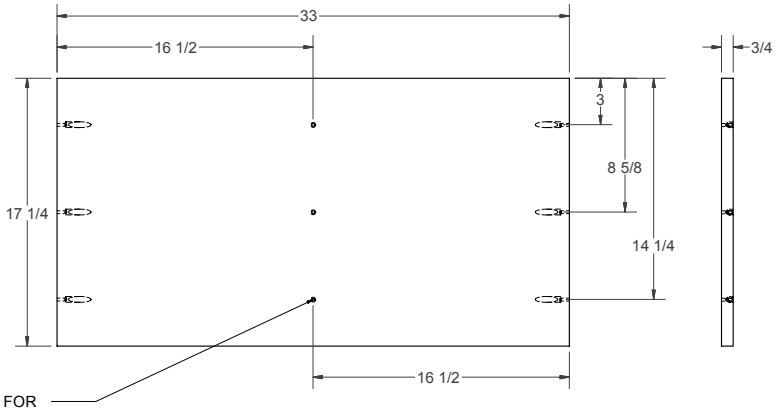
BASE FASCIA

1/8"R ROUNDOVER
OUTSIDE BOTTOM EDGE
ONLY



BASE FASCIA

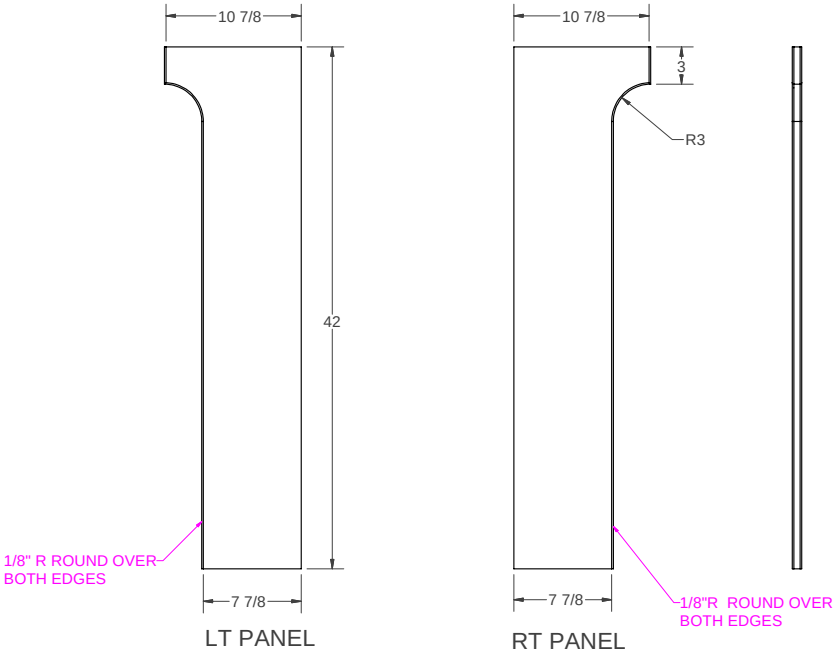
1/8"R ROUNDOVER
OUTSIDE BOTTOM EDGE
ONLY



COUNTERSINK FOR
7 x 50mm CONFIRMAT

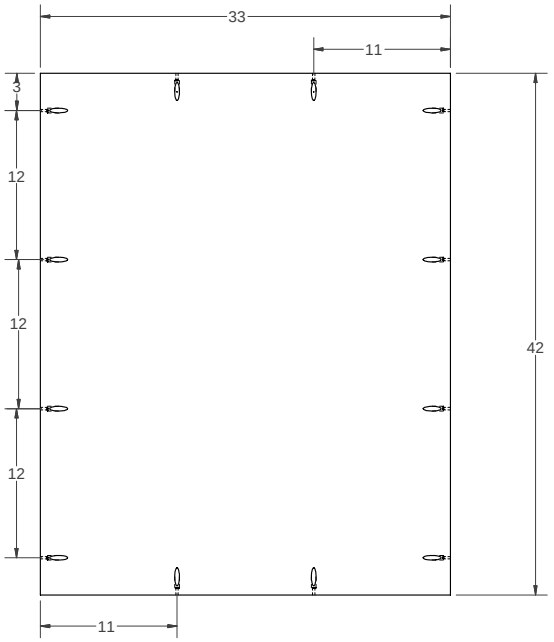
BASE BACK PANEL

WORKBENCH #303	MUDROOM LOCKER	DONOVAN	DATE: 6.18.07	SHEET: 2



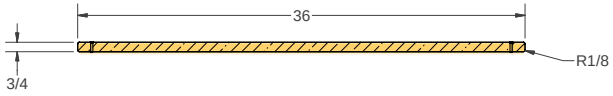
LT PANEL

RT PANEL



BACK PANEL

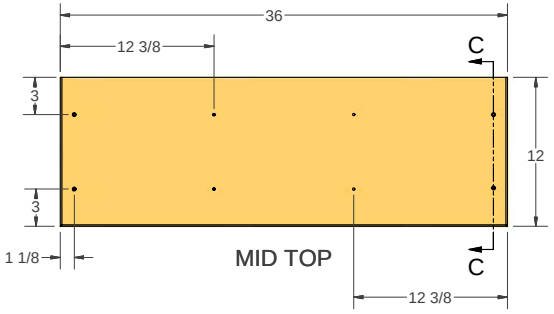
SECTION B-B



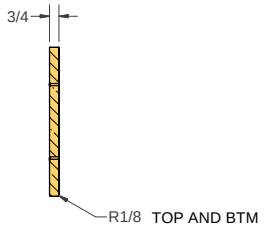
TOP AND BTM
3 SIDES

SEAT

NOTE:
COUNTERSINK FOR
7 x 50mm CONFIRMAT



MID TOP



SECTION C-C

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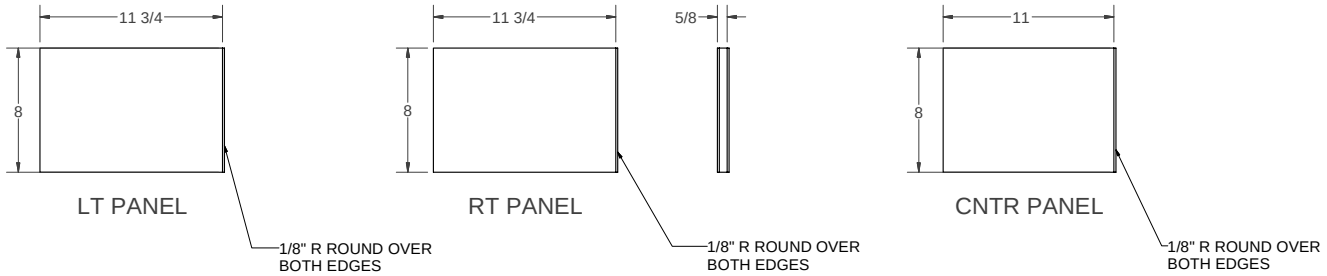
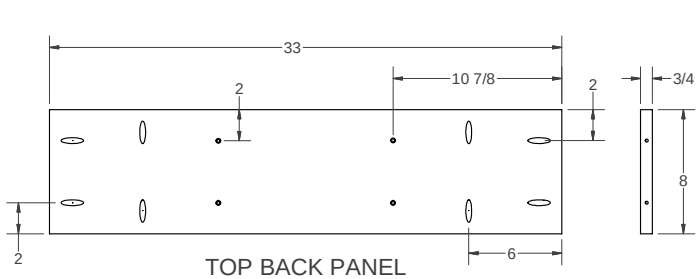
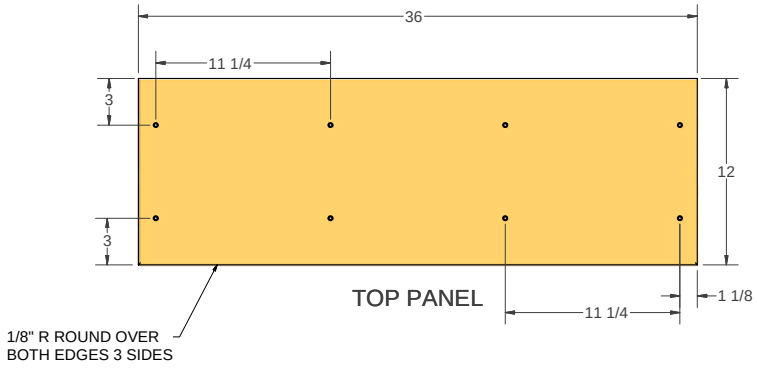
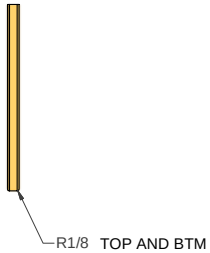


NOTE:
COUNTERSINK FOR
7 x 50mm CONFIRMAT







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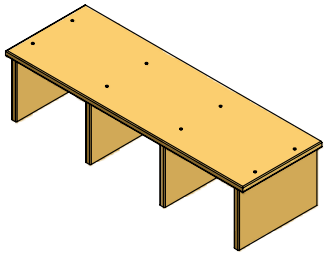
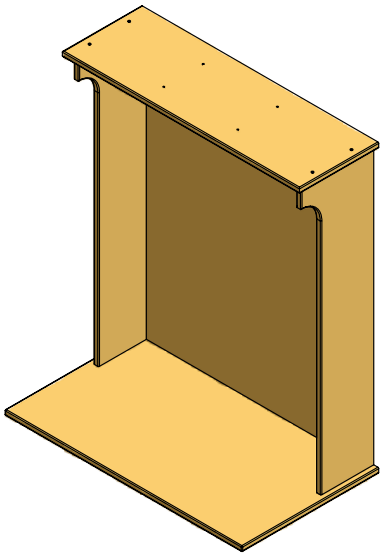
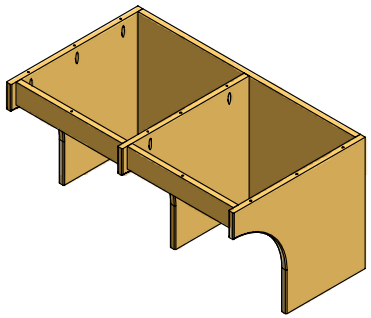
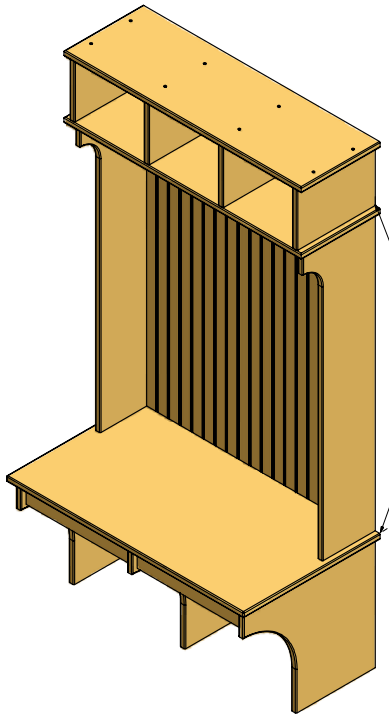






ASSEMBLY SEQUENCE



WORKBENCH #303	MUDROOM LOCKER	DONOVAN	DATE: 6.18.07	SHEET: 5

SIMPLE STRATEGIES FOR SUCCESS WITH

Jig Saw Cuts

For cutting versatility, you just can't beat a jig saw. Here's what you need to know to get great results every time.

A jig saw is one of the most versatile tools you can own. With this one simple tool, you can make curved and straight cuts in wood (as are called for in our "Digital Hub" on page 72). You can also cut plastic, metal, and other materials.

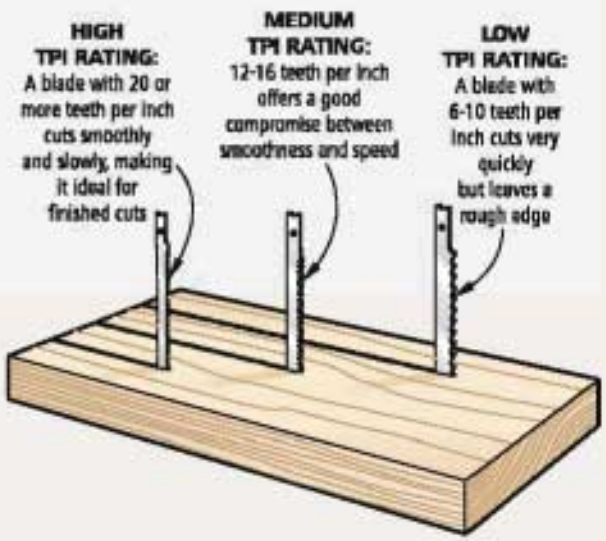
Learn how to use a jig saw correctly, and it's also remarkably accurate and easy to control. You just need to select the proper blade for the task, set the saw to the correct cutting mode, and then guide the saw properly.

Choose a Blade—The biggest reason a jig saw is so capable is the wide variety of blades available *(Photo, below)*.

For cutting wood alone, you'll find blades for fast cuts, smooth cuts, straight cuts, and tightly curved cuts. Plus, there are blades for cutting metal, plastic, acrylic, ceramics, and leather, among others. And you'll find general-purpose blades that cut about anything—just not as cleanly as a specialty blade.

When selecting a blade, you also need to make sure it will deliver the quality of cut you need. That's based on the "tpi" rating, or teeth-per-inch *(Illustration, right)*.

A jig saw easily tackles straight and curved cuts. To guide a curved cut, place one hand on the saw housing above the blade, and use it to pivot the saw. Push with the other hand.



When selecting jig saw blades, pay attention to how many teeth per inch (tpi) the blade has. A low tpi yields a rough but fast cut. A high tpi produces a smooth, slow cut.

Whatever cutting task you have, chances are good that you'll find a blade designed to match the material.

Use the Correct Mode—How a jig saw cuts is easy to understand: The saw moves the blade up and down rapidly, causing the teeth to cut through the material. You push the jig saw forward to keep the blade biting into uncut material as it works.

Some jig saws also offer an orbital cutting mode. In that mode, which is most useful for cutting wood or thick plastic, the saw rocks the blade forward on the upstroke *(Illustration, right)*.

Orbital action can be adjusted from no orbit to aggressive orbit, usually with two additional settings in between. For fast cuts where smoothness isn't important, set the saw to full orbit. For the smoothest cuts, or for cuts following tight curves, turn the orbit off. Otherwise, you can experiment with the alternate settings.

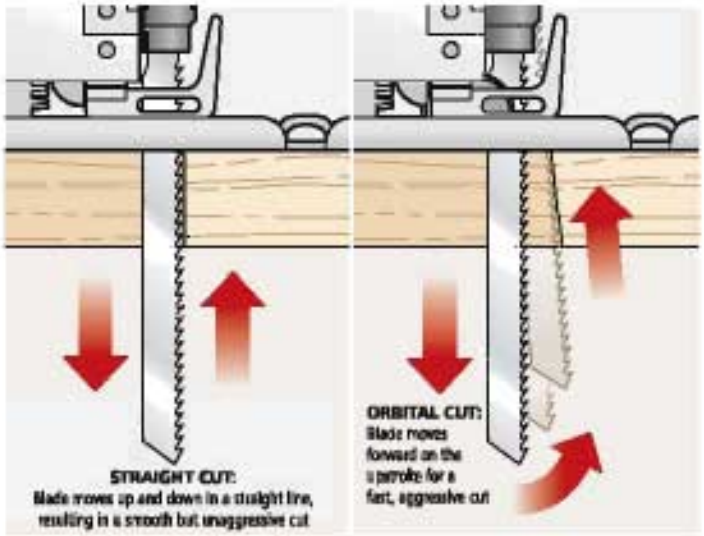
Some jig saws also offer variable speed, which may be controlled by a dial, or by how far you depress the trigger. Faster speed equals more cuts in the same amount of time. That can yield faster and/or smoother cuts. But for tough-to-cut materials, or for materials like plastic that melt if they get hot, a slow speed is a better choice.

Let the Saw Work—When cutting with a jig saw, the most common mistake people make is thinking that the harder they push the saw, the faster it will cut. But forcing the blade into the cut is counterproductive.

First, forcing the cut causes unnecessary friction. Plus, it keeps the teeth against the workpiece, which means there's no chance for the gullets (the spaces between the teeth) to remove the waste. Both of these conditions cause the blade to get hot, which dulls it quickly and can burn the workpiece.

At the same time, pushing aggressively forces the blade's teeth to "bite" too hard into the material. This can cause the blade to catch and kick the saw upward, which makes the jig saw jump around as it cuts.

Instead of forcing the saw into the cut, let the blade do its work, and simply push the saw along at the rate it wants to go. Of course, you still need to keep a secure hold on the saw, and keep it firmly against the workpiece. Just don't force it forward.



In straight-cutting mode, a jig saw blade moves straight up and down *(left)*. In orbital mode, a roller behind the blade pushes the blade forward on every upstroke *(right)*.

When cutting curves, avoid pushing the saw sideways, which flexes the blade and causes an out-of-square cut.

Handle the Curves—Forcing a jig saw into the cut becomes even more problematic when making curved cuts. If you hold the saw with one hand only and push it around the curve, you end up inadvertently pushing the saw sideways as well. This causes the blade to flex and results in a cut that wanders off course and is not perpendicular to the surface of the workpiece *(Illustration, left)*.

The first remedy for this is to slow your feed rate when making curved cuts. The second is to hold the saw with two hands. One hand goes on the saw housing directly above the blade, while the other hand goes on the handle as usual *(Photo, page 28)*.

With this technique, your front hand does the "steering" by pivoting the saw to follow the curve. Your rear hand does nothing more than guide the saw forward, without applying any *sideways* pressure. With a little practice, you'll be cutting curves that are dead on every time.

—Written by David Stone, illustrated by Matt Scott

SIMPLE STRATEGIES FOR SUCCESS WITH

Jig Saw Cuts

For cutting versatility, you just can't beat a jig saw. Here's what you need to know to get great results every time.

A jig saw is one of the most versatile tools you can own. With this one simple tool, you can make curved and straight cuts in wood (as are called for in our "Digital Hub" on page 72). You can also cut plastic, metal, and other materials.

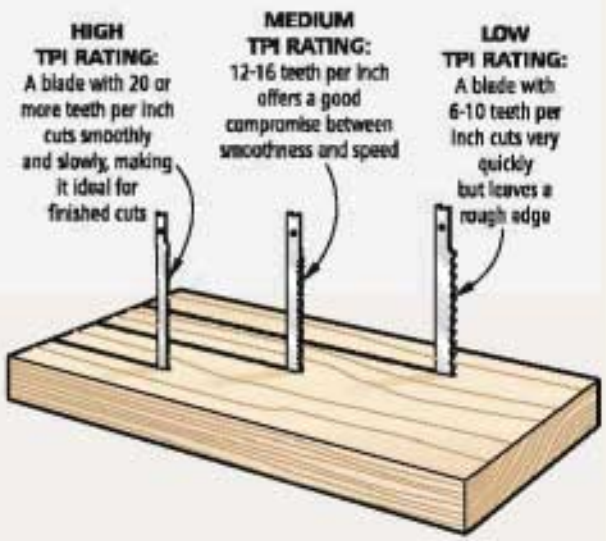
Learn how to use a jig saw correctly, and it's also remarkably accurate and easy to control. You just need to select the proper blade for the task, set the saw to the correct cutting mode, and then guide the saw properly.

Choose a Blade—The biggest reason a jig saw is so capable is the wide variety of blades available *(Photo, below)*.

For cutting wood alone, you'll find blades for fast cuts, smooth cuts, straight cuts, and tightly curved cuts. Plus, there are blades for cutting metal, plastic, acrylic, ceramics, and leather, among others. And you'll find general-purpose blades that cut about anything—just not as cleanly as a specialty blade.

When selecting a blade, you also need to make sure it will deliver the quality of cut you need. That's based on the "tpi" rating, or teeth-per-inch *(Illustration, right)*.

A jig saw easily tackles straight and curved cuts. To guide a curved cut, place one hand on the saw housing above the blade, and use it to pivot the saw. Push with the other hand.



When selecting jig saw blades, pay attention to how many teeth per inch (tpi) the blade has. A low tpi yields a rough but fast cut. A high tpi produces a smooth, slow cut.

Whatever cutting task you have, chances are good that you'll find a blade designed to match the material.

Use the Correct Mode—How a jig saw cuts is easy to understand: The saw moves the blade up and down rapidly, causing the teeth to cut through the material. You push the jig saw forward to keep the blade biting into uncut material as it works.

Some jig saws also offer an orbital cutting mode. In that mode, which is most useful for cutting wood or thick plastic, the saw rocks the blade forward on the upstroke *(Illustration, right)*.

Orbital action can be adjusted from no orbit to aggressive orbit, usually with two additional settings in between. For fast cuts where smoothness isn't important, set the saw to full orbit. For the smoothest cuts, or for cuts following tight curves, turn the orbit off. Otherwise, you can experiment with the alternate settings.

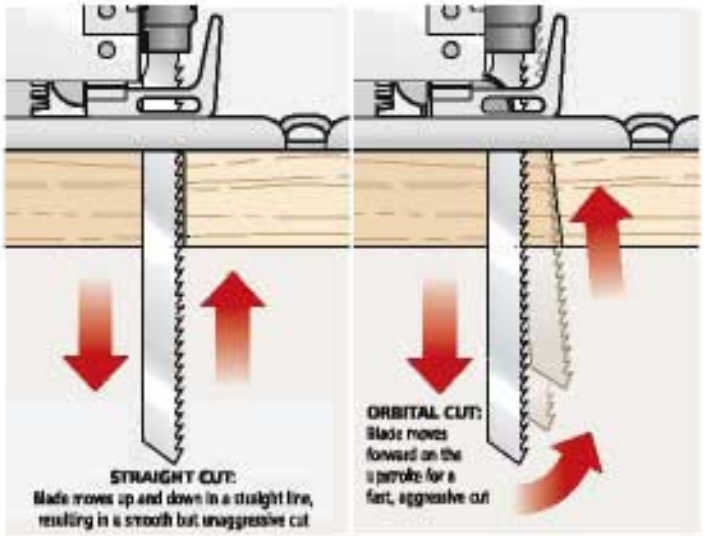
Some jig saws also offer variable speed, which may be controlled by a dial, or by how far you depress the trigger. Faster speed equals more cuts in the same amount of time. That can yield faster and/or smoother cuts. But for tough-to-cut materials, or for materials like plastic that melt if they get hot, a slow speed is a better choice.

Let the Saw Work—When cutting with a jig saw, the most common mistake people make is thinking that the harder they push the saw, the faster it will cut. But forcing the blade into the cut is counterproductive.

First, forcing the cut causes unnecessary friction. Plus, it keeps the teeth against the workpiece, which means there's no chance for the gullets (the spaces between the teeth) to remove the waste. Both of these conditions cause the blade to get hot, which dulls it quickly and can burn the workpiece.

At the same time, pushing aggressively forces the blade's teeth to "bite" too hard into the material. This can cause the blade to catch and kick the saw upward, which makes the jig saw jump around as it cuts.

Instead of forcing the saw into the cut, let the blade do its work, and simply push the saw along at the rate it wants to go. Of course, you still need to keep a secure hold on the saw, and keep it firmly against the workpiece. Just don't force it forward.



In straight-cutting mode, a jig saw blade moves straight up and down *(left)*. In orbital mode, a roller behind the blade pushes the blade forward on every upstroke *(right)*.

When cutting curves, avoid pushing the saw sideways, which flexes the blade and causes an out-of-square cut.

Handle the Curves—Forcing a jig saw into the cut becomes even more problematic when making curved cuts. If you hold the saw with one hand only and push it around the curve, you end up inadvertently pushing the saw sideways as well. This causes the blade to flex and results in a cut that wanders off course and is not perpendicular to the surface of the workpiece *(Illustration, left)*.

The first remedy for this is to slow your feed rate when making curved cuts. The second is to hold the saw with two hands. One hand goes on the saw housing directly above the blade, while the other hand goes on the handle as usual *(Photo, page 28)*.

With this technique, your front hand does the "steering" by pivoting the saw to follow the curve. Your rear hand does nothing more than guide the saw forward, without applying any *sideways* pressure. With a little practice, you'll be cutting curves that are dead on every time.

—Written by David Stone, illustrated by Matt Scott

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Floor Cloth Swirl Pattern

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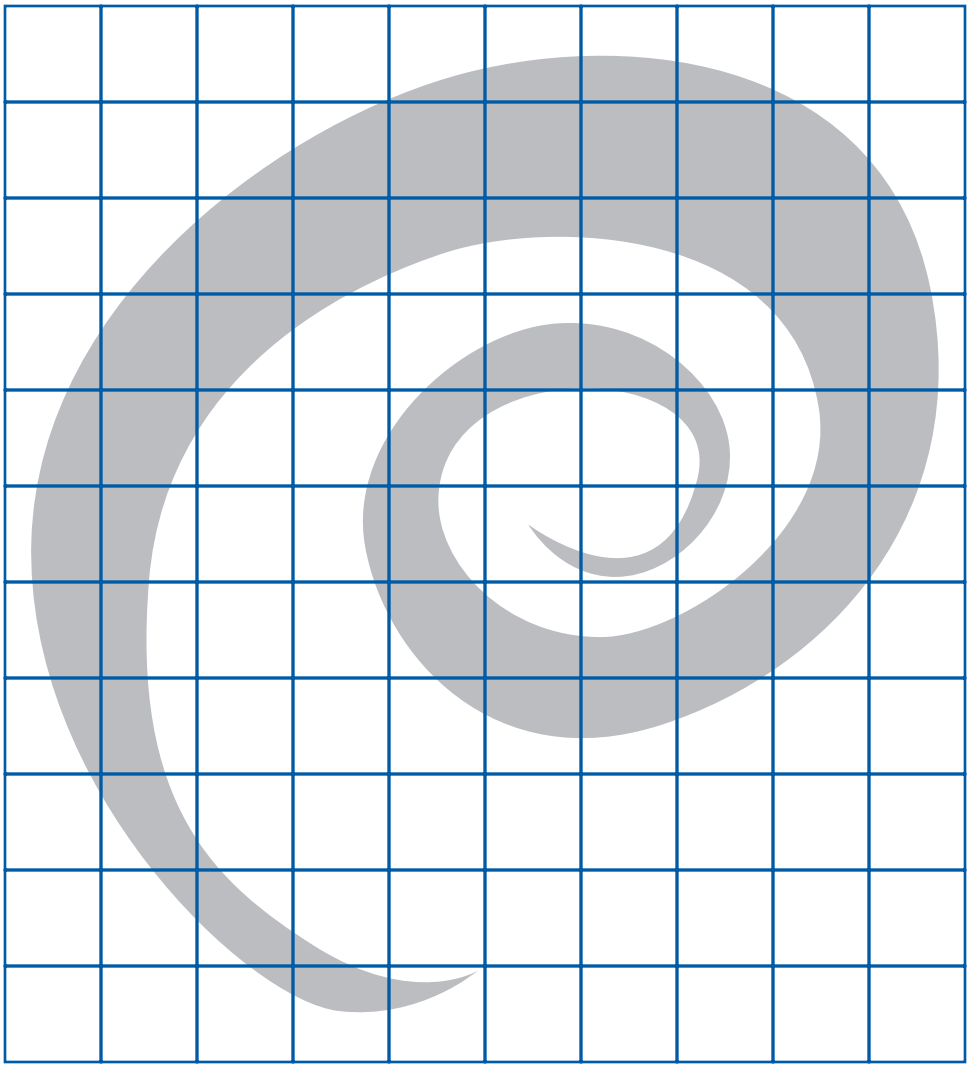
Pattern at 100%



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Flower Power Pattern

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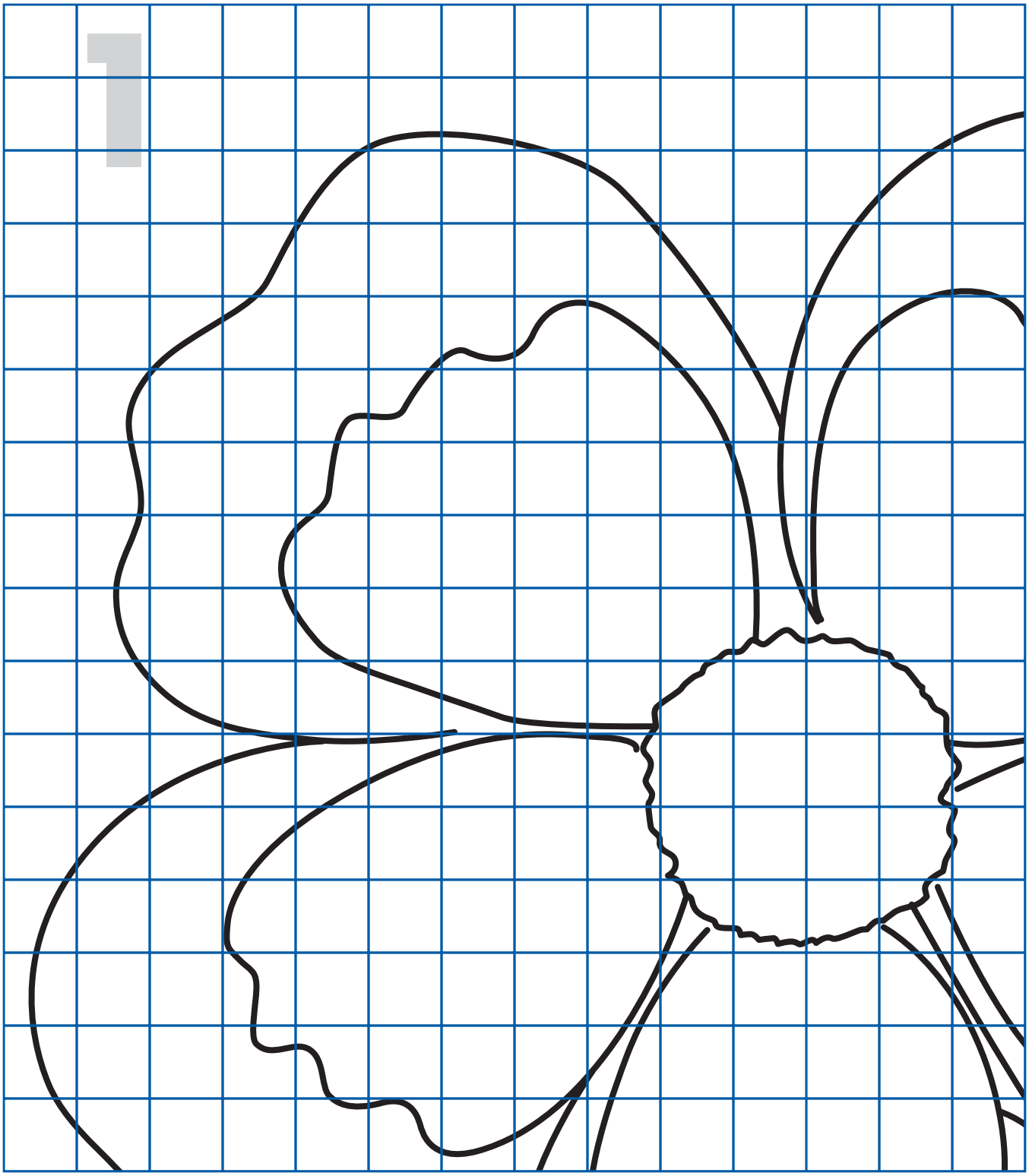
CHAIR BACK - Pattern at 100%



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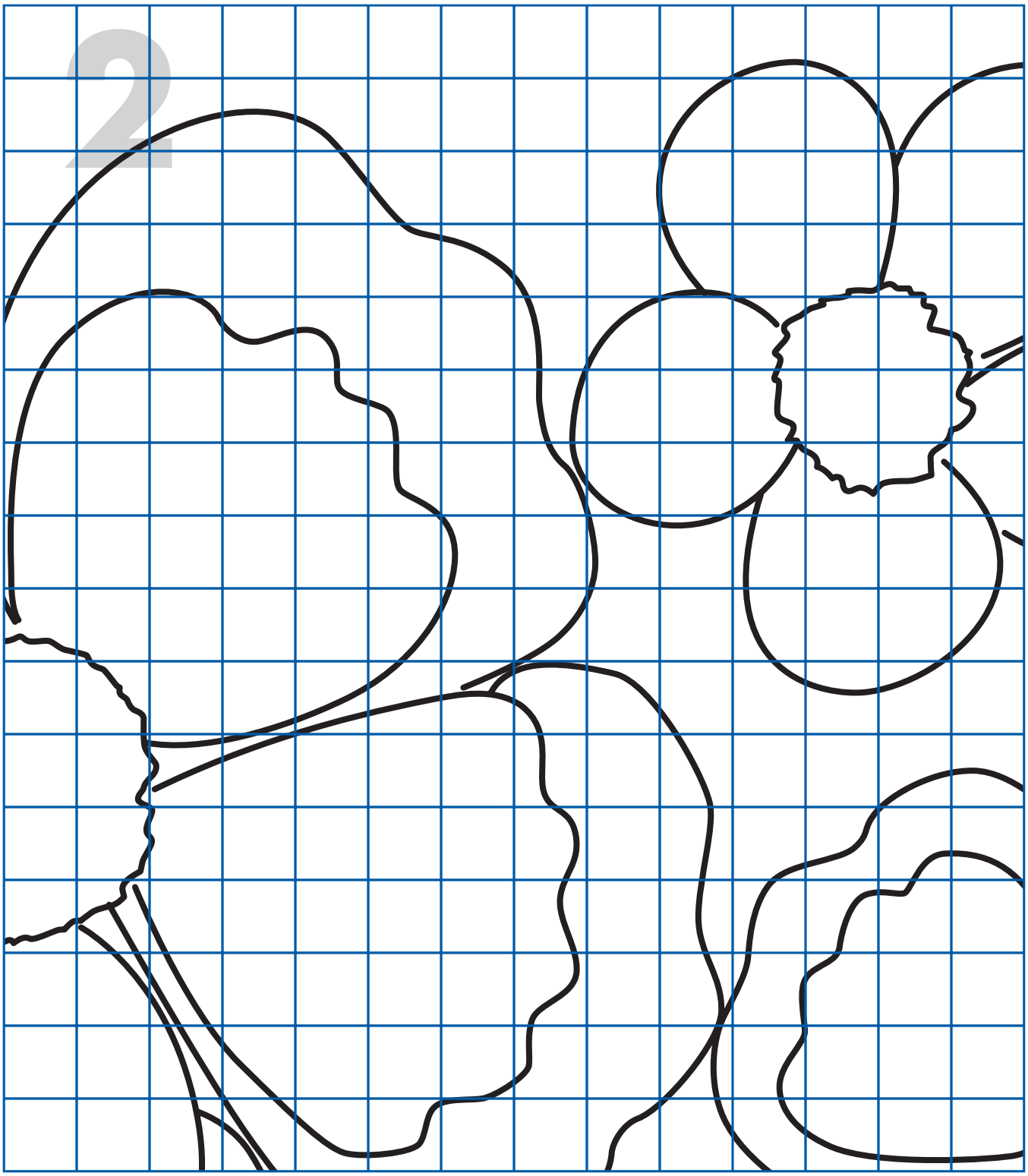

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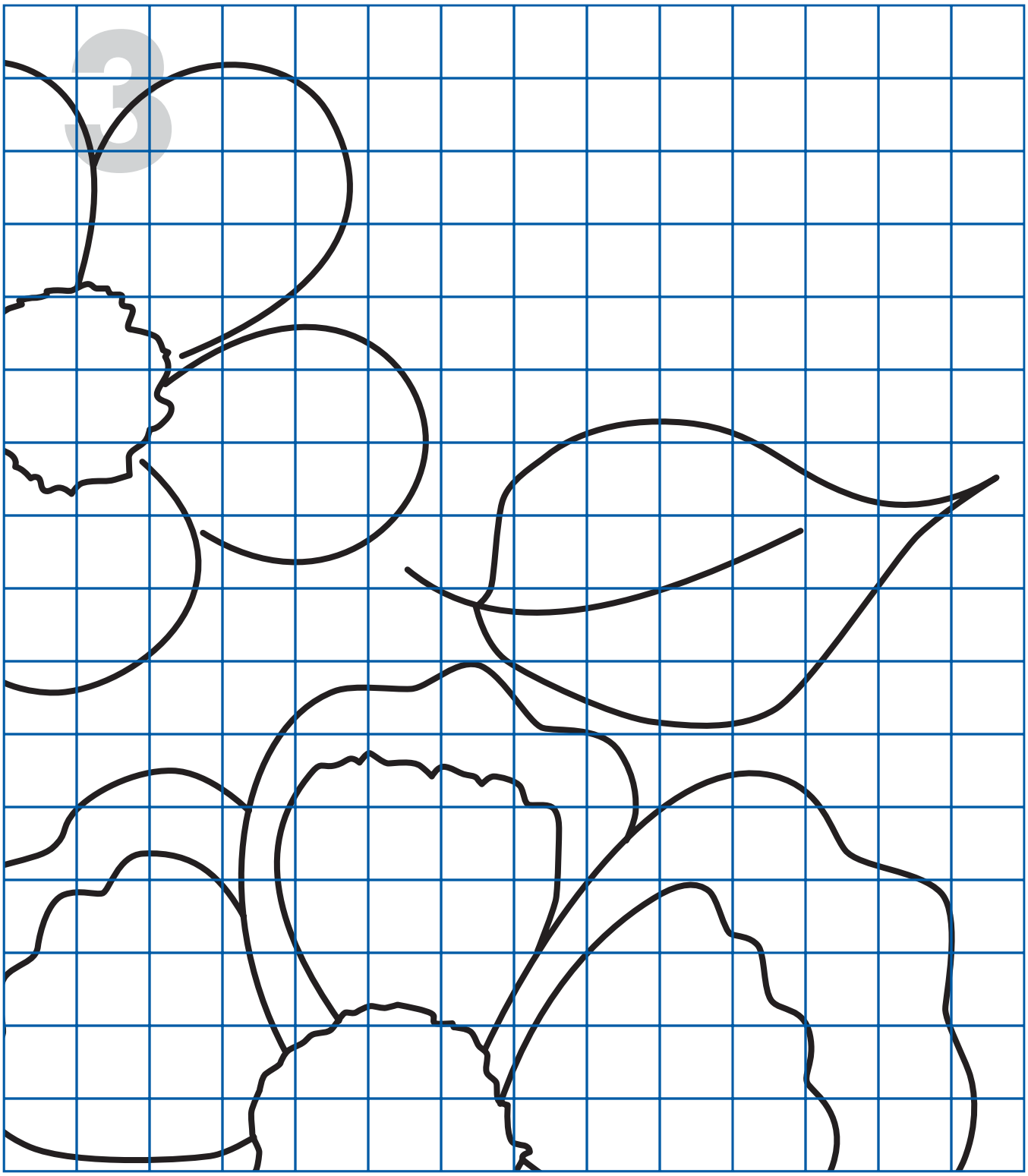

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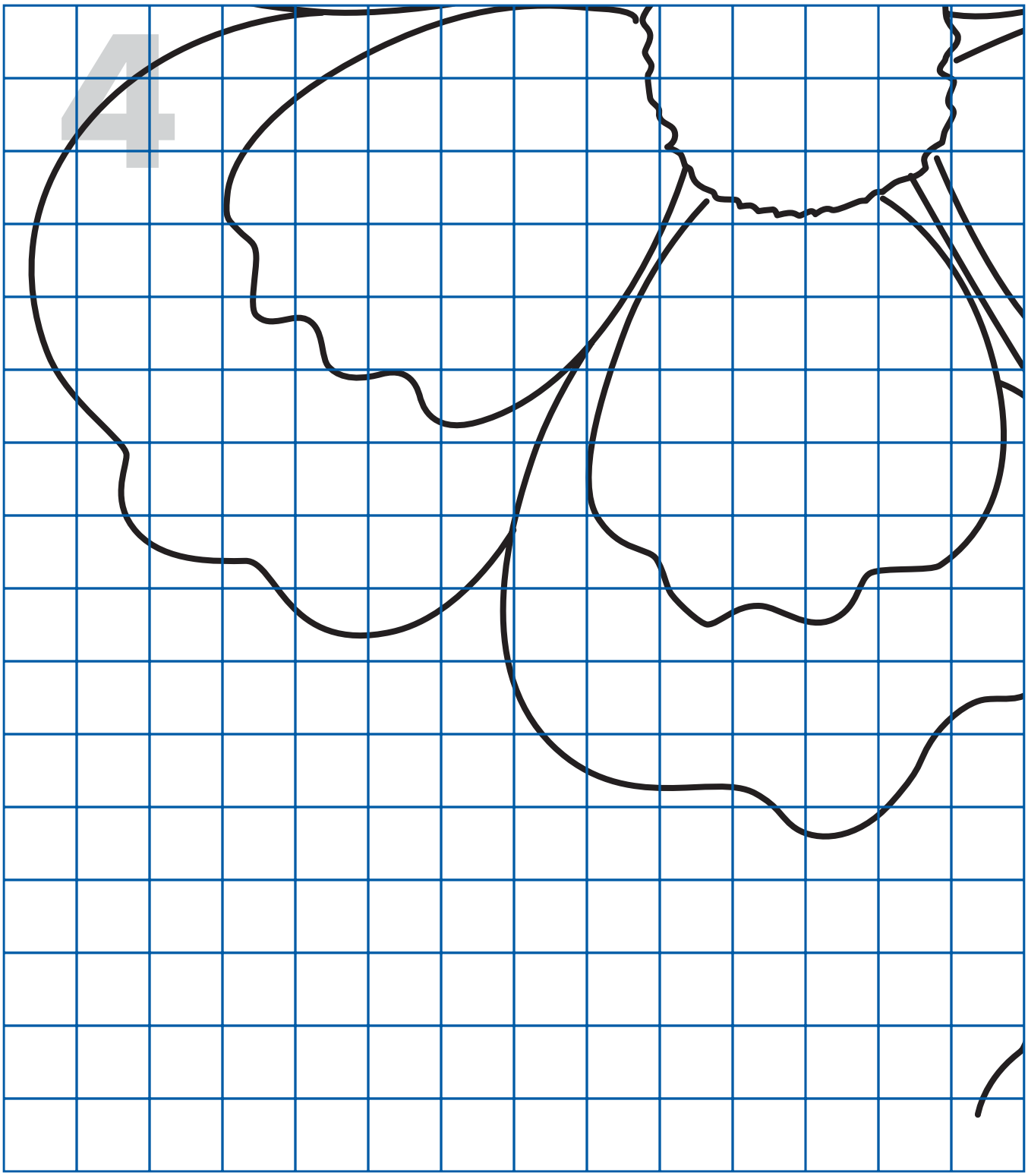

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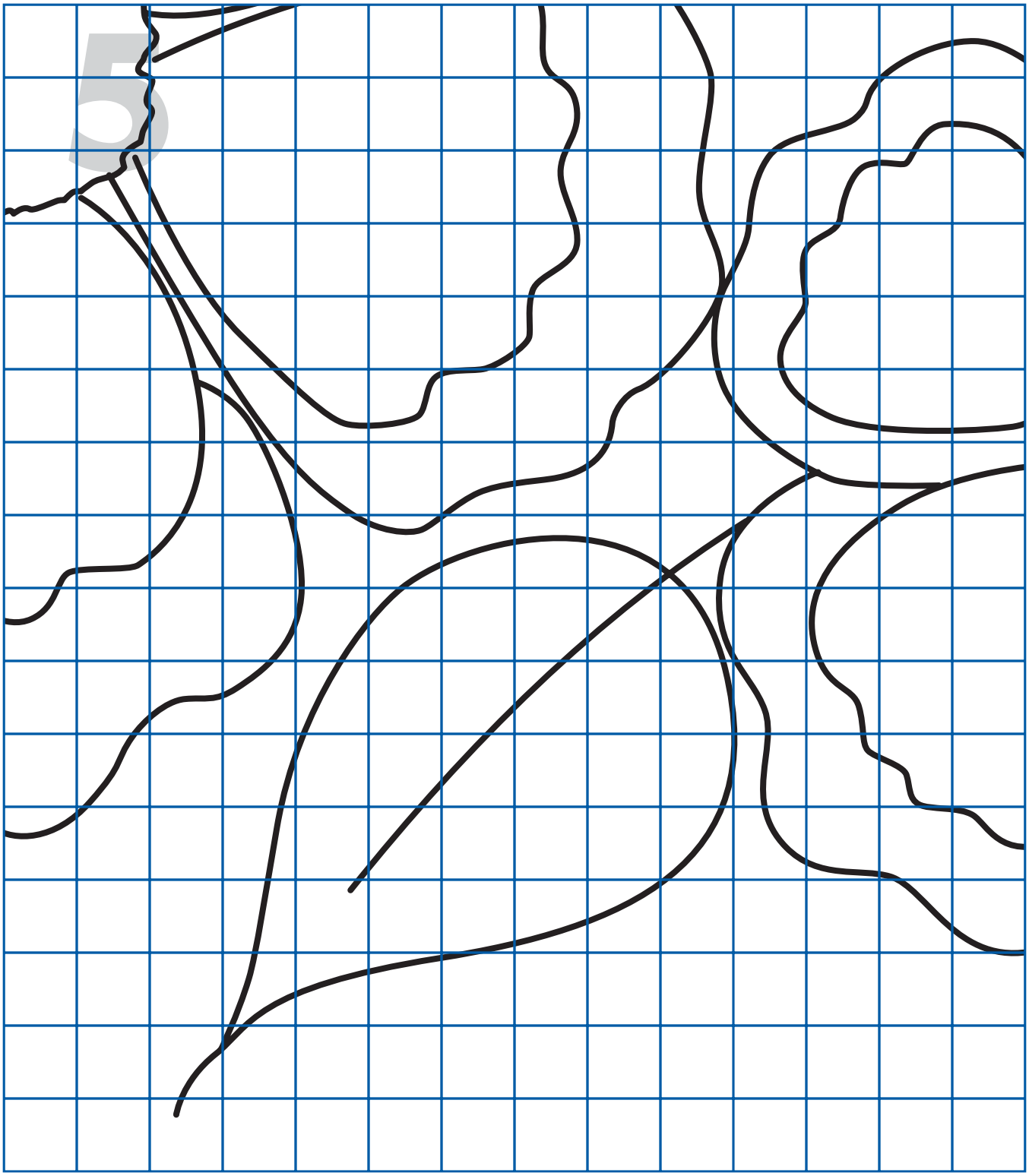

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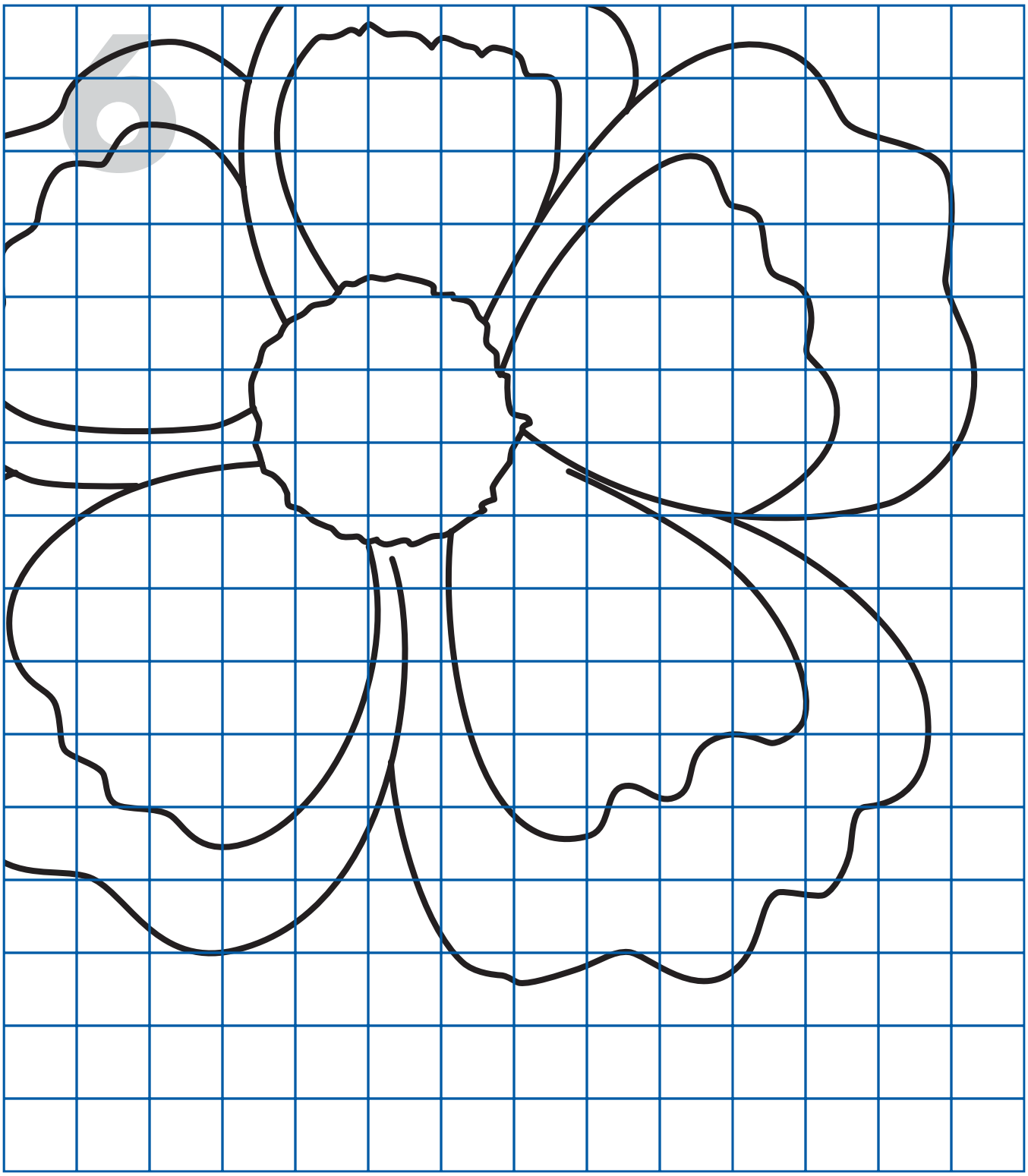

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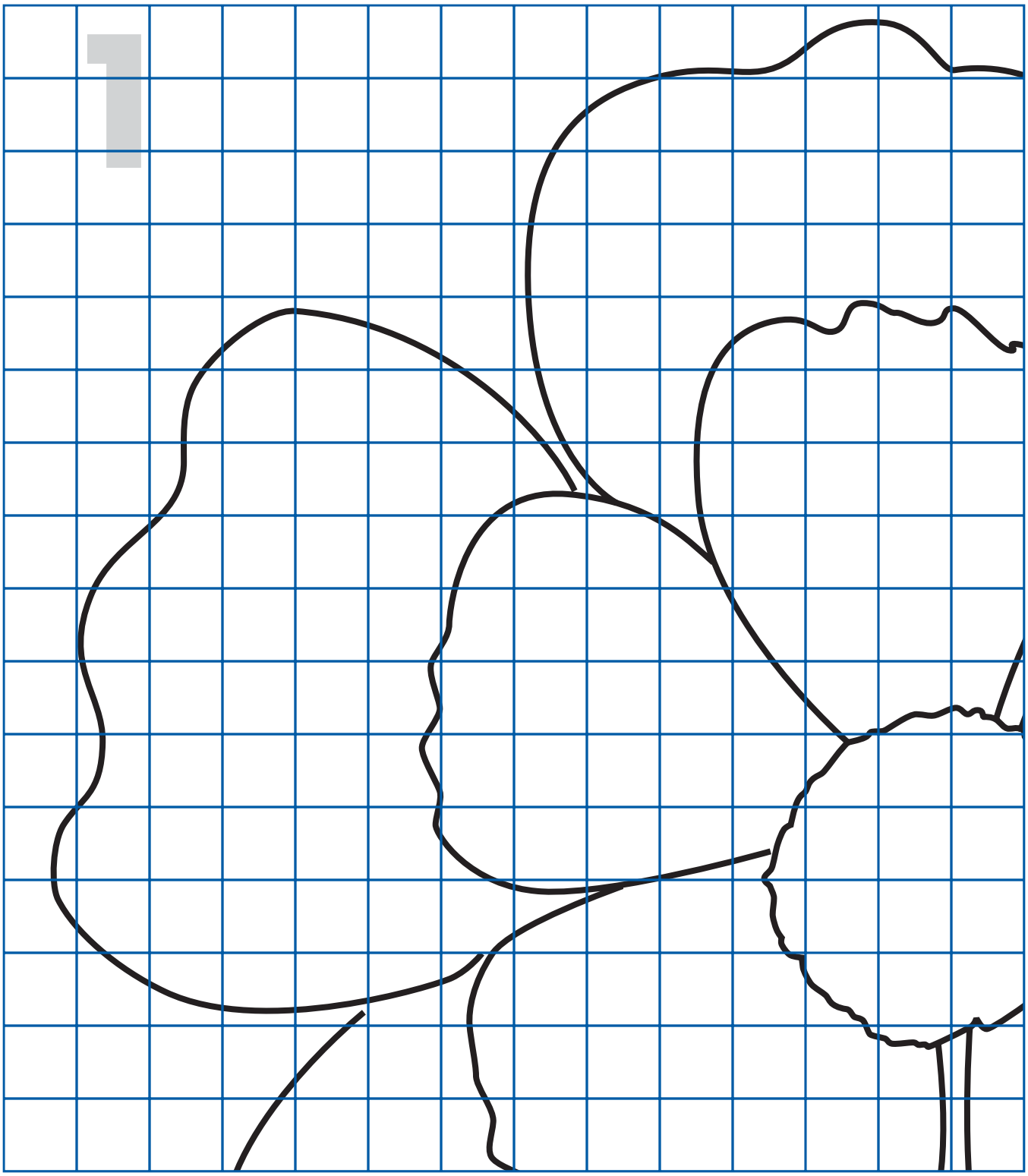
CHAIR SEAT - Pattern at 100%



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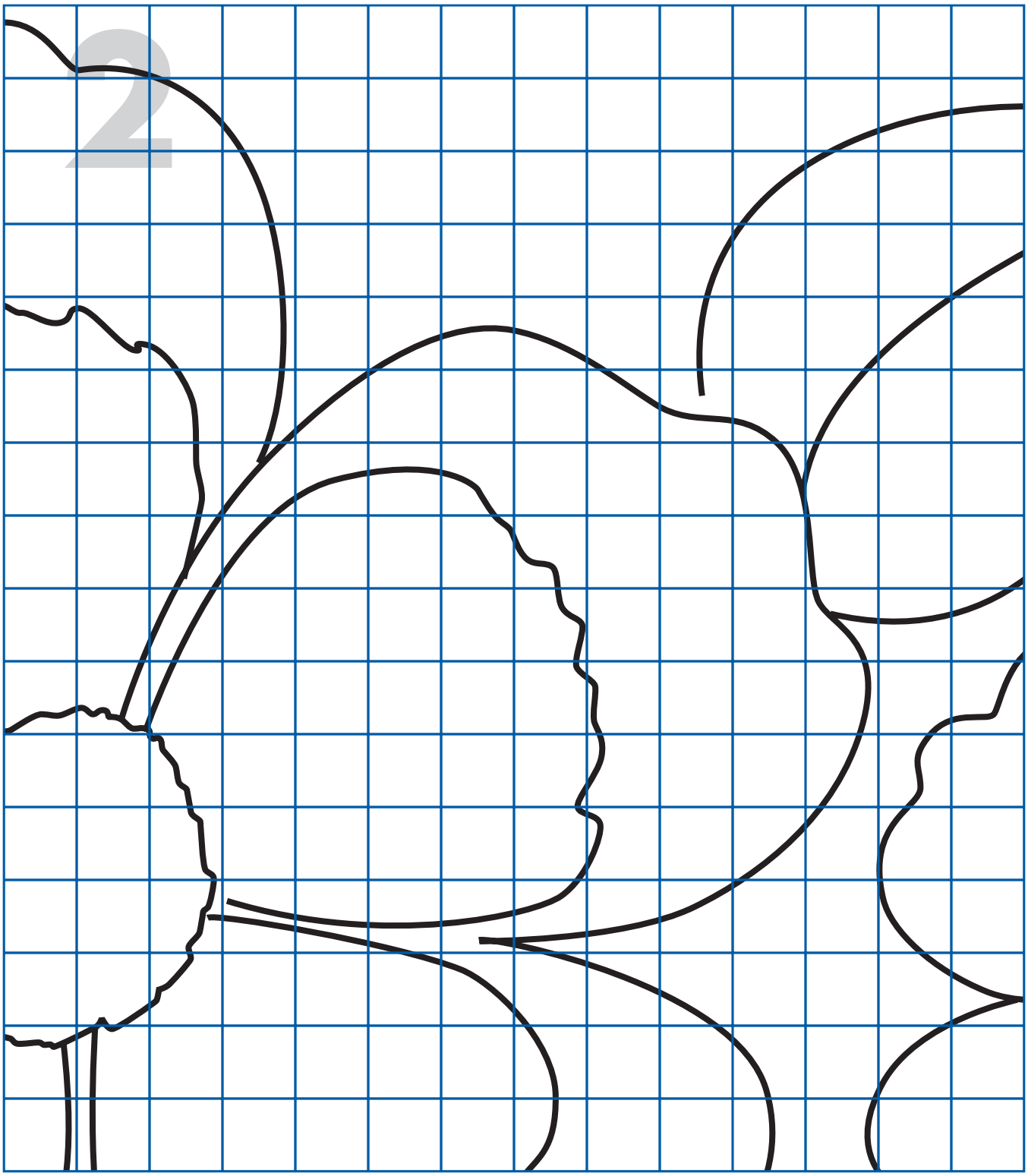

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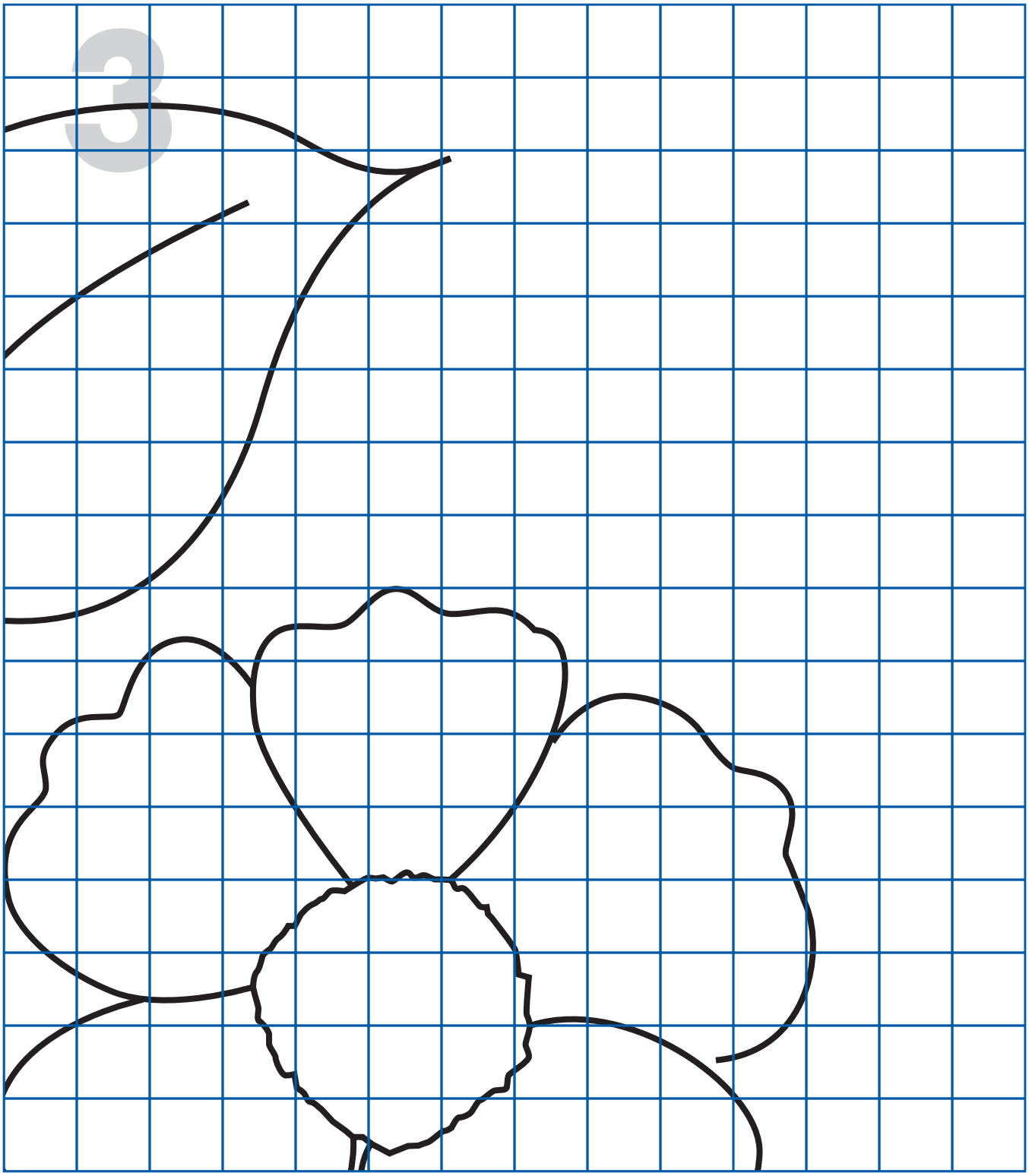

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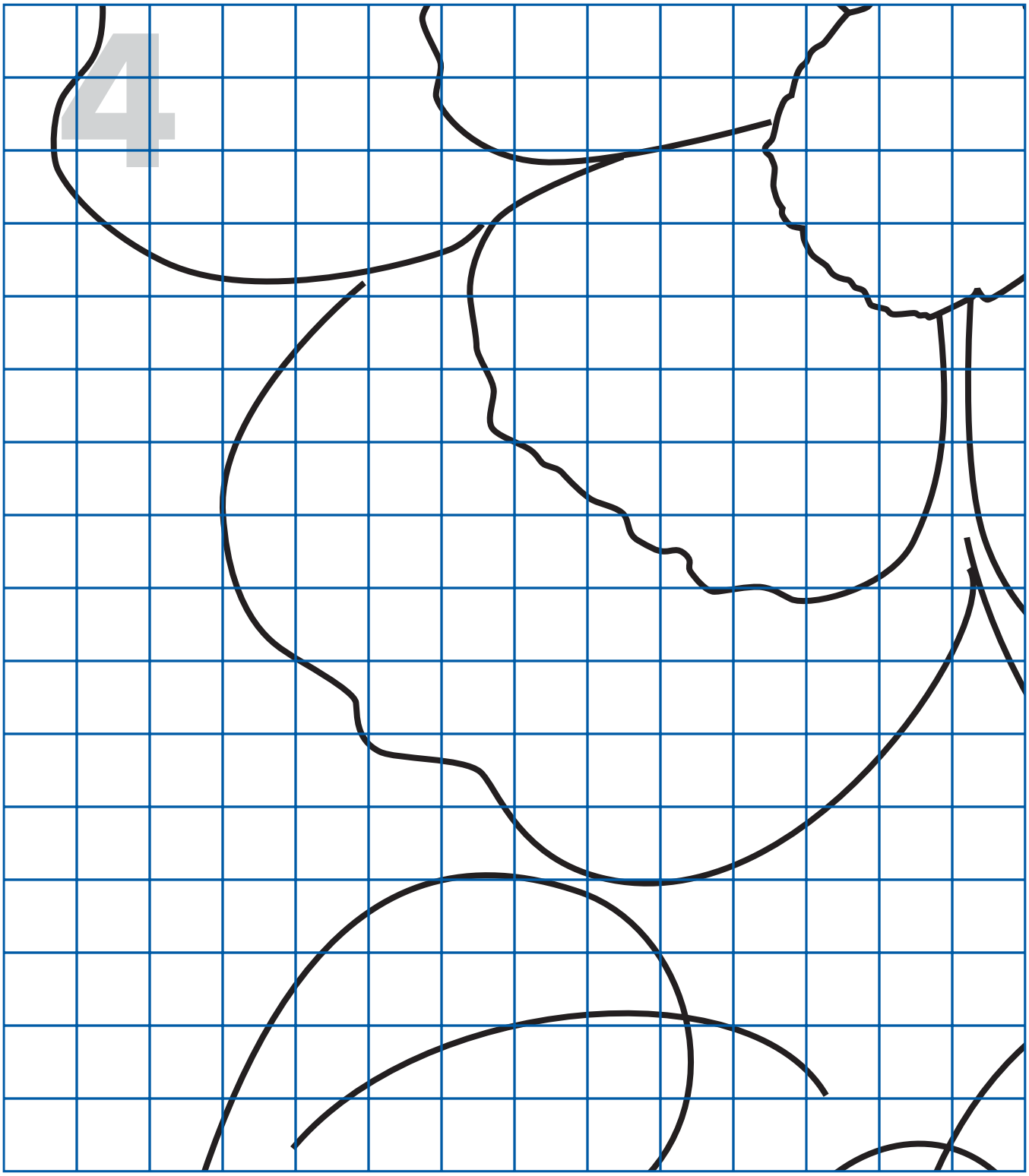

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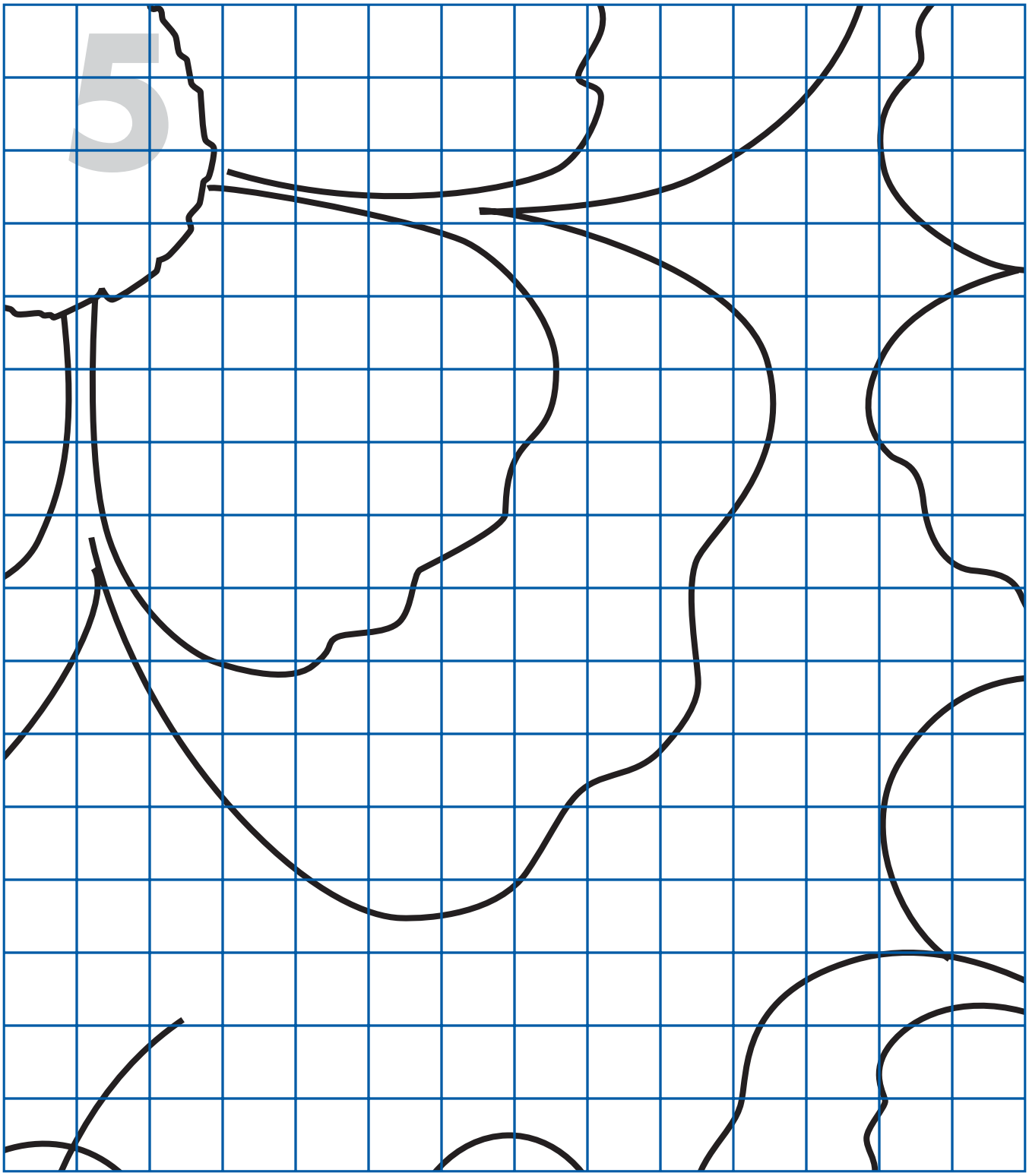

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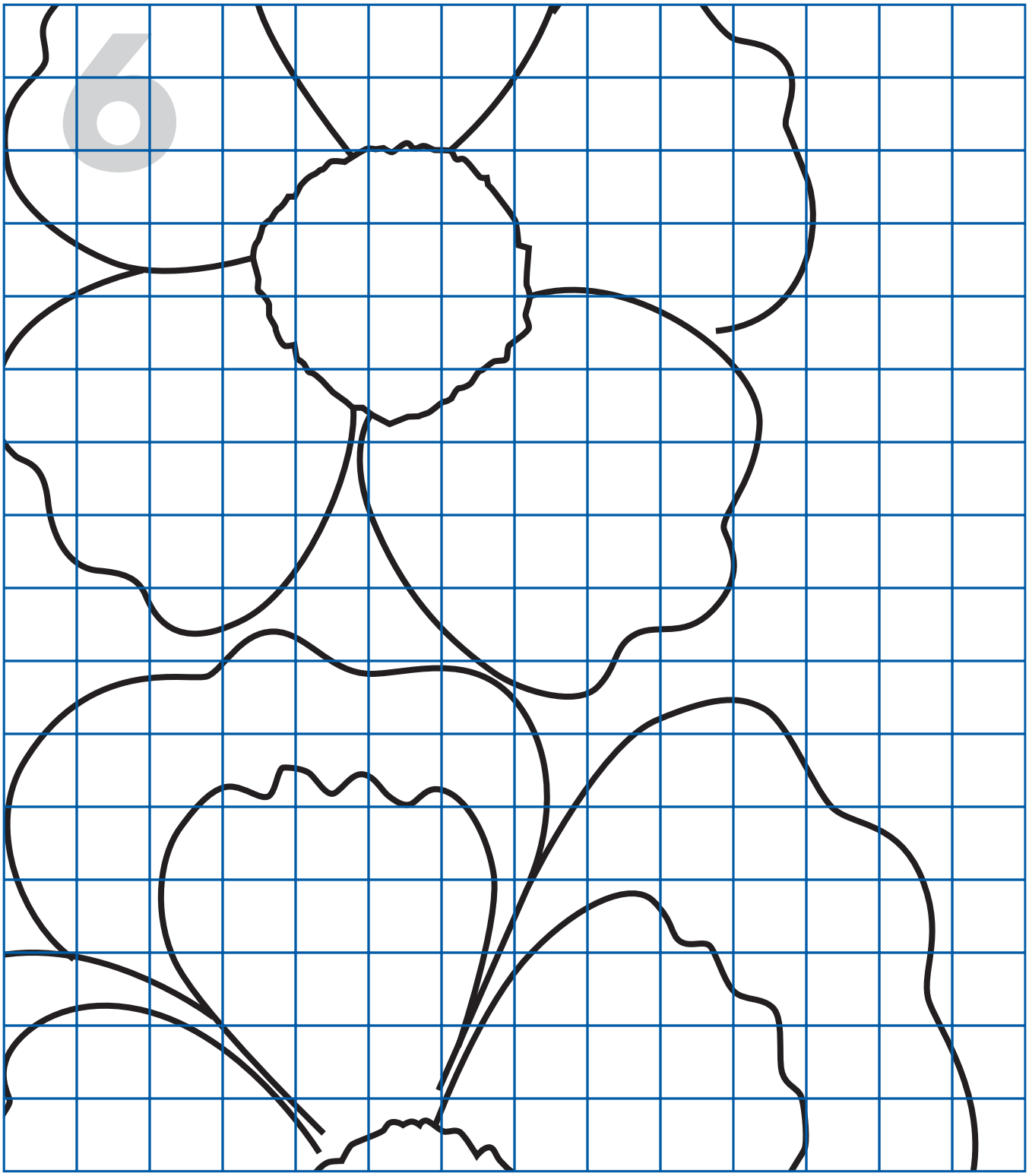

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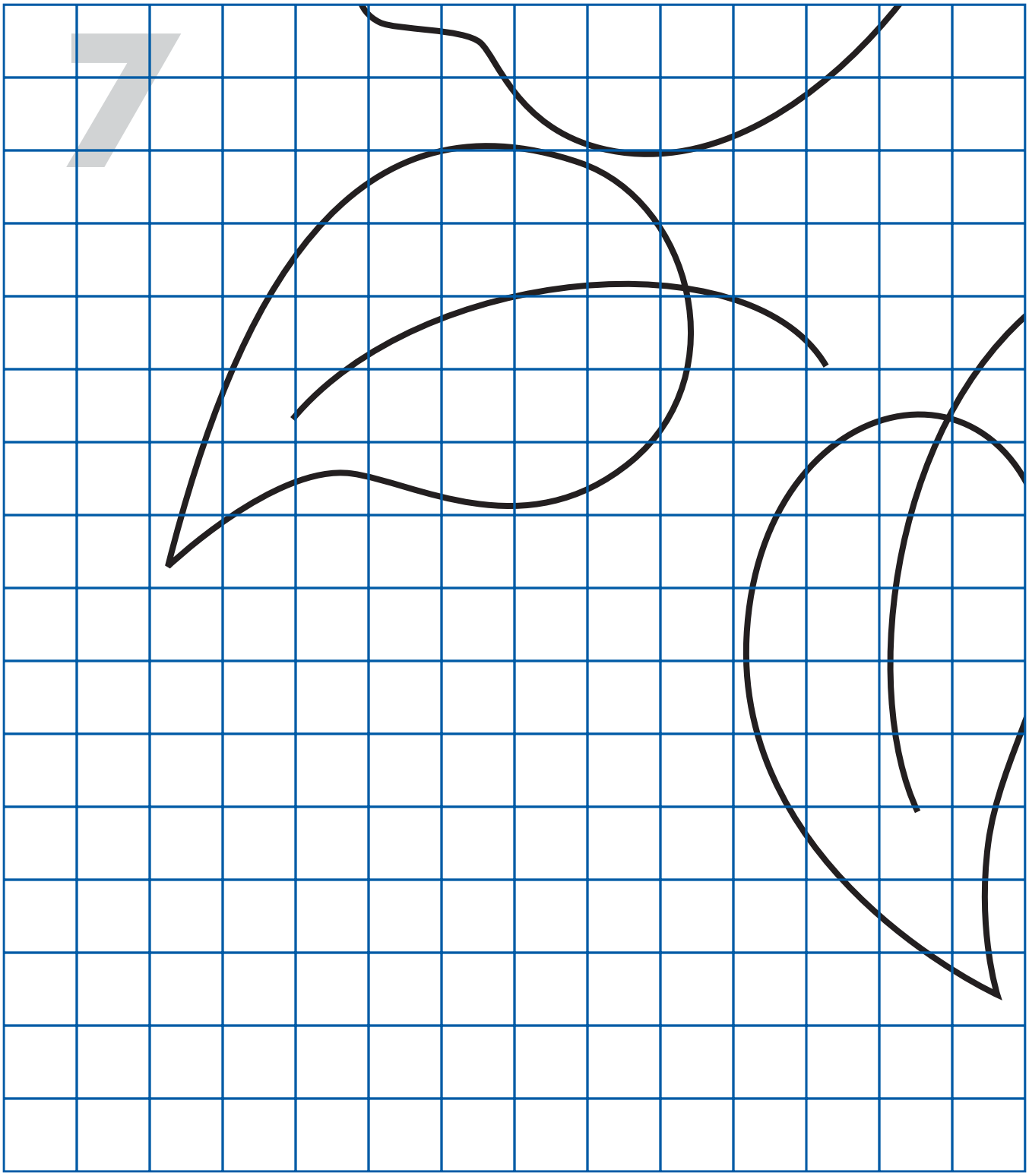

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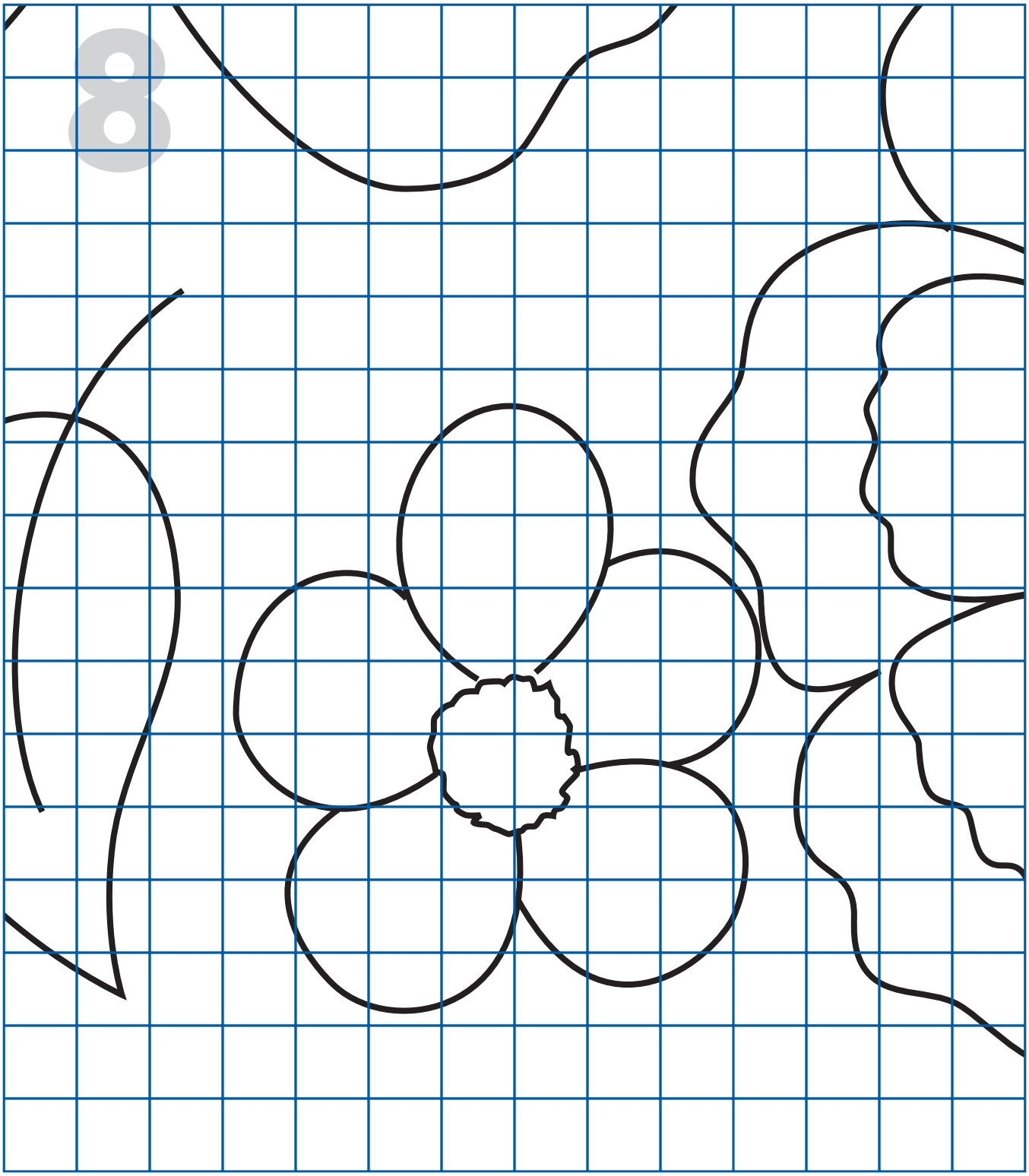

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