DREMEL®

BOOK OF INSPIRATION

Over 40 inspirational DIY projects

INSPIRATIONAL IDEAS AT YOUR FINGERTIPS

The Dremel® Book of Inspiration offers over 40 ideas for hands-on creative projects at different levels of difficulty and limitless opportunities for your own projects using Dremel's Versatile Tool Systems.

The projects are an inspiration for everyone looking to improve their outdoor setting, with projects like creating a double seat or an outdoor bar. This book also focuses on practical indoor home improvements like changing the tiling in bathrooms or creating easy storage solutions. In order to brighten up your house we have also included some special projects on home decoration and we finish off by inspiring idea's on some general arts and crafts projects.

Dremel hopes that this book will help you to add creativity, practical and personal touches to the most important moments and aspects of your life.

ABOUT DREMEL®

Dremel® was founded in 1932 by AJ Dremel who introduced the world's first Multi-tool. Today, it is dedicated to creating and manufacturing Versatile Tool Systems, of the finest quality for consumers engaged in a wide variety of hands-on DIY and creative hobbies, such as, indoor and outdoor home maintenance projects, automotive restoration, woodworking, model building, as well as a multitude of creative projects from jewellery making to scrapbooking. The Dremel core product line is defined by the Dremel Multi-tool, a versatile high speed motor unit which can be used to drive a system of over 150 available Dremel accessories and attachments.

Over the years, Dremel has introduced other tool systems such as, glue guns, engravers, clamps, worktables and butane torches that make it easier to perform detailed and intricate tasks for any kind of hands-on project. Dremel. Big on Detail.

DIFFICULTY RATING SYSTEM

- ★☆☆☆☆ Very easy
- ★★☆☆☆ Easy
- ★★★☆☆ Moderate
- ★★★★☆ Challenging
- ★★★★★ Difficult

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CREATE A FRUIT AND VEGETABLE WALL FOR YOUR BALCONY...

How to make a fruit and vegetable wall for your balcony…

Want to grow your own fruit and vegetables but live in a flat and just don't have the space on the balcony for boxes and planters? Simply use your Dremel® DSM20 Compact Saw to cut aluminium rods, solder them together to create a structure for hanging pots – and lo and behold, you have an upright fruit and vegetable wall to be positioned on the sunniest of your balcony walls. See our step-by- step guide below.

TOOLS REQUIRED:

- Dremel® DSM20 Compact Saw with DSM840 Cutting Guide and the DSM510 Metal and Plastic Cut-Off Wheel
- Dremel® 3000 with stainless steel wire brush 530, Dremel® EZ SpeedClic Mandrel SC402 and Dremel® EZ SpeedClic Metal Cutting Wheel SC456
- Dremel® Versaflame

OTHER MATERIALS REQUIRED:

- Aluminium welding rods
- Stainless steel abrading rod
- 4 x metal brackets, safety goggles
- 14 x 1 metre x 6 mm thick aluminium rods
- Plant pots
- Compost
- Tomato, chilli pepper and strawberry plants
- Tape measure
- Paper and pencil, masking tape

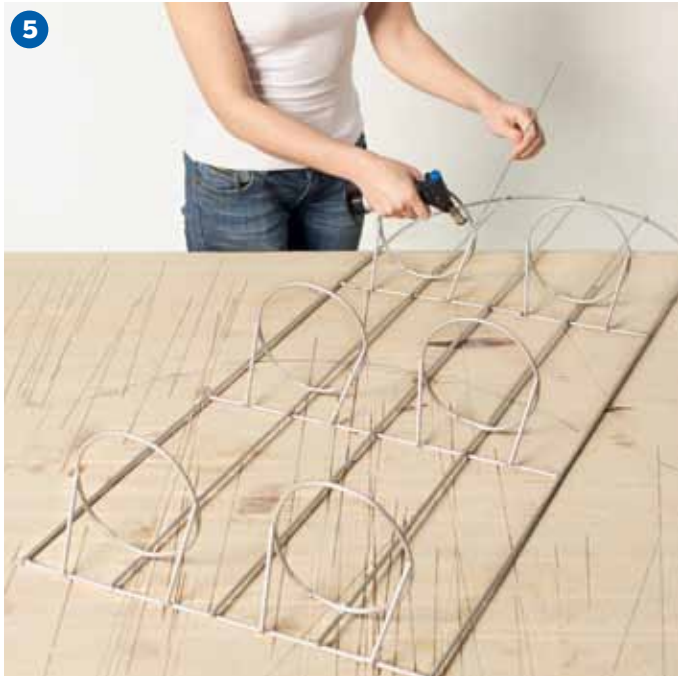
STEP-BY-STEP INSTRUCTIONS

STEP 1
Measure the space on your wall and draw up your design on a sheet of paper. Our design measured 137 cm high x 51.4 cm wide.

STEP 2
Then, use your Dremel® DSM20 Compact Saw and the DSM510 Metal and Plastic Cut-Off Wheel to cut six individual aluminium rods to 50 cms, gripping them firmly into either the Dremel® Project Table or a similar workstation. These will become the hoops, each sized 16.5 cms in external diameter, to hold your plant pots.

STEP 3
Then bend each length into an individual circle. Screw four metal brackets into your workbench to hold the size of hoop you want to weld. Weld together the two ends of the hoop using the Dremel® Versaflame. In order to do this, first, clean up the faces using your Dremel® 3000 with a Dremel® stainless steel wire brush 530 to remove oxidization, dust etc. Then, heat each of the two ends of the hoop to melting point using your Dremel® Versaflame. Lay a bead of the welding rod onto each face of the hoop. When the end of the hoop is hot enough, the welding rod will melt onto the end of the hoop.

Then, while the bead of welding rod is still molten, abrade through the molten welding rod with a stainless steel abrading rod to break through the oxidation formed underneath the molten bead of weld rod. This ensures that the bead of welding rod merges with the aluminium. Close up the hoop, and clamp in position using a Dremel® bar clamp or similar, then heat up until it reaches the welding rod's melting point again and the two mating faces will fuse together. If necessary add more welding rod. There are some good tutorials on YouTube to help you do this.



STEP 4

Take a one metre length of aluminium rod to form one of your trellis's vertical lines. Fix your first hoop at 6.5 cms, fix your second hoop at 50 cms, attach your third hoop at 93.5 cms. Repeat this process on another one metre length of aluminium rod.

STEP 5

Now, cut 3 x 50 cms lengths of aluminium rod using your Dremel® DSM20 and Metal and Plastic Cut-Off Wheel, as before. These will become the horizontal struts. Mark up where the vertical struts will go onto your horizontal struts at 12.5, 25 and 37.5 cms. Also, mark up the vertical struts, which you have welded with hoops, at 0 cms, 44 cms and 87.5 cms to intersect with the horizontal struts. Now weld the horizontal struts onto the vertical struts.

Then, take a 1 metre length of aluminium rod x 2 and using your Dremel® Versaflame weld to either side to make the external side vertical struts. Take another 1 metre length of aluminium rod and bend it into an arch for the top of the structure. We used a dustbin lid to bend it around. Weld the ends to the external side vertical struts. Take a 1 metre length of aluminium rod, then cut a piece x 36.5 cms and weld together to create the centre upright and weld all intersecting points. Add two top upright 32.5 cms sections and weld. Finally, add 11 cms support struts – two per hoop x 6 hoops giving you 12 struts in total.

STEP 6

Once you have your structure, make a leaf on a twig and solder to the top of the arch. To do this, cut one x 80 cm aluminium rod, bend it by hand in the middle into a V and then into shapes on the ends which mimic stalks, onto which you attach metal leaves. To make the leaves, mark up and cut out metal diamond-shaped leaf shapes from very thin sheet aluminium 1 mm thick using your Dremel® 3000, Dremel® EZ SpeedClic Mandrel SC402, Metal Cutting Wheel SC456, then weld them onto the aluminium rod stalks using your Dremel® Versaflame.

STEP 7

Either leave silver or spray paint black for contrast against the wall. Mount your metal structure onto the wall using either hooks or metal brackets. Plant up your glazed painted terracotta or plastic pots with strawberries, chilli peppers or tomatoes and herbs, for example, and place into the pot holders on the structure. You can even wind round some external fairy lights to help enjoy your balcony during the evenings.

CREATE A 'WINDOW' AND INCREASE THE SIZE OF YOUR BALCONY...

Add a touch of glamour to your balcony with a decorative mirrow window by using the Dremel® DSM20 Compact Saw.

TOOLS REQUIRED:

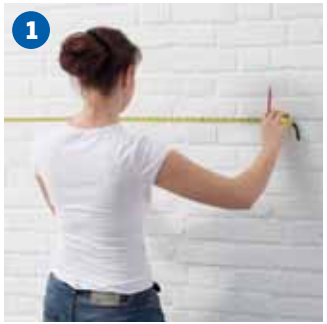
- Dremel® DSM20 Compact Saw with DSM840 Cutting Guide and the Dremel® DSM500 Multi-Purpose Cut Off Wheel
- Dremel® 3000 with Dremel® Plunge Router Attachment 335, Router bits 615 and 650 and EZ SpeedClic Sanding disc SC413
- Dremel® Glue Gun and wood glue

WOOD FOR MIRROR FRAME CUTTING LIST:

- 80.4 cms w x 101.2 cms l x 18 mm d MDF (backing board)
- 2 Lengths : 65.2 cm l x 7.5 cm w x 6 mm d MDF (spacing strips- underside frame)
- 2 Lengths : 101.2 cm l x 7.5 cm w x 6 mm d MDF (spacing strips-underside frame)
- 2 Lengths : 9.5 cms w x 2 cm d x 101.2 lcms softwood (sides of the frame)
- 2 Lengths : 9.5 cms w x 2 cm d x 61.7 lcms softwood (top and bottom of the frame)

OTHER MATERIALS REQUIRED:

- Screwdriver or powered driver
- Mirror : 65 cms w x 85.8 cms l x 6 mm d glass
- Louvre doors : 81.7 cms l x 30.7 cms w x 22 mm d
- 4 x heavy duty picture brackets
- Tape measure, screws and metal pins



STEP-BY-STEP INSTRUCTIONS

STEP 1
Measure your balcony wall and decide on the dimensions of your mirror. Buy two louvre doors – ours were 81.7 cms long x 30.7 cms wide x 22 mm deep. Allow a 2 mm gap all round and a 2 mm gap in the middle. Then work out the other measurements according to the size of mirror and frame as suggested in the cutting list.

STEP 2
Take your Dremel® DSM20 (Cutting Guide to assit) with the DSM500 Multi-Purpose Cut-Off Wheel to cut the individual lengths of wood, as detailed above in our cutting list, in order to make the wooden frame for the mirror.

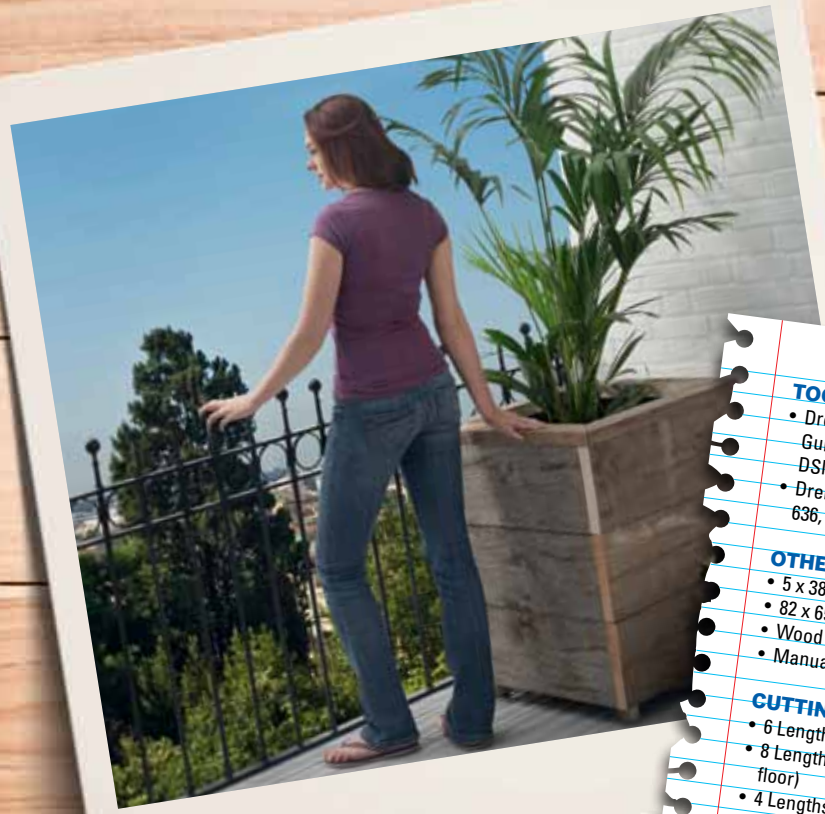
STEP 3
Using your Dremel® Glue Gun and wood glue, glue and pin one x 6 mm MDF strip to the underside of each side of the frame. This will create the rebate for the mirror. Then, fit one of each of the MDF strips flush to the edge of the wooden frame.

STEP 4
Fix the side and bottom edge of the frame to the backing board by screwing through the backing board into the back of the frame using a manual screwdriver or a powered driver and a 35 mm screw.

STEP 5
Slide the mirror into the rebate you have created within the frame. Repeat the process to finish the frame construction ensuring that you screw away from the mirror and rebate.

STEP 6
Mark up where your hinges of your bought louvre doors should go e.g. 10 cms from the top and again from the bottom. Rebate the hinge on the doors by 2 mm using the Dremel® Plunge Router Attachment 335 and the router bits 615 and 650.

STEP 7
Finally, prime and paint your mirror frame. Then take your Dremel® 3000 and EZ SpeedClic Sanding disc SC413 and distress the top surface so that some of the white primer shows up from underneath. Secure your mirror to the outside wall.



CREATE A FLOWER PLANTER FOR YOUR TERRACE OR BALCONY

How to make a wooden flower planter for your terrace or balcony…
If your terrace or balcony could do with a bit of shade and you want to plant a small tree or palm to dress your space, just take your Dremel® DSM20 Compact Saw to cut the individual wooden scaffolding boards to the right length, then use your Dremel® 3000 to help assemble it. A few hours later and a designer planter is yours! Just follow our step-by-step guide below….

TOOLS REQUIRED:

- Dremel® DSM20 Compact Saw with Dremel® DSM Edge Guide, Dremel® DSM840 Mitre Guide and the Dremel® DSM500 Multi-Purpose Cut-Off Wheel
- Dremel® 3000 with Multi-chuck 4486, wood drill bit set 636, Dremel® EZ SpeedClic sanding disc SC411

OTHER MATERIALS REQUIRED:

- 5 x 38 mm thickness 13ft scaffold boards
- 82 x 65 mm no.5 wood self-countersinking screws
- Wood filler to match your wood colour
- Manual screwdriver or powered driver

CUTTING LIST :

- 6 Lengths of 60 cm full board width and depth (sides)
- 8 Lengths of 52.4 cm full board width and depth (sides/floor)
- 4 Lengths of 38 mm x 38 mm x 700 mm (legs/side supports)
- 4 Lengths of 38 mm x 38 mm x 448 mm (floor supports)
- 4 Lengths of 76 mm x 38 mm x 60 cm with 45o mitre at each end for mating faces (top border)

STEP-BY-STEP INSTRUCTIONS

STEP 1

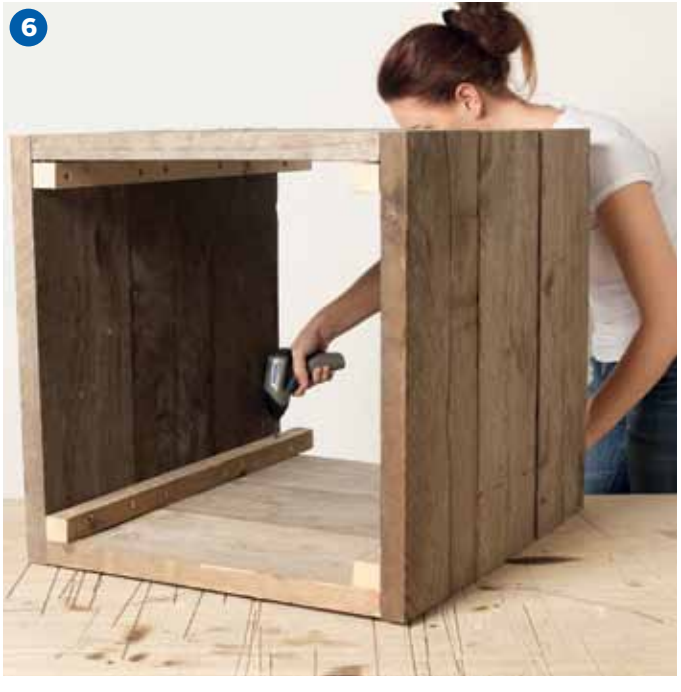
Mark up the cut on the board for the side of the planter that you are going to make all the way round on the piece of timber. Then, take your Dremel® DSM20 Compact Saw using the Dremel® DSM500 Multi-Purpose Cut-Off Wheel, set to a cutting depth of 20 mm and cut along the marked up line on one side – using a straight edge clamped or screwed into position to guide the tool. You will need to cut through the timber from both sides, so make sure that your marking up is accurate for both sides of the cut. When you've done this, continue to cut all of the sides of the planter, referring to the cutting list above for the correct sizes.

STEP 2

Use the Dremel® DSM20 with Multi-Purpose Cut-Off Wheel and the Dremel® DSM Edge Guide for the longer cuts and the Dremel® DSM840 Mitre Guide for the shorter cuts and diagonal cuts to create all of the floor supports and the legs/side supports, referring to the cutting list for the correct sizes.

STEP 3

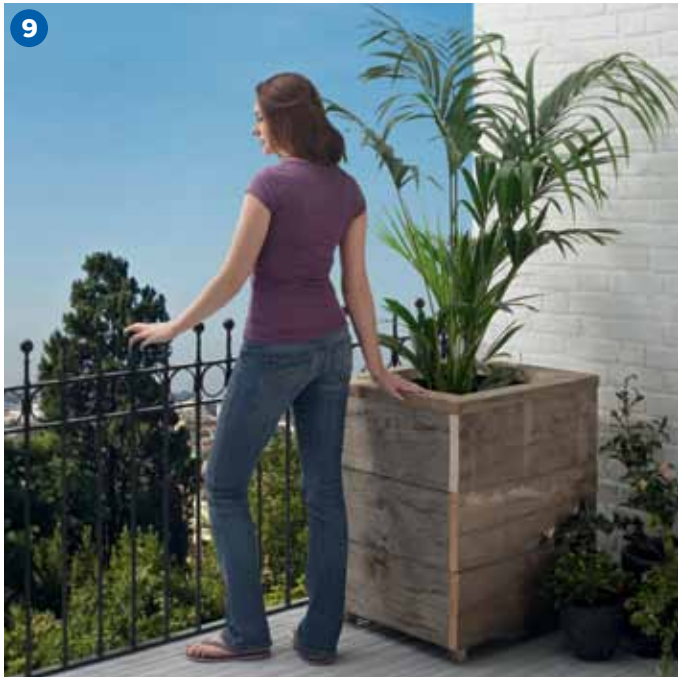
Cut all the top pieces of timber using the Dremel® DSM20 with Multi-Purpose Cut-Off Wheel and the Edge Guide. Then, mitre the ends to form the top frame using the Dremel® DSM840 Mitre Guide, referring to the cutting list for the correct sizes.



STEP 4
Mark out the screw positions on the side supports and drill pilot holes for the screws using the Dremel® 3000 and wood drill bit set 636.

STEP 5
Assemble one of the planter sides using three individual 52.4 cm lengths and two leg/side supports. Place the three individual 52.4 cm lengths on a flat surface, square up and put them up carefully making sure they fit flush to one another. Then take a leg/side support and position it so that the outside edge is flush with the cut edge and top of the 52.4 cm lengths. Then, using your manual screwdriver or powered driver and self-countersinking 65 mm x 5 mm screws, fix the side supports to the side of the planter. Repeat for the opposite side of the planter. You will now have two complete 52.4 cm sides of the planter with leg/side supports attached.

STEP 6
Take three individual 60 cm side pieces and assemble them on a flat surface, as before, square them up and put up tightly to each other so that all the faces are flush with each other. Then, take one of your assembled 52.4 cm sides and screw to fix using your manual screwdriver or powered driver and drill bit no 2, ensuring that the support is on the internal aspect and that the surface of the 52.4 cm assembled sides are flush with the top and the cut end of the 60 cm side pieces. Repeat this process with the remaining assembled 52.4 cm side. Now you have all three sides of the planter assembled. Construct the final 600 mm side as before and screw to fix. You should now have all four sides of your planter assembled.



STEP 7

Mark up and drill pilot holes using your Dremel® 3000 and the Drill bit set 636. Then using your manual screwdriver or powered driver and no. 2 bit, screw to fasten the floor supports at the base of each internal side of the planter so that they are flush with the bottom edge of the planter sides. Using the 52.4 cm floor pieces notched out to fit, screw and fix the floor pieces on top of the floor supports in the bottom of the planter - using your manual screwdriver or powered driver and the no. 2 bit .

STEP 8

Fit the top of the planter: Mark up the screw positions, then use the Dremel® 3000 and the drill bit to drill pilot holes using self-countersinking screws. Then screw and fix the mitred top to the rim of the planter with the manual screwdriver or powered driver and the no .2 bit. Finally, apply wood filler to countersink holes. Sand off any rough edges and any excess filler using your Dremel® 3000 with the EZ SpeedClic Sanding disc SC411.

STEP 9

Line the inside of the planter with heavy duty plastic sheeting and fill with good quality compost. Buy your palm or small tree, plant and water for instant shade or as a decorative addition to your balcony or terrace.

MAKING A DOUBLE SEAT OUT OF SCAFFOLDING BOARDS FOR YOUR BALCONY...

Use your Dremel® DSM20 to cut old scaffolding boards to create a chair, table or double seat and dress with trendsetting colourful cushions.

TOOLS REQUIRED:

- Dremel® DSM20 Compact Saw with the Dremel® DSM Edge Guide, Dremel® DSM840 Cutting Guide and the Dremel® DSM500 Multi-Purpose Cut-Off Wheel
- Dremel® 3000 with EZ SpeedClic Sanding discs SC411
- Dremel® Glue Gun and 7 mm Wood Glue Sticks GG03

OTHER MATERIALS REQUIRED:

- Manual screwdriver or powered driver
- Self countersinking screws

CUTTING LIST :

- 6 Lengths of scaffolding board at 69.5 cms (arms/sides of bench)
- 6 Lengths of scaffolding board at 112.5 cms (back, seat and front of bench)
- 1 Length 112.5 cms l x 8.5 cms w (top of the back of the bench)
- 2 Lengths of 66 cms l x 6.5 cms w (tops of the arms)
- 2 Lengths of 5 cms w x 62.5 cms (seat supports)
- 2 Lengths of 6.7 cms l x 5 cms w (front supports)
- 2 Lengths of 42 cms l x 5 cms w (back rest supports)
- 2 Lengths of 66 cms l x 5 cms w (feet)

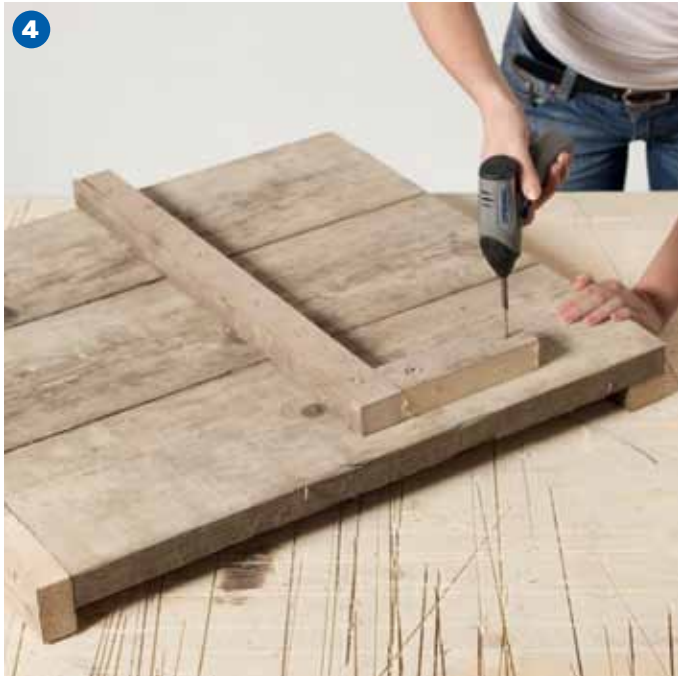
STEP-BY-STEP INSTRUCTIONS

STEP 1

To cut all scaffolding boards use the Dremel® DSM20 Compact Saw and Dremel® DSM500 Multi-Purpose Cut-Off Wheel to cut to the lengths shown in the cutting list above. Mark up the first cut that you are going to make all the way round on the piece of timber. Then, take your Dremel® DSM20 using the Multi-Purpose Cut-Off Wheel, set to a cutting depth of 20 mm and cut along the marked up line on one side – using a Dremel® DSM Edge Guide for straight cuts and the Dremel® DSM840 Cutting Guide for straight and diagonal cuts to guide the tool. You will have to cut through the timber from both sides so make sure that your marking up is accurate for both sides of the cut.

STEP 2

To construct the left side, lay out three scaffolding boards side by side on a flat surface and using your manual screwdriver or powered driver and self-countersinking screw, fix the foot onto the base, as shown.



STEP 3

Using your manual screwdriver or powered driver and screw the left armrest onto the top of the side panel as shown. Then, screw the seat supports onto the inside aspect of the left hand side panel at 36 cms from the bottom, making sure it's flush to the back edge of the side panel.

STEP 4

Fix the front support in line with the end of the seat support at 90 degrees, as shown. Now construct the right hand side, mirroring what you've done on the left. Then screw the front panel to the front support of the left and right sides and all the seat panels onto the seat support.

STEP 5

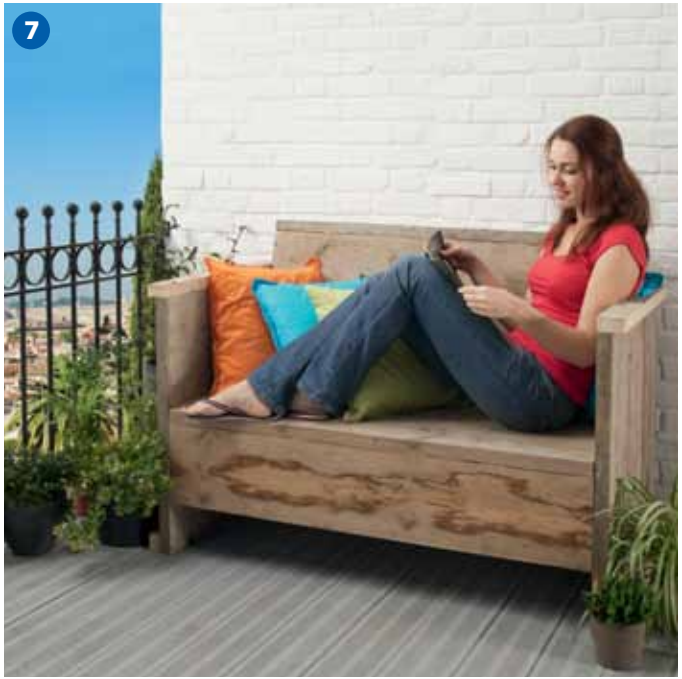
Take your back rest panels, lay them out on the floor, put them up with care to make sure they are flush with each other and screw to fix the back rest supports at each ends flush with the cut and flush with the top. Screw the top piece for the back along the top edge of the back rest. Now take the assembled back rest and screw to the sides at the desired angle e.g. 13 degrees.

STEP 6

Fill the screw holes with filler of a matching colour and sand off excess, plus any rough edges to finish using your Dremel® 3000 and the Dremel® EZ SpeedClic sanding discs SC411.

STEP 7

Treat with exterior wood treatment / stain.



ADD DECK LIGHTING

Add ambiance around your deck this season with acouple of well-placed accent lights.

TOOLS REQUIRED:

- Dremel®Multi-Max MM40
- MM450 Wood and Drywall blade
- MM70W Sanding paper
- MM14 Quick Fit Hook and Loop Pad

OTHER MATERIALS REQUIRED:

- Low-Voltage Outdoor Lighting
- Tape Measure
- Additional Electrical Supplies may be needed - refer to lighting manufacturer instructions

STEP-BY-STEP INSTRUCTIONS

! Tip: Once you have chosen which outdoor low-voltage lights you are installing, be sure to check the light manufacturer's safety guidelines.

STEP 1

Measure the area you wish to cut out to install the light- ensuring you are avoiding any existing hardware that may be behind that area. Bear in mind that pressure treated wood (as shown here) may be a bit tougher to cut. Additionally, the maximum depth of cut that can be easily achieved with this application is 2 cm.

! Tip: Make sure you place the light at least 305 cm from any water source.

STEP 2

Using the Dremel® Multi-Max with the MM450 wood and drywall blade, cut the area you marked. This half-moon shaped blade will allow you to make smooth running cuts.

! Tip: Allow your tool and accessory to do the work, do not force the accessory into the material you are cutting.

STEP 3

With the hole for your lighting complete, sand any rough areas using the Multi-Max with the MM14 Hook and Loop pad fixed with the MM70 Wood Sanding Paper. Feed the electrical cord through the hole and firmly set your new lighting fixture into place.

! Tip: Once all of your lights are in place, refer to the light manufacturer's instructions for electrical installation tips.

BASKET LIGHTS

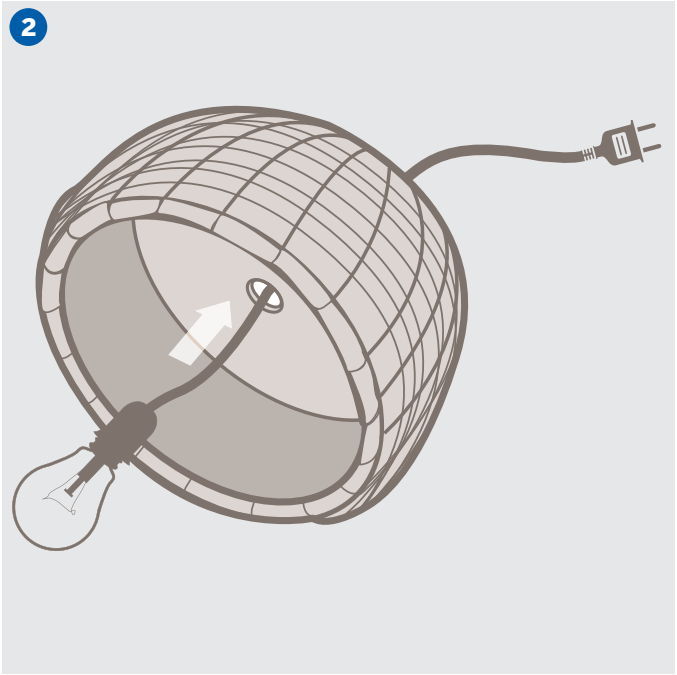
Re-use old baskets to create a cozy look to your outdoor hang-out!

TOOLS REQUIRED:

- Dremel® 4000
- EZ SpeedClic cutting Wheel SC409

OTHER MATERIALS REQUIRED:

- Baskets
- Extension Cord
- Low Voltage Outdoor Corded Lightbulb



STEP-BY-STEP INSTRUCTIONS

STEP 1

Use your Dremel® 4000 with the EZ SpeedClic cutting Wheel SC409 to slice a hole just large enough for the chord of your light to string through.

! Tip: When using the EZ SpeedClic cutting Wheel SC409 (as with most Dremel® rotary cutting wheels), set your tool to full speed. Remember to let the speed of the tool do the work and do not apply excess pressure to the portion of the basket you wish to cut. For this project, the tool can be used at full speed <35,000RPM> or <Level 10>. Make sure your hole is just big enough, but won't let the light slip through.

STEP 2

To secure the basket to the string of lights, string the chord of the lightbulb through the hole you just cut.

! Tip: Do some shopping in the outdoor section of your home center to find large, low-voltage outdoor string lights that will work best for this project.

! Additional Tip: Spray paint all of your baskets the same color for a uniform look or all different colors for a quirky punch of color!

PERSONAL FIREPLACE

Add some ambiance to your outdoor party with a personal fireplace.

TOOLS REQUIRED:

- Dremel® 4000
- SpeedClic Metal Cutting Wheels SC456
- Comfort Guard 550

OTHER MATERIALS REQUIRED:

- Shallow Metal Bucket
- Wire Mesh
- Gel Fuel
- Stones

STEP-BY-STEP INSTRUCTIONS

STEP 1

Lay your wire mesh on the ground and place your bucket upside-down over the grate. Using a brightly colored grease pen, trace the bucket.

! Tip: Whenever cutting metal, be sure to wear gloves, as your workpiece may spark. These sparks can be deflected using the Dremel® Comfort Guard 550. To install the Comfort Guard 550, remove the nosepiece of your Dremel® 4000 and replace it with the attachment. The clear shield rotates around the nose piece so adjust where needed to best deflect sparks. When cutting metals, start your Variable Speed Rotary off at a low speed and increase as needed. If chattering occurs on your metal workpiece, increase the speed of your tool gradually until the cut is smooth. Cutting wheels may wear throughout the project, so have a few on hand just in case you need to switch out wheels. If necessary, make additional quick cuts to remove any jagged edges.

STEP 2

Place your bucket upright and set the gel fuel inside the bucket. Place the cut piece of mesh about an inch down inside the bucket, leaving enough room to add stones on top, that's it!

! Tip: Place the cut piece of mesh about an inch down inside your bucket.

BUILD AN OUTDOOR BAR

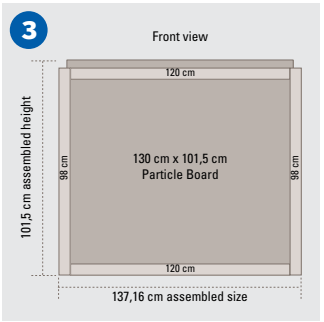
Building an outdoor bar is a great project to make your backyard party-ready.

TOOLS REQUIRED:

- Dremel® DSM20 with 2x 4 Cutting Guide
- DSM500 Multipurpose Cutting Wheel
- DSM600 Carbide Flush Cutting Wheel
- Dremel® Trio
- TR 563: multipurpose carbide cutting tip

OTHER MATERIALS REQUIRED:

- Drill driver + Wood screws
- 2 Sheets of 2 cm x 122 cm x 244 cm Particle Board
- 5 Planks of 244 cm length 38 mm (depth) x 89 mm (width)
- Brick Masonite (optional)
- Wood Glue (optional)



STEP-BY-STEP INSTRUCTIONS

STEP 1

Create the frame of your front panel by cutting two lengths of 98 cm and two lengths of 120 cm of the 38 mm x 89 mm timber using the DSM20 tool with the flush cutting blade DSM600 and the 2x4 attachment.

Place the guide near your measurement marks. Leave about an 0.32 cm between the guide and line to accommodate for the kerf of the wheel and its slight offset. Clamp the guide in place. Make your first pass, then flip the board over to complete the cut all the way through the 38 mm x 89 mm plank on your second pass.

STEP 2

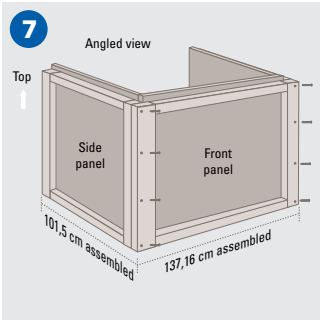
Next, cut a particle board panel to secure behind the frame of the bar. Measure and mark an area of 130 cm x 101,5 cm with the DSM20 and DSM600 Flush Cutting Wheel.

STEP 3

Secure your frame behind the particle board panel you just cut. Lay the frame over the panel and align flush with the bottom edge leaving 4 cm overhang of particle board on the top and 4 cm reveal of 38 mm x 89 mm plank on either side. Place screws in all four corners and in the middle of each side of your frame.

STEP4

Create the frames of your two side panels by cutting four lengths of 58 cm of 38 mm x 89 mm frame using the DSM20 with the Flush Cutting Blade DSM600 and the 2x4 attachment.



STEP 5

Next, cut two particle board panels to secure behind the side frames of the bar. Measure and mark an area of 75 cm x 101,5 cm. Secure the particle board into place with a clamp. Using your DSM20 tool with an DSM500 wheel, cut out the panels.

STEP 6

Secure your panels behind the two side frames you created in step 4. Lay the frame over the panel and align flush with the bottom and back edge leaving 3,81 cm overhang of particle board on the top and 2 cm reveal of 38 mm x 89 mm frame on the front side. Place screws in all four corners and in the middle of each side.

STEP 7

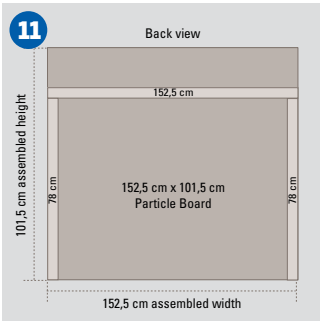
Now it is time to secure the side panels to the front panel you just created. Align one side panel at a time with the front panel. Your corners should align and slide into place with the overhang and reveal, you left on the side and front panels. Slide the two pieces together and secure with wood screws.

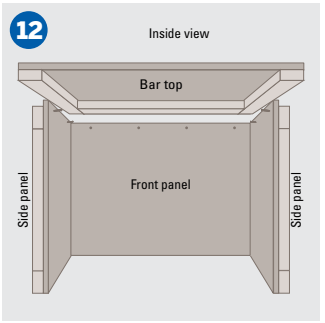
STEP 8

As another idea - you can add brick or tile to desired area. You can cut these materials to size by using the DSM540 Tile Cutting Wheel or the DSM520 Masonry Cutting Wheel. Here, we added masonite brick to our bar. We cut sheets of the masonite brick to size using the DSM20 and DSM520 Masonry Cutting Wheel.

STEP 9

Create the frame for your bar top by cutting two lengths of 78 cm and one length of 152.5 cm of the 38 mm x 89 mm plank using the DSM20 tool with the Flush Cutting Blade DSM600 and the 2x4 Cutting Guide attachment.





STEP 10

Now it is time to create the top of the bar. Measure and mark an area of 152,5 cm x 101,5 cm. Secure the particle board into place with a clamp. Using your DSM20 and DSM500, cut out the panel.

STEP 11

Secure your frame behind the particle board panel you just cut. Lay the 38 mm x 89 mm frame over the panel and align flush with the bottom edge leaving 16.5 cm overhang of particle board at the front of your bar top. Place screws in all four corners of the frame to secure the particle board.

STEP 12

Finally, secure your bar top into place. Set the top over the frame of your bar - have someone help you align the frame so that it fits tight against the particle board lip around the top of your front and side panels. Secure the top to the base from underneath using wood screws around the top edge of the particle board. Place a screw every 1' for added stability.

CUTTING AND FITTING TRELLIS TO A COURTYARD GARDEN

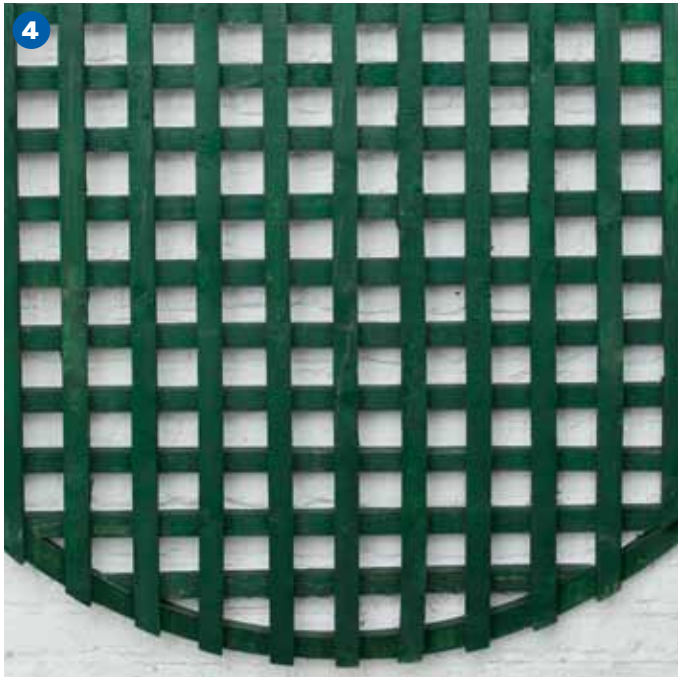
Why not make something beautiful out of a small bare paved courtyard. Add some tiling, a raised flowerbed, some pots and some painted trellis – plus some gorgeous scented plants – and sit back with a glass of wine and a book. It's worth the effort and needn't take long using your clever Dremel® 8200. Simply follow our step-by-step guide and use our images to inspire you!

TOOLS REQUIRED:

- Dremel® 8200
- SpeedClic Mandrel SC402 and Wood Cutting Wheel SC544
- Dremel® EZ SpeedClic™ sanding mandrel & sanding band 13 mm grit 60 (SC407)
- Dremel® drill bit 150 3,2 mm from the Precision Drill Bit set 628

OTHER MATERIALS REQUIRED:

- Trellis with arched top
- Exterior wood stain in dark green
- Tape measure



STEP-BY-STEP INSTRUCTIONS

STEP 1
Measure your courtyard walls for the trellis and buy it in standard lengths from your nearest DIY superstore. For our courtyard garden, we chose pre-stained wood in green with an arched end. If the standard length doesn't fit your wall, lay it on your trestle table and taking your Dremel® 8200, SpeedClic Mandrel and SpeedClic Wood Cutting Wheel SC544 cut through the wood to the desired length. (Similarly, if you can't find arched trellis, then mark up your arch onto the trellis and cut through each section in the same way.)

STEP 2
Sand the cut ends to ensure a smooth finish using your Dremel® 8200, Sanding Mandrel and Sanding Band 13 mm grit 60 (SC407).

STEP 3
Mount batons on wall, then using your Dremel® 8200 and Dremel® drill bit 150 3,2 mm from the Precision Drill Bit set 628, drill through trellis and into the baton onto your courtyard wall. This way your plants will have space to climb behind and around your trellis. We have inverted our trellis to put the straight side at the top and the arched at the bottom as a design feature. If you do this you will need to stain the top edge of your trellis to match the rest of it.

STEP 4
This is what your trellis should look like on your wall without plants. If you had to cut an arch for your trellis because you couldn't find any arched trellis locally, you will have needed to create a curved piece of wood to finish off the arch, as shown.

RENEW AN OLD GARDEN BENCH

Create a quiet outdoor sanctuary that you can enjoy year-round. Visit outdoor markets and yard sales this spring to find an old bench perfect for restoration.

TOOLS REQUIRED:

- Dremel® Multi-Max MM20
- MM900: diamond paper
- Dremel® DSM20
- DSM540 tile cutting wheel

OTHER MATERIALS REQUIRED:

- Mortar / Grout
- Bucket
- Grout Float
- Grout Sealant
- Sponge / Rag
- Work Gloves

STEP-BY-STEP INSTRUCTIONS

STEP 1

Brush or vacuum off any excess debris. Next grind down the the benchtop using a Dremel® Multi-Max tool with an MM900 Diamond Paper to create a smooth, even surface for laying new tile.

! Tip: You should always wear gloves and safety glasses when cutting tile, as shards of tile can be sharp.

STEP 2

Lay out your tile design next to your bench. Cut tiles to size as needed using the Dremel® DSM20 fit with the DSM540 Diamond Wheel Blade. Pour a thin layer of mortar or grout - here we laid 1 cm of sanded grout. Lay your cut tiles into the mortar bed and let dry completely.

STEP 3

Allow the tiles to set overnight. Once tiles are set, use a grout float to add extra grout between tiles. Additionally, you may want to apply a grout sealer to protect against mold and mildew. Wipe the surface clean of excess grout and sealer when finished.

CREATE AN HERB SOLARIUM

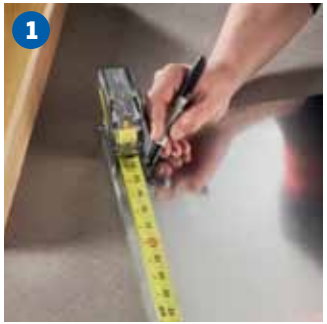
Begin starter plants early this season or keep fresh herbs in your kitchen year-round with this reflective, water-retaining table-top solarium.

TOOLS REQUIRED:

- Dremel® DSM20
- DSM510 metal and plastic cutting wheel
- Dremel® 8200
- SC409: thin cutting wheels
- Comfort Guard 550

OTHER MATERIALS REQUIRED:

- Wooden Tray
- Thin Sheet Metal
- Small Piece of Wood
- Rubber Mallet (if needed)
- Measuring Tape
- Work Gloves



STEP-BY-STEP INSTRUCTIONS

STEP 1
Measure the dimensions of metal you will need to cut: Measure the bottom of the wooden tray, adding 2.5 cm in length and width to allow for extra lining up the tray walls.

! Tip: When cutting metal, wear work gloves and eye protection to avoid injury. Be sure to secure your workpiece to a tabletop with a clamp before cutting.

STEP 2
Cut your marked lines using the Dremel® DSM20 and DSM510 Metal Cutting Blade.

STEP 3
Mark lines in all 4 corners of the sheet metal, 1 cm from the edges and make cuts 1 cm deep.

! Tip: Use the A550 Comfort Guard for increased comfort from sparks. You still need to wear proper safety gear- work gloves and eye protection.

STEP 4
Using the edge of your tabletop as your guide- fold 3 of the 1 cm walls of the lining to your solarium.

STEP 5
Lay a small piece of wood inside the lining to help you complete your last fold. Lay your sheet metal lining into a wooden tray. Add terracotta potted plants and water.

! Tip: Folding a perfect crease may be difficult. Once you have set the metal lining in your tray, you may need to pound into place using a rubber mallet.

RECLAIMED TABLE

Recycle a pallet for a multi-functional table.

TOOLS REQUIRED:

- Dremel® Multi-Max MM20
- MM450: Wood and Drywall Saw blade
- Dremel® DSM20
- DSM600: Multipurpose Flush Cutting disc
- DSM500

OTHER MATERIALS REQUIRED:

- Drill Driver + Wood Screws
- Pallet (ask a local store)

STEP-BY-STEP INSTRUCTIONS

STEP 1
Cut the pallet in half – against the centre support beam – using the DSM20 tool fitted with the DSM500. Use the beam as your guide as you cut through the wooden planks.

STEP 2
Remove planks and re-position them to fit more tightly together. You can use scrap planks from the removed portion of the pallet. Use a Multi-Max tool to remove any stubborn nails.

STEP 3
Plunge cut the center three planks in a rectangle to make space for your plants to sit.

STEP 4
Cut the support beam you removed in step one into 4 equal-lengthed pieces to create the legs to your table. Secure with screws

REFINISH PATIO FURNITURE

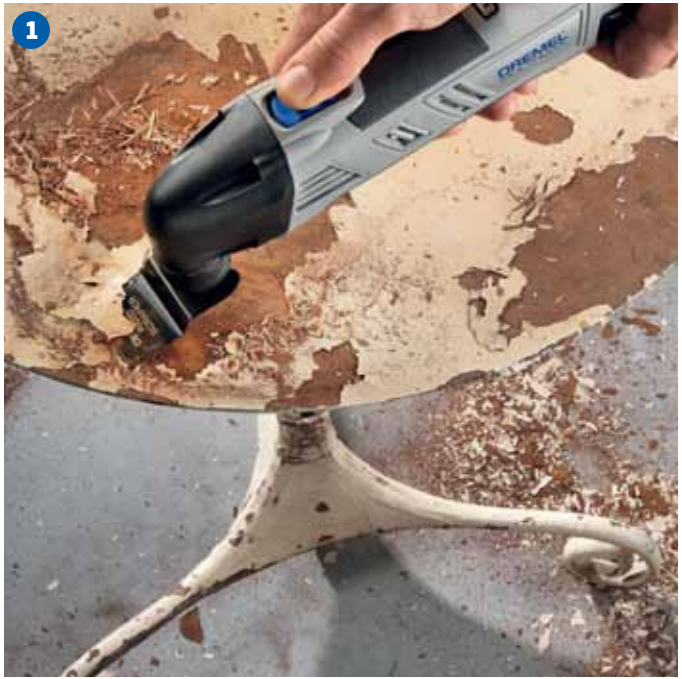
Give last-year's patio furniture a fresh, bold look this Spring. Restoring weathered patio furniture is easy with any Dremel® Multi-Max tool and Rotary tool with the right accessories.

TOOLS REQUIRED:

- Dremel® Multi-Max MM20
- MM600: Rigid scraper blade
- MM70P: Sanding paper
- Dremel® 8200
- SC407: Sanding band
- 952: Aluminium oxide grinding stone

OTHER MATERIALS REQUIRED:

- Rust-Resistant Paint
- Painting Supplies
- Dust Mask



STEP-BY-STEP INSTRUCTIONS

STEP 1
Scrape off existing paint on larger, flat surfaces using a Dremel® Multi-Max tool and the MM600 Rigid Scraper Blade.

STEP 2
Grind off rust and paint in smaller, detailed sections using any Dremel® Rotary tool and a rotary grinding accessory. Here we used the Dremel® 8200 tool with the 952 Aluminum Oxide Grinding Stone. Depending on how ornate the furniture is, you may want to consider a 538 Abrasive Brush run at a speed below 20,000 RPM.

STEP 3
Sand the surface as a final step before painting. Use the Dremel® Multi-Max and MM70P sanding paper for larger, flat surfaces. Use a Dremel® Rotary tool with a Sanding Drum or Abrasive Buff run at a low speed for hard-to-reach areas of your furniture.

STEP 4
Prime and paint your furniture with rust-resistant paint to make your new look last.

GARDEN MARKERS

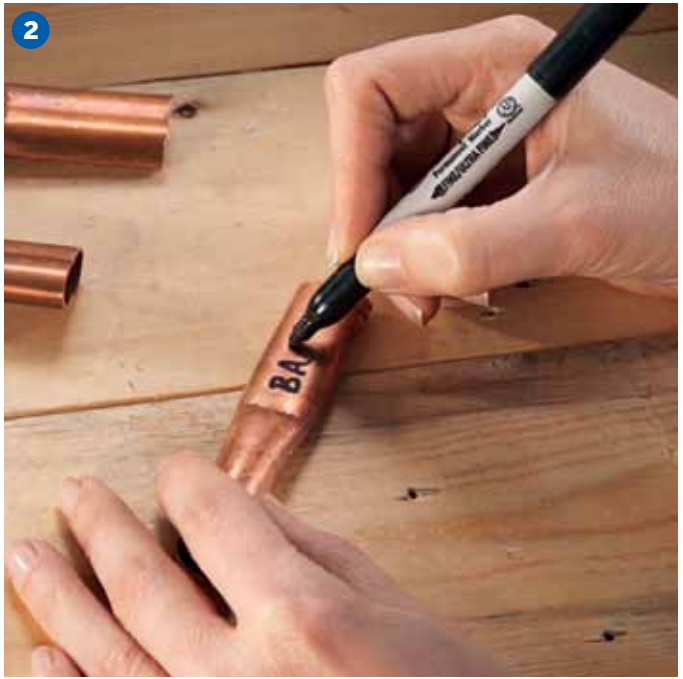
Add a personal touch.

TOOLS REQUIRED:

- Dremel® 4000
- 9901: Tungsten Carbide Cutter
- Dremel® DSM20
- DSM510: Metal and Plastic Cutting Wheel

OTHER MATERIALS REQUIRED:

- Scrap Copper Pipe



STEP-BY-STEP INSTRUCTIONS

STEP 1
Cut pipe to desired size. Here we cut our markers to about 10 cm.

! Tip: Use a vice or hammer to flatten out the top of the copper pipe once you have cut it.

STEP 2
Draw on design.

STEP 3
Carve your design into the pipe - Don't cut all the way through the pipe. Working at a low speed, make light strokes across your design. Use rubbing alcohol to remove any remaining design markings.

! Tip: For added control, use the Detailer's Grip attachment.

CHANGING THE TILING AROUND YOUR TOILET

How to change the tiles around your toilet for a fresh new look…
If the tiling around your toilet is old, cracked or the wrong colour for your new toilet or bathroom, it's quick and simple to chip off the old tiles, make good and tile the new ones around and behind your existing sanitary fittings. Take your Dremel® DSM20 Compact Saw using the tile cutting disc and cut your new tiles to the correct size. Just follow our step-by-step guide below. You can even cut porcelain floor tiles with your DSM20 Compact Saw for a complete makeover!

TOOLS REQUIRED:

- Dremel® DSM20 Compact Saw with the DSM Edge Guide and Dremel® DSM540 Diamond Tile Wheel

OTHER MATERIALS REQUIRED:

- Chisel and hammer
- Tile adhesive
- Tile spacers
- New tiles
- Grout and grouting pad
- Tape measure and pencil
- Sandpaper

STEP-BY-STEP INSTRUCTIONS

STEP 1
Chip off your old tiles using a chisel and hammer and make good, sanding so that the surface is smooth – or, if necessary, get the wall skimmed, as you need a perfectly even surface on which to tile.

STEP 2
Measure your wall dimensions and your tiles to create a plan for your tiling. Then find the centre of the wall and decide your tiling plan working from the centre towards the outside edges/corners to give yourself even tile cuts at either end.

STEP 3
In order to start to tile using your plan, ensure that you remove your toilet flush plate so that you can tile up to the service hole. Apply adhesive evenly all over the wall. Then accurately apply the whole new tiles using tile spacers to ensure they are all equally spaced apart from each other.

STEP 4
Cut the remaining tiles for the wall edges, corners, around the service hole and the back of the toilet using your Dremel® DSM20 Compact Saw and the Dremel® DSM Edge Guide and the Dremel® DSM540 Diamond Tile Wheel.

STEP 5
Apply the cut tiles to the wall, following your design.

STEP 6
Finish off by grouting and when that's dry, screw in a toilet roll holder – or even better, apply one with a suction pad so there's no need to drill - and you're done!

WALL MOUNTED FLOATING WOODEN CABINET

How to make and install a floating wall-mounted Shaker-style wooden box for your DVD player and set top box for your wall-mounted flat screen TV… Bought a flat screen TV and proudly wall mounted it only to have to deal with trailing wires to your DVD player and set top box? Make yourself a small floating wall mounted Shaker style wooden cabinet to take your DVD player and set top box and hide the wires behind a white board centered below your flat screen TV. Sounds complicated? Not a bit of it! Take your Dremel® DSM20 Compact Saw and simply follow our step-by-step guide below!

TOOLS REQUIRED:

- Dremel® DSM20 Compact Saw with the DSM Edge Guide, Dremel® DSM840 Cutting Guide and the Dremel® DSM500 Multipurpose Wheel
- Dremel® 3000 with the Dremel® Plunge Router Attachment 335 plus router bits 615, 640 and 654 and the Demel® EZ SpeedClic sanding discs SC411
- Dremel® Glue Gun and 7 mm Wood Glue Sticks GG03

CUTTING LIST:

- 244 x 400 x 18 mm premium timberboard for two sides of the cabinet
- 243 x 396 x 18 mm premium timberboard for two doors
- 509 x 277 x 18 mm premium timberboard for top
- 509 x 277 x 18 mm premium timberboard for base
- 453 x 400 x 18 mm premium timberboard for back
- 453 x 224 x 18 mm premium timberboard for shelf
- Four 396 mm lengths of 36 x 4 mm pine strip wood for upright door details
- Four 171 mm lengths of 36 x 4 mm pine strip wood for horizontal door details
- Two 224 mm lengths of 36 x 4 mm pine strip wood for shelf supports
- White board/cable hide: 140 mm w x 100 mm h x 70 mm d

OTHER MATERIALS REQUIRED:

- 2350 x 500 x 18 mm premium timber board for wooden cabinet and internal shelf
- Glass round handles for cabinet
- 3 metres of planed 36 x 4 mm pine strip wood
- Suitable screws/fixings to affix floating cabinet to wall
- Batons to affix floating cabinet to wall
- Primer and white satinwood paint
- Panel pins
- Tape measure

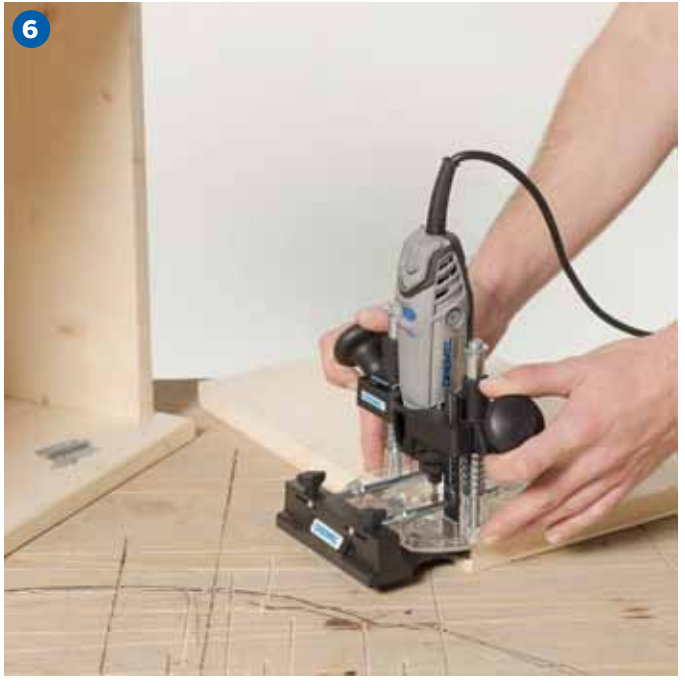
STEP-BY-STEP INSTRUCTIONS

STEP 1
Measure your DVD player and set top box to decide on the dimensions for the cabinet. Mark where it will go on the wall – centered, for example, allowing for a gap to get to any controls on the underside of the flat TV screen and for the wires. Measure the gap at the bottom of the TV screen where the wires need to be hidden by your white board, above the wooden cabinet.

STEP 2
Mark up and cut all of the lengths of wood using the Dremel® DSM20 Compact Saw, the Dremel® DSM500 Multi-Purpose Cut-Off Wheel and the Dremel® DSM Edge Guide as per our cutting guide above.

STEP 3
Then rout the front and side edge details onto the top of the cabinet using your Dremel® 3000, Dremel® Plunge Router Attachment 335 and the router bit 615.

STEP 4
Using your Dremel® Glue Gun and Dremel® 7mm Wood Glue Sticks GG03, glue and pin the back of the cabinet to the two sides, and then glue and pin the top and base to the back and sides. Leave to dry.



STEP 5

Cut the ten lengths of 36 x 4 mm pine strip wood for horizontal and vertical door details and shelf supports using your Dremel® DSM20, with Multi-Purpose Cut-Off Wheel with the Dremel® DSM840 Cutting Guide. Glue and pin the strips of wood using your Dremel® Glue gun and Dremel® 7 mm Wood glue sticks GG03 as before, onto the fronts of each door to create the Shaker effect.

STEP 6

Choose where you want the hinges and rebate the cupboard and doors for each of them using your Dremel® 3000 with Dremel® Plunge Router Attachment and router bits 654 and 650. Fit the doors to the cabinet with the hinges, and the screws that came with the hinges, using a manual screwdriver or powered driver and a suitable bit.

STEP 7

Cut the shelf using your Dremel® DSM20 and Multi-Purpose Cut-Off Wheel to the size in our cutting list. Then, fit the shelf inside the cabinet. Make two wooden shelf brackets from the strips of wood you cut earlier. Cut the shelf supports from the 36 x 4 mm pine strip wood, as per our cutting list. To fit the shelf supports inside the cabinet, glue and pin at a height of 19.1 cm from the base. Leave to dry before inserting the shelf. Then fit the shelf inside the cabinet.

STEP 8

Fill all end grains with wood filler and sand off any excess using the Dremel® 3000 and EZ SpeedClic Sanding discs SC411.

STEP 9

Prime and paint to accessorise with wallpaper. Fit the door handles and mount the cabinet onto the wall at the desired height.

! Tip: if you don't need a wooden cabinet for this purpose, you could still use this project step-by-step guide if you wanted to make any small cabinet e.g. for the bathroom or kitchen.

POT HANGER FROM RESTORED WINDOW

Save some space in your kitchen.

TOOLS REQUIRED:

- Dremel® Multi-Max MM20
- Dremel® 4000 with 115 high speed cutter
- MM450: wood and drywall saw blade
- MM70P sandingpaper

OTHER MATERIALS REQUIRED:

- Old Window
- Paint
- Screw Hooks
- Chain or Galvanized Cable

STEP-BY STEP INSTRUCTIONS

STEP 1
Remove glazing on long, straight areas of the window using the Dremel® Multi-Max with the MM450 blade.
To remove glazing in curved or tight spaces, use a Dremel® Rotary Tool with the 115 high-speed cutter.
Once glazing is removed, you can either re-glaze or remove the pane of glass altogether.

STEP 2
Remove paint on flat expanses of the window using the Dremel® Multi-Max with the MM70P Sanding Sheet.
Use a rotary tool equipped with a Flapwheel sanding accessory to remove paint in areas that are more difficult to access.

STEP 3
Paint the sanded frame. Once the paint is dry, drill pilot holes into the frame in areas where you would like to hang your pots. Finger-tighten screw hooks into your piloted holes.

! Tip: You can stand the frame upright on your counter, mount it to a wall, or hang it from the ceiling. Here we hung the window using a galvanized cable looped around screw hooks fixed to each corner of the window.

! Safety Tip: Work with both tools at a medium speed. If you chose to remove the pane of glass, be careful to watch out for any existing nailing holding the pane into place - as they can be sharp. Wear gloves when working on this project.

RAIN STATION

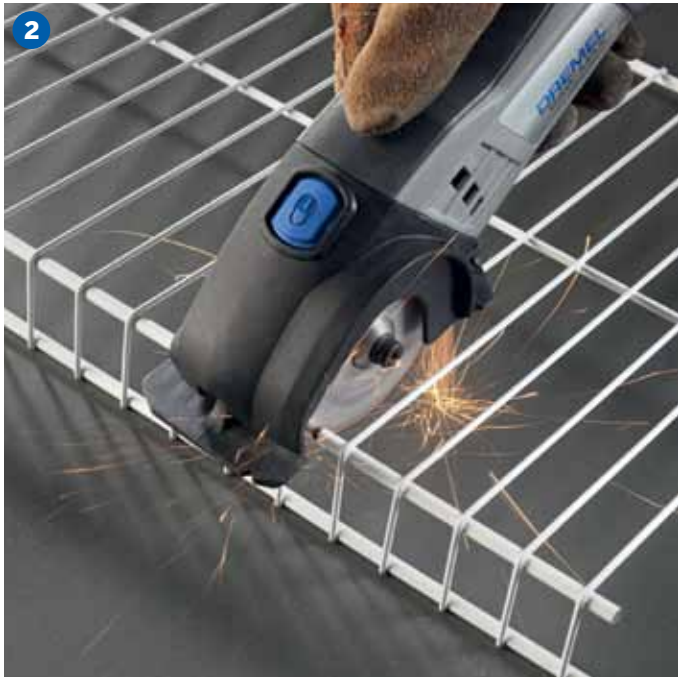
Keep outdoor essentials at-the-ready.

TOOLS REQUIRED:

- Dremel® DSM20
- DSM510 metal and plastic cutting wheel

OTHER MATERIALS REQUIRED:

- Drill Driver & Wood Screws
- Metal Shelving and Corner Brackets



STEP-BY-STEP INSTRUCTIONS

STEP 1
Measure desired length of metal shelving depending on where you'd like to mount it.

STEP 2
Use the DSM20 tool with a DSM510 Metal Cut-Off Wheel to cut your desired length. Next, secure your shelves. We drilled corner brackets into the bench to place the shelves.

! Tip: Secure brackets in the back of the bench slightly higher than the ones in front. That way you can easily see the items organized on your shelf.

CUSTOM HEADBOARD

Create a custom look

TOOLS REQUIRED:

- Dremel® DSM20
- DSM500 multipurpose carbide cutting wheel
- Dremel® Trio
- TR 563: multipurpose carbide cutting tip

OTHER MATERIALS REQUIRED:

- Picture frame
- Shadow box
- Wainscoting
- Plywood
- Rope Lighting

STEP-BY-STEP INSTRUCTIONS

STEP 1
Remove glass from current picture frames and the centre frame shadow box (enclosed glass front case). Trace the removed glass to determine the shape you need to cut. Using the DSM20 with the DSM500 blade, cut wainscoting for the two side frames.

STEP 2
Using the DSM20 still equipped with the DSM500 wheel, cut plywood for your center, shadowbox.

STEP 3
Draw your center design onto the plywood. Using a Dremel® Trio with a TR563 cutting accessory, plunge cut your desired design.

! Tip: Place rope lighting inside the shadow box to illuminate your design. Use your Trio tool to plunge cut a hole in the back of your shadow box to pass the lights through.

ETCHED MIRROR

Brighten up any space

TOOLS REQUIRED:

- Dremel® 4000
- 225 flexshaft attachment
- 84922 silicon carbide grinding stone

OTHER MATERIALS REQUIRED:

- Drill Driver & Wood Screws
- Mirror
- Permanent marker

STEP-BY-STEP INSTRUCTIONS

STEP 1
Trace your desired design using permanent marker.

STEP 2
Using your Dremel® Rotary Tool equipped with our Flex-Shaft attachment and any engraving cutter or silicon carbide grinding stone, etch over your design. Here we used a 84922 Silicon Grinding Stone to achieve smooth, thick lines.

! SafetyTip: Extensive force is not required here. By applying a gentle touch you can get the effect you are looking for without damaging your mirror.

CONSTRUCTING A RADIATOR COVER

Create a designer look for your radiators…

Radiators don't have to be boring. Create a wooden case for it, add a screen and paint. What could be easier or more elegant. Simply follow our step-by-step guide. All you need is your Dremel® TRIO and Dremel® Glue Gun 910 – and off you go!

TOOLS REQUIRED:

- Dremel® TRIO
- Dremel® TRIO Multipurpose Carbide Cutting Bit TR563
- Dremel® TRIO Chamfer Router Bit TR618
- Dremel® TRIO Sanding Mandrel TR407 and the P120 Sanding Band TR432.
- Dremel® Glue Gun and 7 mm clear glue sticks

OTHER MATERIALS REQUIRED:

- Die cut hardboard
- Primer, white emulsion and satin finish paint
- Wood
- Screws
- Pencil
- Straight edge
- Wood filler

STEP-BY-STEP INSTRUCTIONS

STEP 1
Measure your radiator and buy a piece of MDF. This should measure 13 mm thick and have a total area that's at least one third larger than the surface area of your radiator. This is in order to give yourself room to cut all the sections for the cover from it. When you get home, mark out the sections with a pencil for your radiator cover top, sides and front.

STEP 2
Using the Multipurpose Carbide Cutting Bit TR563, cut out your sections. As well as the top, sides and front solid sections, cut out the ventilation holes beneath the top shelf, for the grill and at the base. Set at speed 8.

STEP 3
Then take your Dremel® TRIO with the Multipurpose Carbide Cutting Bit TR563 and cut out a section of die cut patterned radiator grill hardboard with a minimum thickness of 3 mm. This is to go over the main opening/s on the front of your radiator. Make sure that the section you cut is larger by at least 10 cms than the opening/s on your design.

STEP 4
Then go back to your MDF cut out section where the patterned radiator grill will be inset and give it a decorative and neat finish by using the Dremel® TRIO and Chamfer Router bit TR618 to bevel the edge of the wood facing outwards. Carry on doing this on all the edges where you want a decorative finish. Use speed 6.

STEP 5
Lightly sand all the edges which you have cut using the Dremel® TRIO plus Sanding Mandrel TR407 and the P120 Sanding Band TR432.

STEP 6
Now, with your Dremel® Glue Gun and 7 mm clear glue stick, glue the patterned radiator grill to the reverse of the main MDF face.

STEP 7
Then with your Dremel® Glue Gun and 7 mm clear glue stick, glue all the sections together, then screw the main face onto the sides and finally screw the top onto the box you have made. Fit over skirting board and pipes to mount against the wall. Using wood filler, fill over screws and any blemishes, then prime, paint and finally secure to wall with internal brackets.

MAKING AND FITTING A NEW PIECE OF SKIRTING BOARD

Give a smart finish to your walls…

It may not sound like much but a smart end to your walls in the form of the humble skirting board makes all the difference. Skirting boards get scuffed and worn and in some cases rot away or simply haven't been fitted in the first place. So, a little time spent creating and fitting or replacing them will smarten up your home. Simply take your Dremel® Multi-Max and follow our step-by-step guide to help you!

TOOLS REQUIRED:

- Dremel® Multi-Max
- Dremel® Multi-Max Wood and Drywall Saw blade MM450
- Dremel® Multi-Max 10 mm Flush Cut blade MM470
- Dremel® Multi-Max Hook and Loop Sanding pad MM11
- Sanding paper for wood MM70W in grit P60

OTHER MATERIALS REQUIRED:

- Masonry drill
- Pencil
- Straight edge
- Rawlplug
- Set square

STEP-BY-STEP INSTRUCTIONS

STEP 1

Measure the area at the foot of your wall that you want to cover with skirting board. Then, buy a length of skirting board from your local DIY superstore in the style that you want to either match your existing boards or replace them. Skirting boards come in many styles from the completely plain to suit a modern house, to ones with a bevelled edge, to highly decorative ones with lots of moulding for an older house. Mark up the point along the length at which you want to cut the board using a pencil and straight edge.

STEP 2

Cut out the piece of skirting board to fit the area where you need to replace it using your Dremel® Multi-Max and the Flush Cut blade MM470. If you are fitting it into a corner you may need to cut off the edge of each piece of skirting board to fit them together neatly using the Wood and Drywall Saw blade MM450.

STEP 3

Sand to finish using the Dremel® Multi-Max Hook and Loop Sanding Pad MM11 and the sanding paper for wood MM70W which comes in three grits P60, P120 and P240. Finally, using a masonry drill, drill a hole for a rawlplug into the brickwork and then screw the skirting board into position, avoiding pipes, and fix it to the wall.

DOG KENNEL

How to make a dog kennel…

It's often said that a pet is the heart of the home. If your furry family member due a birthday or perhaps a Christmas present. Then why not make him or her their own home. If you have a kitchen or conservatory that's big enough it can stand in a corner or on the back patio, terrace or garden outside. Fill it up with soft cushions and it's a palace for your dog. Your children will probably end up playing inside it too!

Take your Dremel Moto-Saw and simply follow our step-by-step guide below!

TOOLS REQUIRED:

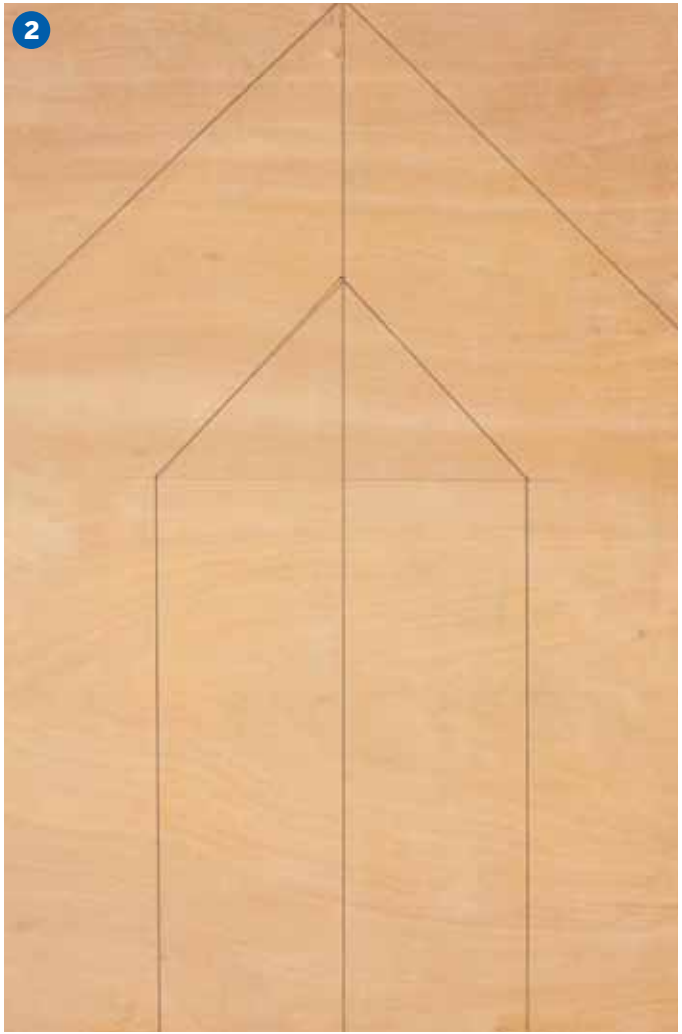
- Dremel® DSM20 with the Dremel® DSM500 Multi-Purpose Cut-Off Wheel
- Dremel® Moto-Saw with Fine and Coarse Wood blades MS51 and MS52
- Dremel® Corded Multi-Max MM40

CUTTING LIST:

- 22.74 metres of redwood pine ship lap 120 mm wide x 14 mm thick for cladding walls of dog kennels, cut to the following lengths:
- Back and front of the kennel
- 10 x 200 mms long
- 9 x 760 mms long
- 2 x 350 mms long
- 2 x 600 mms long
- Sides of the kennel
- 12 x 1 metre long
- 12 mm ply lengths:
- 4 x 612 mm long x 80 width for the eaves of the kennel
- 1 x 600 mm width x 1028 mm long for the left hand roof panel
- 1 x 1028 long x 612 wide for the right hand roof panel
- 18 mm exterior ply lengths:
- 2 x 1044 mm long x 732 mm wide for the front and back of the kennel
- 45 x 45 mm pine softwood 964 mm long for the roof strut
- 1 x 120 mm x 80 mm 12 mm ply for the crown

OTHER MATERIALS REQUIRED:

- Pin gun or hammer and pins
- Drill driver
- 50 mm countersinking screws
- Paint



STEP-BY-STEP INSTRUCTIONS

STEP 1

Go to your local DIY store and buy the redwood pine ship lap, ply and pine softwood. Cut your ship lap down to the required sizes using your Dremel® DSM20 and the Dremel® DSM500 Multi-Purpose Cut-Off Wheel.

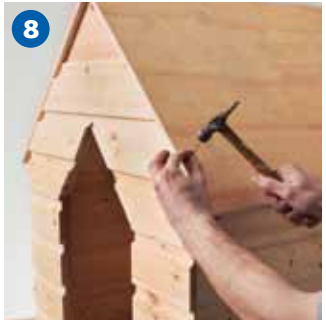
STEP 2

Cut out the doorway and roof as follows using your Dremel® DSM20 and DSM500 Multi-Purpose Cut-Off Wheel: Draw a line onto a piece of your 18 mm ply vertically from the bottom of the 1044 mm length to a height of 760 mm. Then draw a parallel line 560 mm, vertically on each side of the line you've just drawn, 186 mm from each edge of the width of the piece of ply. Draw a line to connect the top of the two parallel lines to intersect with the apex of the entrance to the kennel at 760 mm in the centre. Then mark on the left and right edges of the ply at 677 mm and draw a line up to the edge of the board in the centre to form the roof pitch. Place on the other sheet of ply and mark up using it as a template for the roof pitch only.

Then cut out using your Dremel® DSM20 and Dremel® DSM500 Multi-Purpose Cut-Off Wheel and sand with your Dremel® Corded Multi-Max, as necessary.

STEP 3

Place 5 x 200 mm strips of ship lap onto the front of your dog kennel and put them up tightly together. Then using a pin gun or hammer and pins, pin them on making sure that the first one is flush with the bottom and the inside edge of the door. Repeat on the other side of the doorway. This will give you an overhang of 14mm on the outside of the panel which is correct.



STEP 4

Take two pieces of the 760 mm ship lap, place them on a table or workbench and put them up tightly together, then place the kennel front on top of them, face down. Scribe/ draw a line along the inside edges of the top of the kennel onto the ship lap.

STEP 5

Then cut the pieces of ship lap with your Dremel Moto-Saw. To finish off the top, place the 600mm and then the 350mm length of ship lap and scribe/ draw a line along the outside edges of the top of the kennel and cut with the Moto-Saw as before. Pin onto the front of the kennel leaving the last piece off for the time being.

Repeat this process for the rear of the kennel again pinning all the pieces in place but leaving the last piece off.

STEP 6

Then take your 1 metre lengths of ship lap and stand the kennel front up on a flat surface and hold it, then working from the bottom pin 1 metre lengths of ship lap to construct the side elevation. It will take 6 lengths to complete. Repeat this step on the other side to form the other side of the kennel.

STEP 7

Next, make the roof strut by taking the piece of 45 mm x 45 mm pine softwood 964 mm long and fix it, using a drill driver and two 50 mm countersinking screws at each end, flush with the apex of the kennel. This makes the ridge of the kennel.

STEP 8

Pin a 600 mm x 1028 mm roof panel in place on the left hand side of the roof and pin into the ridge and along the verge. Then take the 612 mm x 1028 mm right hand roof panel and overlap it at the apex by 12 mm and pin it into place.

STEP 9
Draw your design for the eaves of the kennel onto the 612 mm x 80 mm piece of ply. Cut it out using the Moto-Saw and Fine Wood Cutting Blade MS52, making a 45 degree cut on one end, and use it as a template for the other side. Pin in place flat against the face of the kennel on the front.

STEP 10
Draw your crown design onto the piece of 120 mm x 80 mm 12 mm ply, cut it out on the Moto-Saw and pin it onto the kennel above the door.

STEP 11
Paint to desired finish using animal-friendly non-toxic paint. Introduce dog to kennel.

! NOTE : Use your Dremel® Corded Multi-Max to sand any rough edges as you go. If your kennel is going to sit outside, it will need a floor and to be painted using external paint.

WINE BAR

This project came to us from Erik in Cary, IL. Erik enjoys the sense of accomplishment of completing quick fixes around the home. This wine bar was his first restoration project and we think he did an amazing job!

TOOLS REQUIRED:

- Dremel® Multi-Max MM40
- MM14 Hook an Loop Sanding Pad
- MM70W sanding paper
- Dremel® DSM20
- DSM500 Multipurpose Carbide Cutting Wheel
- Dremel® 4000
- SC407 Sanding Mandrel and band

OTHER MATERIALS REQUIRED:

- 2.5 cm x 8 cm Plank
- 3 cm Round Molding Strip
- Drill Driver & Wood Screws
- Primer & Paint Brushes
- Acrylic white paint
- Finishing Nails
- Old cupboard

STEP-BY-STEP INSTRUCTIONS

STEP 1
After removing drawers, doors and hardware, Erik sanded all surfaces to be refinished.
He removed existing paint or varnish using the Multi-Max MM40 with 70W Sand Paper for larger surface areas. He used the Dremel® 4000 with the SC407 Drum and 408 Sanding Band for more detailed areas.

STEP 2
Erik used the DSM20 to cut pieces to construct the wine rack. He cut sections of 2.5 cm by 8 cm and 2.5 cm quarter rounds to fit the cabinet space. The 2.5 cm by 8 cm pieces served as the supports and the quarter round are the cross beams that hold the wine bottles. He screwed the 2.5 cm by 8 cm supports in the front and back of the cabinet using wood screws and a drill driver. He used trim nails to align the quarter rounds to fit the space, making sure the area between the cross beams were spaced to support a single wine bottle.

STEP 3
Erik used a heavy primer to paint the area of the wine bar within sight.

STEP 4
Once the piece was dry, Erik noticed a couple of rough areas of the primer. Using the Multi-Max and MM70P Paint Sanding sheets, he smoothed out rough spots.
He again used the Dremel® 4000 with the EZ SpeedClic™ Sanding Drum and a finer grit Sanding Band (438) to smooth out more detailed areas.

STEP 5
Once all areas were smooth, Erik gave the piece two coats of white paint.

STEP 6
Erik purchased pre-fabricated wine glass hangers online. Using the included hardware and a drill driver, he installed the hangers underneath the cabinets. He made sure to allow enough space at the front of the hanger so that the doors would close completely. Erik then completed the project by reattaching the doors, drawers and hardware onto the wine bar.

EASY STORAGE IDEAS

Use some of that scrap material lying around your garage to build storage units! Whether you have PVC, 38 mm x 89 mm planks or pipe, you can create functional solutions to store nearly anything.

PIPE SHELVING UNIT:

TOOLS REQUIRED:

- Dremel® DSM20 with 38 mm x 89 mm planks cutting guide
- DSM500 multipurpose carbide cutting wheel
- DSM510: metal and plastic cutting wheel
- Dremel® Mulit-Max MM20
- MM482 wood and metal flush cut blade

OTHER MATERIALS REQUIRED:

- 38 mm x 89 mm planks
- Metal Pipe / Conduit
- Drill Driver & Wood Screws
- S-Hooks (Optional)

PVC CUBBIES UNIT:

TOOLS REQUIRED:

- Dremel®DSM20
- DSM500 Multipurpose Carbide Cutting Wheel

OTHER MATERIALS REQUIRED:

- PVC Pipe
- Liquid Nails

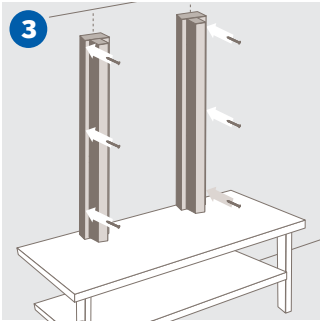
PIPE SHELVING UNIT: STEP-BY-STEP INSTRUCTIONS

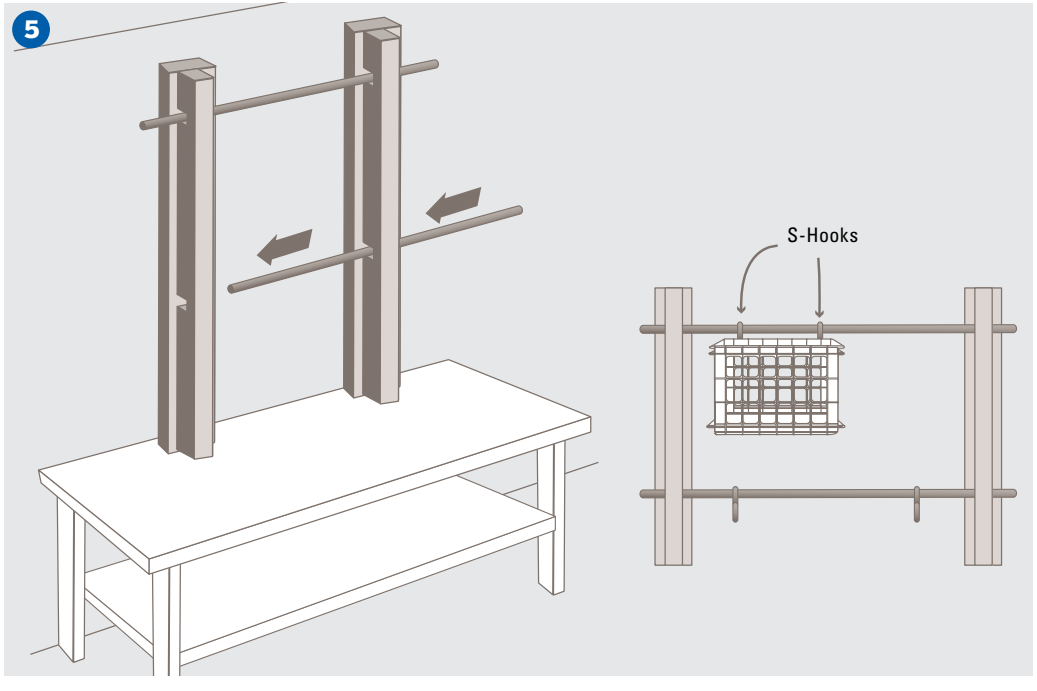
STEP 1

Even if you have support studs in place, we do not recommend notching out your existing studs to create shelving, as it may compromise your support structure. Measure the height of your desired shelves and mark your cut. Use the Dremel® DSM20 fit with a DSM500 blade and the 2x4 cutting guide attachment to cut two pieces of 38 mm x 89 mm that will serve as the sides of your shelving. Place the guide near your measurement marks. Leave about a 3,2 mm between the guide and line to accommodate for the kerf of the wheel and its slight offset. Clamp the guide in place. Make your first pass, then flip the board over to complete the cut all the way through the 38 mm x 89 mm on your second pass.

STEP 2

Mark the area in which you will be placing your pipes. It is best if you only notch out an area just large enough for your pipes to fit inside, to reduce risk of the pipes spinning while in place. With your Multi-Max tool set to high speed and a Flush Cutting blade such as the MM482 blade, cut along your marked lines. Remember to let the speed of the tool do the work and do not bear down on the 38 mm x 89 mm planks. Here we hung two metal pipe shelves in our 38 mm x 89 mm planks so we cut two notches in each 38 mm x 89 mm planks.





STEP 3

Using a drill driver and wood screws, screw your shelf sides perpendicular to the support 38 mm x 89 mm planks you cut in step 1. The notches should be facing the 38 mm x 89 mm as shown here. Finally, screw in the two complete T-structures into your wall.

! Tip: Use a level to be sure that you are securing your 38x89's at an even height so that your pipes hang evenly.

STEP 4

The pipe shelves should span the distance between the edges of your 38 mm x 89 mm planks. We recommend leaving an extra 1 cm off of the end of each 38 mm x 89 mm to ensure your pipe will not slip through one side. While other types of pipe may work such as copper for lighter-weight storage, we used conduit for maximum support. Once you have measured and marked your cut, place the pipe in a vice and use your DSM20 tool with an DSM510 Metal Cutting Blade to complete the cut. The Dremel® DSM20 can cut through thinner conduit in a single pass. Thicker conduit may require rotating the pipe as you cut.

STEP 5

Set your pipe into the notched areas of the 38 mm x 89 mm planks. Now, you can hang nearly anything from the new shelves! We hung plastic crates from the pipes using S-hooks for easy storage of sports gear.

PVC CUBBIES UNIT: STEP-BY-STEP INSTRUCTIONS

STEP 1

Measure the depth of your desired cubby. Here we are making our PVC cubbies the depth of our workbench we are attaching them too. You may want to cut more than one cubby. For this project we stacked 6 pieces of pipe to create a shelf along the side of our workbench.

STEP 2

Secure your pipe in a vice. Using your Dremel® DSM20 fit with a DSM500 Wheel, cut along your marked line. If your pipe is greater than 2 cm in diameter, you will need to rotate the pipe as you cut it. To do this, release pressure on the pipe slightly so it is still secure but can be rotated. With your free hand securely holding the end of the pipe, turn the pipe towards you very slowly as you cut along the marked line.

STEP 3

Once you have cut all of your PVC pieces, secure them together with liquid nails. Clamp the pipes together and allow the adhesive to dry overnight.

! Tip: If your shelving unit is only one unit wide, which ours is, it is best to mount it somewhere as opposed to leaving it as a freestanding unit due to its rounded base. Here we used liquid nails to attach the unit directly to the side of our workbench.

INSTALL WALL MOUNT RANGE HOOD VENT

Nothing helps clear the air in your kitchen quite like an exterior venting exhaust fan. Installing one can be simple with the help of the Dremel® DSM20 and Multi-Max.

TOOLS REQUIRED:

- Dremel® Multi-Max MM20
- MM450: Wood and Drywall Saw Blade
- Dremel® DSM20
- DSM510 Metal and Plastic Cutting Wheel

OTHER MATERIALS REQUIRED:

- Wall mount range hood
- Clamp
- Additional screw driver
- Caulk

STEP-BY-STEP INSTRUCTIONS

STEP 1

Here we have chosen to rout the vent through an exterior wall. You may find it easier to run the vent through the roof. Mark the area you need to remove above your stove. Your hood may have come with a template for this. If not hold your hood up to where it will be mounted and trace the area of your wall and trace inside the cut-out area intended for the vent.

! SafetyTip: Make sure you're clear of electric and gas line before cutting the drywall.

STEP 2

Next, cut around the area you just outlined with a Multi-Max tool and an MM450 Wood and Drywall Saw Blade. Once your cut is complete, remove the cut drywall and underlying insulation to expose the exterior wall.

! Exercise caution when working with insulation and seek help if you have questions about safe handling measures.

STEP 3

It is easiest to cut the exterior wall from outside. Locate your cut on the exterior wall by drilling holes in the corners of the vent hole from the inside. Ensure there is nothing on the outside of the house that you could hit with your drill before getting started. Once you are ready to cut use the Dremel® Multi-Max tool with the MM450 Blade once again. Cutting thick exterior wall substrate can be challenging.

STEP 4

Measure the length of vent you need to run. You may find that you need to cut the vent to length. This is easy with a Dremel® DSM20 mounted with an DSM510 Metal Cut-Off Wheel. Mark your length of cut and work the tool slowly through the material.

! SafetyTip: Always wear gloves when cutting through metal.

STEP 5

With the vent hole complete, finish installing vent hardware and exhaust fan. Install flashings and caulk on the exterior of the vent to seal against moisture.

! SafetyTip: Adhere to local codes and take all necessary safety precautions when wiring your new range hood.

THE CRYSTAL LIGHT RAIL

Make your dinner parties sparkle this Winter…

Crystals hanging from an aluminium pole are all you need to create a glamorous, and sexy feel to your kitchen or dining table. LEDs powered by four AA batteries will cause this light to last for a long time without the need to change a thing and all the time you and your guests will be bathed in glittering, twinkling crystal light. Take your Dremel® 8200 and your Dremel® Versatip and simply follow our step-by-step guide below!

TOOLS REQUIRED:

- Dremel® 8200 with SpeedClic Mandrel SC402 and Metal Cutting Wheel SC456
- Dremel® Versatip with Soldering Tip 201
- Dremel® Precision Drill Bit Set 628

OTHER MATERIALS REQUIRED:

- 900 x 40 mm diameter length of chrome handrail
- 2 x Chrome end caps
- 4 x White super bright LEDs and 4 x bulb holders
- 6 x R2 Resisters
- Battery holder and 4 x AA batteries
- 30 x brass paper clips
- Two metres of bell wire
- 1 x Ultra miniature toggle switch
- 4 x Wire rope stoppers
- Ceiling fixing
- Wire rope

STEP-BY-STEP INSTRUCTIONS

STEP 1

Buy a length of chrome handrail 900 mm in length from a DIY outlet. And mask up with masking tape to protect the surface of the chrome and to allow yourself to be able to mark up. Draw a line along the entire length of the handrail. On this line mark up the length of the chrome handrail into five equal segments. These are the points where your LEDs will be placed. Now using this line again draw two more lines 20 mm either side of this up the entire length of the chrome handrail. These two lines you have just drawn are the lines from which your crystals will hang.

STEP 2

Now use a centre punch to avoid your drill skating across the surface of the handrail, then drill a pilot hole through the handrail for the LEDs on the line described above using your Dremel® 8200 with the Dremel® drill bit 1.6 mm from the Precision Drill Bit Set 628. Then using a drill with a 8 mm drill bit, enlarge the hole. Now go to the two lines you have drawn from which to hang the crystals. Divide each of these lines into five equal segments and drill each segment with three 1.6 mm holes, spaced equally apart. This is so that you can hang three sets of crystals per segment.

On the top line, mark up a spot 20 mm from each end. This will be the position for the wire rope to go through the handrail to hang your crystal light rail to the ceiling. Drill the size of holes suitable for the wire rope you intend to use.

! Tip : It is advisable to use a cutting fluid when drilling into metal.

STEP 3

You should find a wiring diagram packed with your LED pack of lights. Follow this and feed all the wiring in the correct formula in through the ends of the tube and out through the holes for the LEDs. Leave enough slack on the wires so that they can be easily soldered outside of the tube. The slack that allows you to make the soldered connections outside of the tube can be pushed back inside the tube once the wiring loom has been soldered up and insulated. Wire up and then take your Dremel® Versatip with soldering tip 201 and solder your connections to the battery pack, switch and the resistors on the feeds to the LEDs.

We feed two separate feeds from the battery positive through three R2 resistors on each, in parallel to the two separate LED pairs which are in series: A, K, A, K. Then we run on from each LED pair to the battery negative via the switch.

When you've done all this, insulate all the parts of the wiring loom and the exposed tails of the LEDs. Once the wiring loom is complete, test it to see it that everything works as it should before you assemble the lamp. Then insert the LEDs into their holders and push all the wiring back into the tube taking care not damage any of the insulation on the loom. Now push the LED holders into the holes.

! SafetyTip: If you are not confident of making this step safely, ask a local electrician to check your wiring for you or ask him to wire up the light for you.

STEP 4

Drill an appropriate sized hole for the micro switch into the end cap using your Dremel® 8200 and drill bit from the Dremel® Precision Drill Bit Set 628 up to a size of 3,2 mm. If your switch needs a larger hole than this, you will have to use another drill and drill bit. Fit switch. Then fit hanging wire ropes through the holes you've previously drilled at each end of the handrail and cut to the required length, depending on the height of your ceiling and how low you want the light rail to hang over your table. Secure with rope locks. Insert the other end of the wire rope into the ceiling fixing. Secure with another rope lock. Position ceiling fixing top halves with a spacing of 860 mm and fix to the ceiling. Screw the bottom half of the ceiling fixing to the top part.

STEP 5

Once the light rail is hanging in place securely, hang all your crystals into the holes you have drilled previously. And switch on your light rail.

OSTRICH EGG LIGHTING

Using Ostrich eggs as quirky party lighting may not be something that immediately strikes you as a good idea! However, drilled with patterns, sprayed, hung and lit shows just how effective they can be. Simply follow our step-by-step guide and light up a corner which is bound to become a real talking point. All you need is your Dremel® 3000 – and off you go!

TOOLS REQUIRED:

- Dremel® 3000
- Dremel® Flexible Attachment Shaft 225
- Dremel® Flex-Shaft Tool Holder 2222
- Dremel® Sanding Band 430 & 407
- Dremel® Diamond Point Engraving Tips 7103, 7105
- Dremel® Precision Drill Bit Set 628
- Dremel® Diamond Wheel Point 7122
- Dremel® EZ SpeedClic Metal Cutting Wheels SC456
- Dremel® Oxide grinding stone 952
- Safety glasses

OTHER MATERIALS REQUIRED:

- Ostrich eggs, blown and cleaned – these have a 20 mm blow hole at one end
- Soft pencil
- Towel to cushion the egg while drilling
- Slim paintbrush
- Spray paint, if required
- Soft eraser, if required

STEP-BY-STEP INSTRUCTIONS

STEP 1

For the light source inside the egg, first increase the size of the blow hole using your Dremel® 3000 fitted with the Sanding Band 431 (6.4 mm grit 60) to a diameter of roughly 25 mm.

STEP 2

Buy your blown and cleaned Ostrich eggs online. Wash and dry. Then using a soft pencil roughly mark out a design on the egg. Rest the egg on the folded towel to cushion it while you do this. Then, take your Dremel® 3000, fitted with the Dremel® Flexible Shaft 225 and the Dremel® Diamond Point Engraving Tip 7103, using Dremel® Flex-Shaft Tool Holder 2222 to suspend the Flex Shaft and make it easy for you to work. Use the Dremel® Diamond Point Engraving Tip 7103 to scratch the surface of the egg and make a small indentation where each hole is to be drilled. This will act rather like a pilot hole, preventing the tip from slipping on the smooth surface of the egg. Repeat the process to mark out the entire design.

STEP 3

Remove the Dremel® Diamond Point Engraving Tip 7103 from the Dremel® Flexible Shaft 225 and replace it with one of the Dremel® Precision Drill Bit Set 628 selecting the size appropriate for the effect you wish to create. Put on your Safety Glasses to protect your eyes. Allowing the tool to do the work and applying only gentle pressure, drill a hole through each indentation. Work your way around the egg to complete the pierced design, changing the drill bit as desired to create holes of different sizes.

STEP 4

Fit the tool with Dremel® Diamond Wheel Point 7122. Use it to carefully remove sections of the egg shell between various holes to join them up into slots. Using the picture as a guide, repeat this to form a dot and slot design on your egg.

STEP 5

Replace the Dremel® Diamond Wheel Point 7122 with the Dremel® Diamond Point Engraving Tip 7105. Working around the egg as before, press the tip lightly into the depression surrounding each of the drilled holes to smooth the edges. When the design is completed, remove particles from the inside of the egg by shaking them out through the blow hole. Pass the paintbrush tip through the blow hole and brush away any dust and remaining fragments. If desired. If the egg is to remain natural, use a soft eraser to remove any pencil marks. Otherwise spray paint the egg with a colour at this point, allowing it to dry thoroughly.

! Tip: Ostrich eggs are surprisingly strong and can be drilled quite easily, however avoid positioning the holes too close together to reduce the risk of the egg breaking as it is being drilled.

STEP 6

Make a simple toggle device out of either wooden dowel or metal to hang in the top of the ostrich egg to string it to the ceiling.

If using metal : Using your Dremel® 3000 with a SpeedClic Metal Cutting Wheel SC456, cut a 50 mm length strip of 2 mm x 19.5 mm alumium flat bar purchasable at DIY stores or online. Cut two slots of 3.5 mm wide x 4 mm deep in the centre of the toggle either side. Round off the ends of your toggle to fit the inside curve of the ostrich egg using your Dremel® 3000 and the Aluminium Oxide Grinding Stone 9,5 mm 952. Attach a cable tie, pull tight and cut off the excess. Tie the top of the cable tie to a piece of fishing line, chain or ribbon to hang up the egg.

! Tip: If using chain to suspend the egg, pass the cable tie through the last link of the chain before attaching the cable tie to the toggle. Also, attach a piece of fishing line to the bottom part of the cable tie, underneath the toggle.

Alternatively, if you are using dowel: Simply cut to a length of 5 mm and round off the ends using your Dremel® 3000 and the sanding band 407 (13 mm grit 60). Then either pass your cable tie though the last link of the chain or tie ribbon onto the cable tie and wrap the cable tie around the piece of dowel. Before you pull it tight, also pass your hanging length of fishing line through the cable tie so that you can attach the balloon to the toggle inside the ostrich egg in order to hang up the egg.

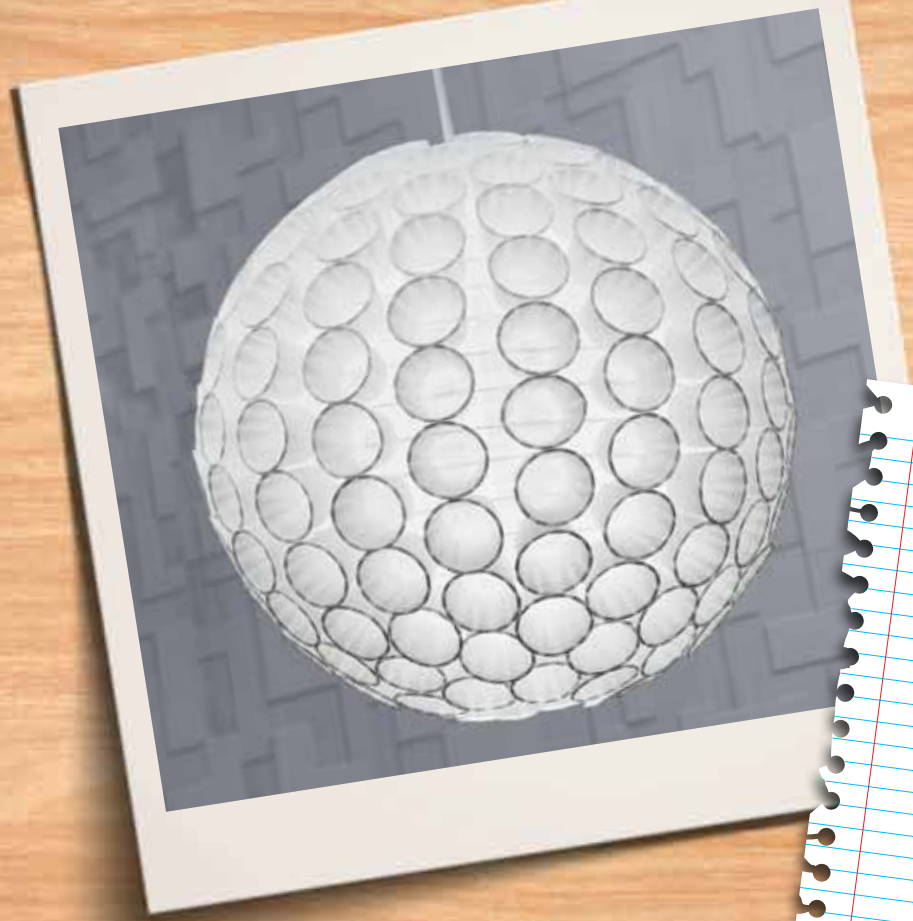
STEP 7

Purchase a packet of white LED light-up balloons from a party shop or online. Using this type of light source means that you can hang your egg light literally anywhere as the light fitting inside the balloon has its own batteries and LED all contained within the balloon itself, so there is no need for any external wiring or power supply. Simply insert the LED balloon into the egg and inflate and tie off. Then simply string up to the ceiling using a cup hook to secure it into the ceiling plaster.

! Tip: When the battery/LED light goes, after 15 hours – well after your party is over – simply remove the LED balloon and insert a new one to carry on enjoying your quirky lighting display : simple!

PAPER CUP PENDANT LIGHT SHADE

Following a trend called upcycling you can create a 3D modern light shade out of a simple white paper ball light shade and some waxed catering paper cups. It will only take you minutes using your Dremel® Glue Gun.



TOOLS REQUIRED:

- Dremel® Glue Gun and 7 mm clear glue sticks

OTHER MATERIALS REQUIRED:

- Round Paper Pendant Light Shade, 30.5 cm diameter
- 180 x 1oz Dry Waxed Paper Soufflé or Condiment Cups

STEP-BY-STEP INSTRUCTIONS

STEP 1
Assemble a paper light shade into a globe by following the instructions provided in the pack.

STEP 2
With your Dremel® Glue Gun switched to the cool setting, apply glue around the edge of the base of one of the paper cups. Starting at the base of the light shade, press the glue to the surface of the shade so that the edge of the paper cup sits against the lower edge of the shade.

STEP 3
Complete the first circle by using your Dremel® Glue Gun to glue more paper cups around the lower edge of the shade, positioning each one adjacent to the previous one. This paper shade has a 7 cm hole in the base, which requires nine paper cups to surround it.

STEP 4
Form the second circle by using your Dremel® Glue Gun to glue the cups in-between those in row one.

STEP 5
Continue to use your Dremel® Glue Gun to glue the cups for rows three and four in-between those of the previous rows, building up circles of alternately placed cups.

STEP 6
From row four, use your Dremel® Glue Gun to glue cups in vertical lines, positioning them directly above the cup in the previous circle, rather than in-between. The diameter of the globe will be increasing as you approach the centre line, which means that larger gaps will appear between the cups.

STEP 7
As you approach the top edge of the shade the diameter will decrease and the lines of cups will naturally merge. Finish with a final row of cups glued adjacent to the opening at the top of the shade and hang up your light shade.

KITCHEN CUTLERY CHANDELIER

Create a shabby chic kitchen chandelier…

The shabby chic trend is all the rage. Its combination of vintage chic with modern utilitarianism is up-to-the-minute and easy to achieve. So have some fun with some cheap or old cutlery, some aluminium and create a fashionable talking point for your kitchen. This is a fun project for anyone in your household who likes spending time working with their hands. It's not complicated to create using your Dremel® VersaFlame and Dremel® 8200. Simply follow our step-by-step guide and use our pictures to guide you!

TOOLS REQUIRED:

- Dremel® VersaFlame
- Dremel® 8200
- Dremel® SpeedClic Mandrel SC402, SpeedClic Metal Cutting Wheels SC456
- Dremel® Precision Drill Bit Set 628, Dremel® Diamond Wheel Point 7134 and Dremel® Tungsten Carbide Cutter square tip 9901, Dremel® Aluminium Oxide Grinding Stone 952, Dremel® Stainless Steel Wire Brush 530
- Dremel® Line and Circle attachment 678
- Dremel® Multi-Chuck 4486
- Dremel® Bar Clamp 2505

OTHER MATERIALS REQUIRED:

- Aluminium flat bar
- Aluminium welding rod
- Sheet of 2 mm thick aluminium
- Stainless steel abrader
- Stainless steel wire brush
- Dressmakers flexible steel tape measure
- Safety goggles
- Paper clips

STEP-BY-STEP INSTRUCTIONS

STEP 1

Buy three x 1 metre strips of aluminium flat bar 2 mm thick by 25 mm wide to make the three rings of the chandelier. For the large ring, use the whole metre. For the medium ring, use a length of 75 cms and the small ring, use a length of 55 cms. Bend each length into an individual circle. Then, screw four metal brackets into your workbench to hold the size of hoop you want to weld.

Weld together the two ends of the hoop using the Dremel® Versaflame. In order to do this, firstly clean up the faces using your Dremel® 8200 with a Dremel® stainless steel wire brush 530 to remove oxidisation, dust etc. Then heat the aluminium edge of the two ends of the hoop to melting point – 380 degrees - using your Dremel® Versaflame. Lay a bead of the aluminium rod onto each face of the ring, then abrade to break through the oxidation so that the bead of filler rod merges with the aluminium. Close up the ring, then heat up until it reaches its melting point again and the two mating faces will fuse together. If necessary, add more filler rod. There are some good tutorials on YouTube to help you do this.

STEP 2

Measure the external circumference of all the hoops and note down their sizes. Then, working on the large hoop, divide the hoop into equal segments, one segment per piece of cutlery you are going to hang on each hoop. And mark up. We used 24 pieces of cutlery on the top hoop, 12 on the middle and 12 on the bottom hoops.

Divide the hoop circumference into quarters and mark at the quarter point, the place where you are going to attach your chain. These four chains will suspend each hoop, one from the other. Drill a hole at each quarter point with the Dremel® 8200 and the Precision Drill Bit Set 628, 3.2 mm drill bit. Use a centre-punch to avoid your drill skating across the surface of the aluminium. The middle hoop will need two drilled holes at the top and bottom of the hoop to attach the chains.

! Tip: It is advisable to use a cutting fluid when drilling into metal.

STEP 3

Firstly make the centre aluminium disc for the crown which will take the support rods from the large hoop. Cut a 60 mm disc out of a sheet of 2 mm thick aluminium using your Dremel® 8200, Dremel® Tungsten Carbide Cutter square tip 3,2 mm 9901 and the Line and Circle Cutter attachment 678. Then cut a circular hole in the centre of the disc to create a 27 mm circular hole with the 9901 to take the light fitting. Smooth the edges of the hole using the Aluminium Oxide Grinding Stone 952.

STEP 4

Returning to the hoops, at the quarter points, weld a 4 mm thick aluminium rod 230 mm long to the inside of the hoop, above the hole you have drilled. When all four are fixed in place, bend the rods and weld to the centre disc, overlapping it by 10 mm in each case. Once you have your structure, weld on two aluminium rods per quarter equally spaced which you will have bent by hand into shapes which mimic tangled stalks, and onto which you can attach metal leaves.

To make the leaves, mark up and cut out metal diamond-shaped leaf shapes from very thin sheet aluminium 1 mm thick using your Dremel® 8200, SpeedClic Mandrel SC402 and a SpeedClic Metal Cutting Wheel SC456, then weld them onto the aluminium rod stalks using your Dremel® Versaflame.

STEP 5
Cut a groove with the Dremel® 8200 fitted with the SpeedClic Metal Cutting Wheel SC456 on the top of each hoop at each of the marked up segments.

STEP 6
Use the holes drilled earlier in the link rings. Add the spiral link rings. Then, attach the chains to link all the hoops together.

STEP 7
Next buy a chandelier ceiling rose and chain. Unscrew the ring from the lamp holder, insert the lamp holder into the disc at the top of your chandelier tightening up the retaining ring. Hang from the ceiling wiring up to an existing light fitting making sure you have turned off the electricity first – or get your electrician to do this for you.

STEP 8
Drill holes in the handles of your cutlery using the Dremel® 8200 and a drill bit from the Precision Drill Bit set. Then, take a paper clip and open out so that you have a S shape, then hook the large S over the frame of the hoop in the groove and the bottom S into the drilled cutlery. Use a standard 60 watt candle bulb to illuminate.

! Tip: We hung the largest hoop at the top with large spoons, interspersed with large forks in between facing outwards, the middle sized hoop with forks and the smallest hoop at the bottom of the chandelier with small teaspoons all facing outwards. If you are buying cutlery, make sure that it is low quality catering cutlery, easy to find online, as it is important that it is thin, soft and easy to drill through.

PAPER PLATE LAMPSHADE

Create a designer lampshade out of paper plates…

Elegant, chic, retro, cool. Can this really be a lampshade made out of paper plates? Well yes it is! With a simple lamp base and normal bulb, this lovely lampshade will be become a favourite bedside or living room light. Simply follow our step-by-step guide. All you need is your Dremel® Glue Gun and clear glue stick to make this iconic lampshade.

TOOLS REQUIRED:

- Dremel® Glue Gun and 7 mm clear glue sticks

Note: The diameter of the plates must be a little larger than the height of the lampshade.

OTHER MATERIALS REQUIRED:

- Paper plates, 18 cm diameter, approximately 50
- Brushed chrome stick lamp base
- Drum lampshade, cream, 13 cm high x 15 cm diameter
- Steel rule
- Pencil
- Scissors
- Bone folder or the back of a table knife
- Ramekin dish or other.

Note: The ramekin dish is used to rest the lampshade on during the gluing process; it assists in the positioning of the plates at a consistent height around the shade. If the dimensions of your shade and plates differ to those given, choose a dish that allows the plates to be positioned centrally on the shade when the shade is resting on it.

LIGHT BULB:

Make sure you only use the wattage which is recommended with the lamp base.

STEP-BY-STEP INSTRUCTIONS

STEP 1
Fold one of the paper plates in half and burnish along the crease using the bone folder or the back of the table knife. Place the ruler .5 cm away from and parallel to the fold and use the pencil to mark the line. Keeping the plate folded, use the scissors to cut along the line marked.

STEP 2
Lay another paper plate right side down and place one of the semi circles on top of it, matching the curved edges. Place the steel rule along the straight edge and use the bone folder to score a line down the whole plate. Repeat the process on the opposite side of the plate so that two parallel lines are scored down the centre of the whole plate, approximately 1 cm apart. Fold in the semi-circles, wrong sides together, and burnish the scored lines to achieve a sharp crease.

STEP 3
Insert a clear glue stick into the Dremel® Glue Gun and turn it to the cool setting. Rest the shade on the dish, top edge up. Apply a line of glue up the centre of the 1 cm wide panel on the first plate then position the folded plate vertically on the shade so that one of the folded edges aligns with the vertical seam of the lampshade.

STEP 4
Repeat the process, aligning subsequent plates adjacent to the previous one, working your way around the shade and ensuring that the plates remain vertical and level at the top and bottom of the shade. Repeat the process until the shade is completely covered. Fix the shade onto the base; add the bulb and your lamp is complete.

! Tip: You can gauge the approximate number of plates you will need for your particular shade by measuring its circumference; 1 cm equals one plate.

AUTUMN CELEBRATION WREATH

Wreaths can be made to highlight any occasion, holiday, or season of the year, and the Dremel® Glue Gun helps you make each wreath a success. This autumn wreath uses the color palette and themes of the season to bring the outdoors in and on your door or wall.

TOOLS REQUIRED:

- Dremel® Glue Gun

OTHER MATERIALS REQUIRED:

- Round wreath frame (wood, straw, grapevine, etc.)
- 122 cm Garland of fall leaves
- Assorted floral items including pine cones, berries, pods, gourds
- 183 cm of 0.5 cm wide velvet ribbon - dark green
- Picture wire, picture hanger with nail
- Glue sticks

STEP-BY-STEP INSTRUCTIONS

STEP 1
Wrap ribbon around wreath gluing every four inches to secure.

STEP 2
Wrap leaf garland around wreath gluing every four inches to secure.

STEP 3
Glue a variety of fall-themed floral items like pods, pinecones, and berries in place around the frame.

STEP 4
Attach a wire loop on the back of the wreath using picture wire. Attach picture hanger to wall or door and display your wreath with pride

DECORATIVE PLANTERS

Personalize your garden space and create unique gifts this season by etching terracotta painted pots.

TOOLS REQUIRED:

- Dremel® 8200
- 191 High Speed Cutter
- 9901 Tungsten Carbide Cutter Square Tip
- 9910 Tungsten Carbide Cutter

OTHER MATERIALS REQUIRED:

- Terracotta Pots
- Paint, and painting supplies

STEP-BY-STEP INSTRUCTIONS

STEP 1
Apply a thick layer of paint to the pot and leave to dry completely.

STEP 2
Draw your desired design onto the pot using a pencil.

STEP 3
Use clamps or other practical way to secure and support the workpiece to a stable platform. Etch over your pencil design using a Dremel® rotary tool with an engraving accessory like the 191 bit. Experiment taking several passes over the design to adjust the width of your line. If you are decorating a few pots, we recommend using a fluted Tungsten Carbide Cutter like our 9901 or 9910 bit.

WALL CLOCK

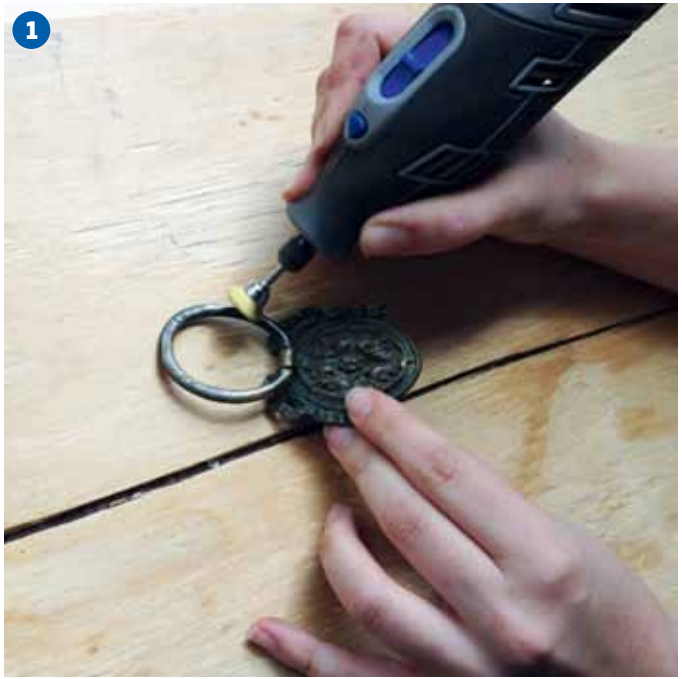
Create a unique piece of art you can't find anywhere else! We found different silver and brass pieces, polished them up, and created a wall clock.

TOOLS REQUIRED:
- Dremel® 8200
- Dremel® Glue Gun

IF CLEANING BRASS:
- 535 Brass brushes
- 536 Brass brushes
- 537 Brass brushes

IF CLEANING SILVER:
- 403 Nylon Bristle brushes
- 404 Nylon Bristle brushes
- 405 Nylon Bristle brushes

OTHER MATERIALS REQUIRED:
- Clock movement



STEP-BY-STEP INSTRUCTIONS

STEP 1

Once you have chosen the pieces you would like to use to create your clock, begin brightening them up by polishing with your Dremel® Rotary Tool. If you are cleaning brass pieces as we are here, we recommend using brass brushes. These brushes are non-sparking and softer than steel so they will not scratch. Use brass brushes if you're cleaning soft metals like gold, copper or brass.

! Tip: When using any polishing brushes, always run your tool at 15,000 RPM, no higher. Slowly make light passes across your workpiece. Here we began by cleaning larger areas with the 536 brush and got into tigher spaces with the 537 brush. If you are cleaning silver pieces, use Bristle Brushes. These are perfect for light de-burring, cleaning or polishing of silverware, jewelry and other precious metals. For extra shine, use Bristle Brushes with polishing compound.

STEP 2

Mount your polished pieces to the wall, here we used hot glue. Add a finishing touch to your clock by embelishing the clock movement (the center of the clock with the hour and minute hands). Note that if you are going to be adding polished pieces to the movement itself, a battery powered movement may not be able to sustain the weight. We found that a corded movement worked best in holding up heavier pieces of silver. Here we took the center of an old corded movement and hot-glued the handle of an old spoon and a knife to the hands of the clock. We hid the cord by running it through the wall.

CHILDREN'S ANGEL WINGS

Make a set of heavenly Angel Wings to turn your child into a charming cherub…

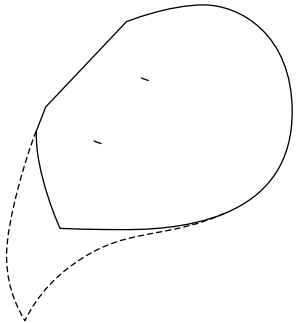
All children are smiling happy little cherubs at Christmas, aren't they? OK, well maybe not all the time – so to try and get the best out of your child during this festive season, see if these gorgeous angel wings will make them a little more heavenly around the house… Just take your Dremel® Glue Gun 930 and create the perfect outfit for any of the twelve days of Christmas – and especially, Christmas parties!

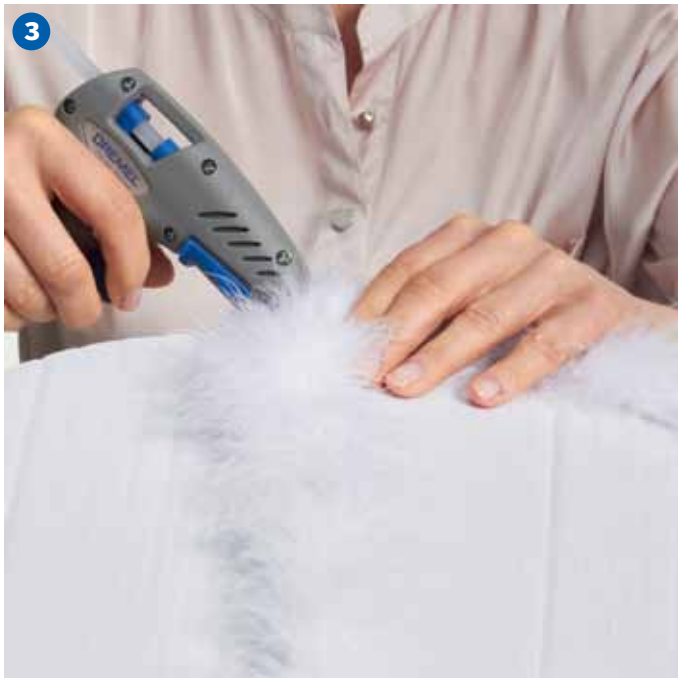
TOOLS REQUIRED:

- Dremel® Glue Gun 930 and 7 mm clear glue sticks

OTHER MATERIALS REQUIRED:

- Large medium-weight cardboard box
- 10 Packs of white marabou feathers (20 per pack)
- 8 Packs of white quill feathers (12 per pack)
- 2 Packs of white craft feathers
- 3m white marabou trim
- 2 x 50 cm lengths of 5 mm wide elastic
- Cutting mat
- Steel ruler
- Large eyed needle
- Pencil
- 2 x Bulldog clips





STEP-BY-STEP INSTRUCTIONS

STEP 1

Enlarge the pattern template on page 121 and print it out at 400% so that the wing measures approximately 38 cm across at its widest point. Then create a double layer of cardboard by flattening the box along one of its existing creases and place the straight edge of the pattern against the fold. Draw round the pattern.

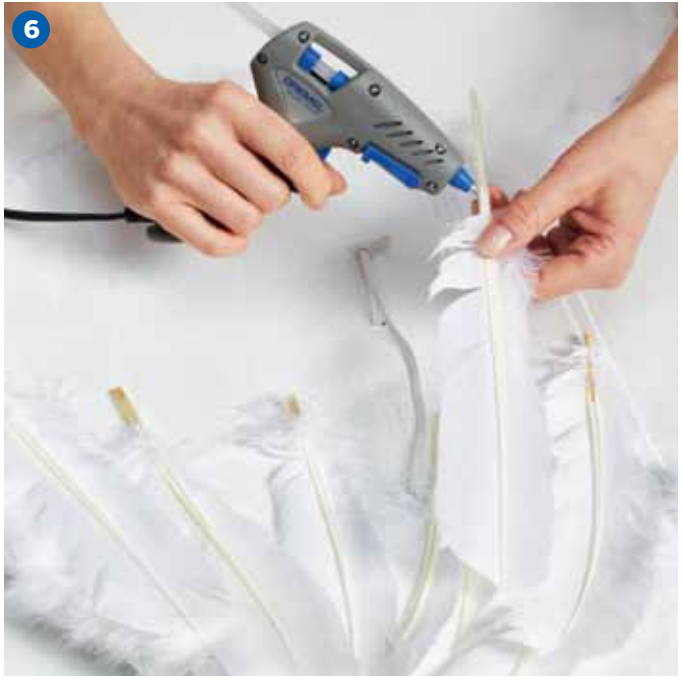
Then, lay the cardboard onto a cutting mat and cut the shape out along the line marked, cutting through both layers simultaneously. Cut 1 cm long slots at the positions marked for the elastic. It's best to work with white cardboard cut out from a white cardboard box, however, if you can't find one, then simply apply a couple of coats of water-based white paint to both sides of ordinary cardboard at this stage.

STEP 2

Open out the wings and lay them down so that the crease forms a mountain ^ rather than a valley fold v. Use the needle to thread one of the lengths of elastic down through one hole and up through the other on one of the wings. Knot the ends to secure them temporarily. Repeat on the second wing. The temporary knots can be undone when the wings are complete and the fit adjusted to suit size of the child.

STEP 3

To hide the hard edge of the cardboard on the finished wings fit your Dremel® high temperature Glue Gun 930 with a 7 mm clear glue stick and glue the marabou trim around the edge of each wing, working on short sections at a time.



STEP 4

Place the wings down with the knotted elastic uppermost. Lay the pattern on top of one of the wings and use the bulldog clips to secure the template to the wing, matching the edges. Flip the wings over. Using the pattern extension as a guide and imagining the arrangement of a birds wing feathers, use the Dremel® Glue Gun 930 and 7 mm clear glue sticks to glue quill feathers that extend from the lower edge of the wing to complete the wing tip.

Starting from the tip and working upwards glue the quills on to the wing with the upper surface of the feather uppermost, overlapping them so that they flow down towards the tip of the wing. Cover approximately three-quarters of the wing with quills. This side of the wing faces away from the child's back, and will look best if, like a birds wing, it has more quill feathers and less downy feathers. Use the finished image as a guide to help you arrange them.

STEP 5

Cover the top section of the wing with craft feathers, using your Dremel® Glue Gun 930 and 7 mm clear glue sticks gluing them face up but pointing downwards so that they overlap onto the quills. Work up towards the top of the wing until the parts of the craft feathers blend in with the marabou trim glued along the top edge.

STEP 6

Turn the wing over and remove the pattern. This side of the wing will be against the child's back and represents the underside of a birds wing, so for a natural effect, this time, use the quills and feathers the other way up, so that the underside of the feather is uppermost. Starting with quill feathers, glue a few in place positioning them so that they again extend below the lower edge of the cardboard and blend in with those on the rear. Cover approximately half the wing with quill feathers.

STEP 7

Cover the remaining section of the wing with marabou feathers for a soft downy effect similar to the underside of a bird's wing. Use the Dremel® Glue Gun 930 and 7 mm clear glue sticks to glue the feathers rear face up but pointing downwards and overlapping the quill feathers. Work your way up towards the top of the wing concealing the fine shafts of the marabou feathers that are closest to the upper edge within the marabou trim.

Repeat the whole process on the other wing, trying to mirror the placement of the feathers as far as possible to achieve a convincing pair of wings. Then, try the wings on the child and adjust the elastic to achieve the best fit.

! Tip: All feathers have distinct upper and rear sides, but will also vary in direction depending on which side of the bird they came from. To achieve the most natural effect, you need to use mostly feathers from the left side of the bird for the left wing, and from the right side of the bird on the right wing. This applies to both sides of your wings and is especially important at the wing tips. Further up the wings it is useful to incorporate some of each so that you can arrange the feathers to create a smooth flowing effect as they run down and out across the wings towards the tips.

TEMPLATE FOR ANGEL WING

NOTE : The template on page 121 must be increased by 400% to be the right size for a child (approximately 38 cm).

SNOWY VILLAGE DIORAMA

How to make a beautiful snowy scene with backlight to illuminate dark Winter nights…

Make a beautiful backlit snowy scene to light up your Christmas celebrations and the following dark Winter nights. We're betting that it will take you months to remove this from your mantelpiece – so let the Winter darkness close in and it snow, let it snow, let it snow! Take your Dremel® Moto-Saw and simply follow our step-by-step guide below!

TOOLS REQUIRED:

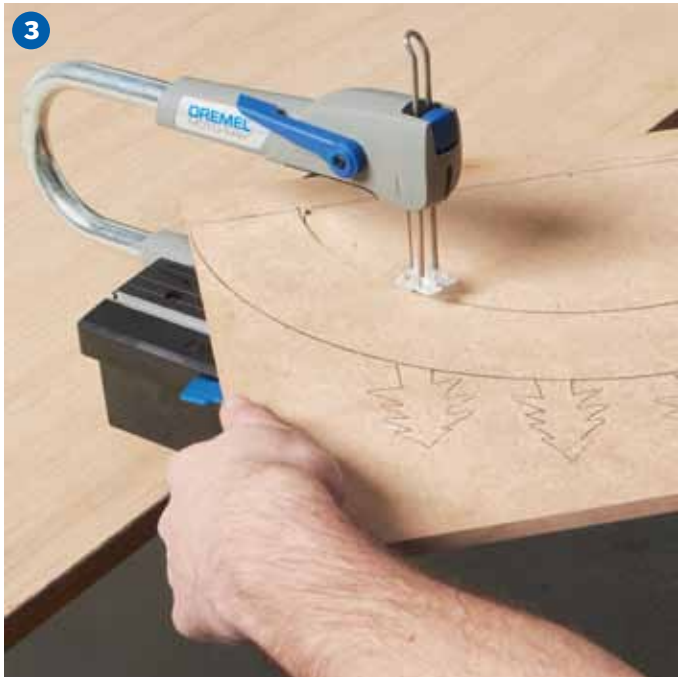
- Dremel® Moto-Saw with Coarse Wood Cutting blades MS51, Fine Wood Cutting blades MS52 and the Metal Cutting blade MS53
- Dremel® 3000 with Flexshaft attachment 225 with Dremel® accessories: Engraving Cutter 107 or 4.4 mm Diamond Wheel Point 7105, Wood Drill Bit Set 636 (6 mm drill bit), Multi-purpose Spiral Cutting Bit 561, Multi-Chuck 4486
- Dremel® Glue Gun 940 and 11 mm wood glue sticks

CUTTING LIST:

- 3 cms x 28 cms 3 mm MDF
- 45 cms x 36 cms 9 mm MDF
- 9 cms x 4 cms 18 mm MDF
- 50 cms x 10 cms 18 mm MDF

OTHER MATERIALS REQUIRED:

- 37.5 cms x 19 cms piece of white frosted soft acrylic
- LED strip light: 34 cm long



STEP-BY-STEP INSTRUCTIONS

STEP 1

First you need to make a drawing tool to help you draw two parallel semi-circles. So take your piece of 3 cms x 28 cms 3 mm MDF and put a screw 15 mm in from one end so that just the tip protrudes. Then mark up a point 16 cms and 22.5 cms from the screw. This will give you both positions to fit a pencil through each point. Then take your Dremel® 3000 and the 6 mm wood drill bit and drill a hole at each point. Widen the holes, if necessary, to fit each one tightly with a pencil.

! Tip: only use one pencil at a time with this guide to get a perfect line each time

STEP 2

Now we're going to mark up the piece of MDF you are going to draw the parallel semi-circles onto. This will become the wooden frame for your snowy scene.
Mark up points 4 cms apart all along the longest edge of your 45 cms x 36 cms piece of 9 mm MDF. Then find the centre point between those points and make an indent at this point with a screw. Now take the drawing tool you have made in Step 1, put the screw point in the indent you have made and scribe/draw the two parallel semi-circles.

STEP 3

Draw five Xmas trees onto the top semi-circle at varying heights ranging between 6.5 cms, 7 cms and 8 cms. The largest one in the centre.
Now go to the bottom edge and draw a rolling foreground allowing at least 2 cms from the lowest point of your drawing to the bottom edge of the piece of MDF. Then cut out the waste MDF between your rolling foreground and the bottom semi-circle line. To do this, use your Dremel® 3000 and the Dremel® Multi-purpose Spiral Cutting Bit 561 to make an access hole into the part you will be removing.
Now, pass the Dremel® Moto-Saw blade through it and cut following your lines. Remove the waste MDF.
And finally, cut out the Xmas trees that you drew previously, using your Moto-Saw with coarse wood cutting blade MS51.

STEP 4

Next, take your piece of 37.5 cms x 19 cms white frosted soft acrylic and place it in position behind the wooden cut out frame of your snowy scene that you have just made. Move your piece of acrylic up a centimeter to allow you to fit your LED light beneath it. Then draw around the inside edge of your wooden frame onto the acrylic to give you a guide to the area on which to draw your snowy village scene.

STEP 5

Now draw your snowy village scene onto the piece of soft acrylic, freehand. Then engrave your drawing into the acrylic using your Dremel® 3000 fitted with the Flexshaft and Multi-Chuck and the Dremel® 107 Engraving Cutter – or use the 7105 4.4 mm Diamond Wheel Point if you want a thicker engraved line.

STEP 6

If you need to trim the edges of your piece of soft acrylic to fit behind your frame, make sure that you allow enough room on each side to be able to glue it to the frame, use your Dremel® Moto-Saw with the coarse wood cutting blade MS51. Glue it into place behind the frame using your Dremel® Glue Gun and 11mm wood glue stick.

STEP 7

Now you need to make the supports for your frame. Draw a diagonal line from edge to edge on your piece of 9 cms x 4 cms 18 mm MDF and cut along this line on the Dremel® Moto-Saw using the Fine Wood blade.

STEP 8

Next glue your supports to the back of your frame. To do this, mark an upright line the height of the supports at 90 degrees 3.5 cms in from each end of your frame. Then put a bead of hot wood glue using your Dremel® Glue Gun 940 onto the supports. Carefully position the supports onto the frame, flush with the edge of the base and the guide line, and hold for 5/10 seconds, applying pressure.

STEP 9

You now need to make the base for your diorama/picture to sit on. Take your 50 cms x 10 cms piece of 18 mm MDF and mark a line down the length of it, 3 cms in from each end. Mark up the centre point. Also mark up the centre point of the wooden frame. Run a bead of hot wood glue using your Dremel® Glue Gun 940 along the edge of the bottom edge of the wooden frame which mates with the base. Carefully position your frame, which supports your acrylic onto the centre mark and the line you've drawn and stick in place and apply pressure until bonded.

STEP 10

Now using your Dremel® Glue Gun 940 and 11 mm wood glue, stick the plastic coated LED light centrally tight up against the back of the painted wooden frame beneath the acrylic picture.

Finally carefully paint the wooden frame white and decorate with a sprinkling of silver glitter.

ADVENT CALENDAR

How to make a wonderful Advent Calendar to allow your children to countdown to Christmas…

Want to make your children a beautiful wooden Advent Calendar? Every day from the 1st December to Christmas Day, your children will rush to open the next door and find the sweet or little toy behind it. Simply take your Dremel® Moto-Saw and Dremel 3000 and follow our step-by-step guide below!

TOOLS REQUIRED:

- Dremel® Moto-Saw using coarse MS51 and Fine Wood Cutting blades MS52
- Dremel® 3000 with the Dremel® Multipurpose Spiral Cutting Bit 561, Dremel® Precision Drill Bit Set 628 (1,2 mm)

CUTTING LIST:

- 73 cms x 50 cms piece of 18 mm MDF for the front of the Xmas tree
- Two 45 mm x 70 cms strips of 9 mm MDF to cut:
- 25 45 mm x 45 mm 9 mm MDF for the little advent calendar doors
- 73 cms x 50 cms piece of 3 mm MDF for the backing board
- 8 cm x 50 cms piece of 9 mm MDF for the strut

OTHER MATERIALS REQUIRED:

- 25 16 mm x 19 mm (open) brass hinges and screws from model making retailer
- Precision screw driver set, screwdriver size 0
- 64 mm brass butt hinge

STEP-BY-STEP INSTRUCTIONS

STEP 1

First go to your local DIY store and get the lengths of MDF cut for you as in the cutting list.

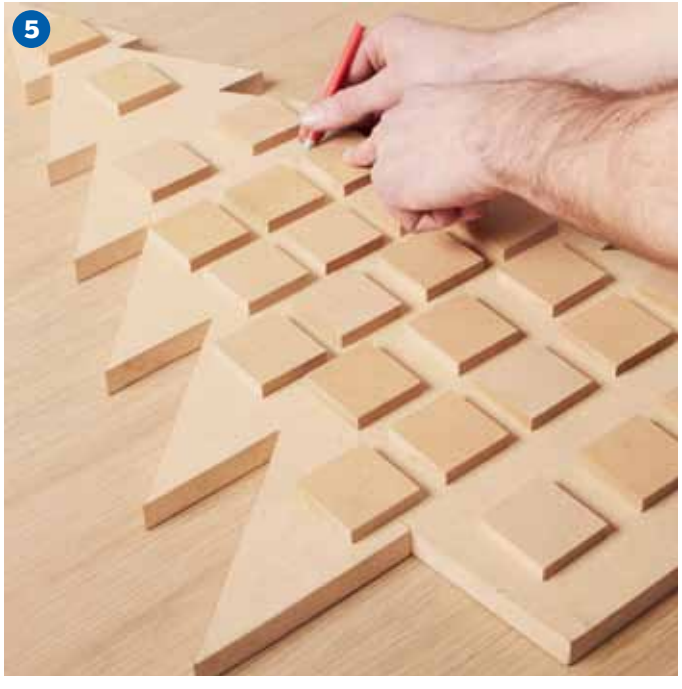
Then draw a basic Xmas tree shape on your 73 cms high x 50 cms piece of MDF. Here's how. Start by drawing a vertical line down the centre of the board and then measure and mark at each 10 centimetre point from the bottom to the top on the centre line. Go back to the bottom and this time make a mark 10 centimetres in from each edge. Now, follow the drawing as shown and make sure that your tree branches extend out to roughly the following measurements: 50 cms at the bottom, 41.5 cms, 33.7 cms, 25.5 cms, 17.8 cms, 9.8 cms.

STEP 2

Now that you have your Xmas tree drawn out on the MDF board, cut out the outline of the Xmas tree using your Dremel® Moto-Saw and the Fine Wood Cutting blade MS52. This will become the front of your advent calendar.

STEP 3

Once you've done that, use your cut out Xmas tree as a template for the backing board of your advent calendar. Do this by placing it on top of the 73 cms x 50 cms 3 mm piece of MDF and draw around it. Cut it out using your Dremel® Moto-Saw as before. Now you should have two Xmas tree shapes cut out.



STEP 4

Next, create the doors for your advent calendar. Using your Dremel® Moto-Saw, cut your two 45 mm x 70 cms strips of 9 mm MDF into 25 45 mm squares.

STEP 5

Place your cut out doors onto the 18 mm Xmas tree shape board in the following configuration: from bottom to top – 3, 5, 3, 4, 3, 3, 2, 1, 1 – equally spaced apart. Then draw around each door. When you've done this, draw a parallel line 2 mm or 3 mm inside the line you've just drawn onto the board. This will give you a plan for plunge cutting out the centre of each square to provide a cavity for the chocolate or sweet to be hidden behind each door.

STEP 6

To plunge cut out the centre of each square, use your Dremel® 3000 and the Dremel® Multipurpose Spiral Cutting Bit 561 to make an access hole and cut through to the part you will be removing. Now cut all 4 sides with the Moto-saw.

STEP 7

Take your Xmas tree shaped backing board in 3 mm MDF and pin it to the 18 mm MDF front board. Use a pin gun or hammer in panel pins around the edges and a few up the middle. Alternatively use PVA wood glue, apply an even pressure and allow to dry.

STEP 8
Now fix your doors onto your advent calendar. First screw a hinge onto the edge of each door using your precision screwdriver no 0. Then, using your Dremel® 3000, drill a pilot hole for each screw using the Dremel® Precision Drill Bit 1,2 mm from the 628 set. Drive in the screws using the precision screwdriver. Then affix the other side of the hinge to the face of the advent calendar.

STEP 9
Finally, affix the 64 mm brass butt hinge to one end of your piece of 50 cms x 8 cms 9 mm MDF by drilling a pilot hole with the Dremel® 2.0 Precision Drill Bit from the 628 set. Then by using screws and a precision screwdriver affix to the centre of the back of the advent calendar to make a strut. The strut should allow the advent calendar to stand up at roughly a 10 degree angle.

STEP 10
Prime and paint with decorative pattern.

LACE EGGS FOR EASTER

Easter gift ideas that will dazzle friends and family!

We traditionally paint or embroider eggs at Easter to decorate our houses in all kinds of compositions. Now Dremel® is introducing a new trend for spring 2011 – lace eggs. This time you will not need any paint, because the eggs will delight your guests in their natural beauty, and lace eggs will make a very special gift.

TOOLS REQUIRED:

- Dremel® 3000 Multi-tool
- Dremel® 225 Flex Shaft Attachment
- Dremel® 4486 Multichuck
- Dremel® 7103 Diamond Wheel Point
- Dremel® 628 Precision Drill Bit Set (0,8 or 1 mm drill bit)
- Dremel® 910/940 Glue Gun with the Multipurpose gluestick

OTHER MATERIALS REQUIRED:

- Blown eggs (best with goose eggs, but also works with hen's eggs)
- Pencil
- Decoration ribbon

STEP-BY-STEP INSTRUCTIONS

STEP 1

Take a pencil and draw a strip about one centimetre wide in the middle of the blown and dried eggshell, then draw parallel lines at the same distance right and left. Draw horizontal lines in the middle strip as in the picture. Draw a flower pattern on the side of the eggshell.

STEP 2

Place a 225 Flex Shaft and 4486 Dremel Multichuck into a Dremel® 3000 Multifunctional Tool, and fit the 7103 Diamond Wheel Point. Holding the diamond point perpendicular to the egg, drill a hole in the centre of the outer pencil-marked strips, then drill two holes above and below it and another two on each side. These make the flower petals. Then make a similar little flower on the middle of the eggshell where the centre of the large flower will be.
Hold the egg firmly but carefully. Place the diamond wheel point delicately, without forcing on the surface of the eggshell and allow the point to gradually drill a hole in the surface. This prevents the edge of the lace pattern from breaking off and gives the hole a neat edge.

STEP 3

The third step also involves the 7103 Diamond Wheel Point, but not for drilling. Beside the little flower patterns drilled in the second step, make more flower patterns by routing with the 7103 Diamond Wheel Point. Take care not to puncture the shell. The outer row should also be made by routing.

STEP 4

Making cuts of as many different sizes as possible adds even more interest and appeal to your egg. Change the 7103 Diamond Wheel Point in the Dremel® Multichuck for the 0,8 or 1 mm precision Drill Bit from the 628 Precision Drill Bit Set. Then drill radial holes between the main pattern in the centre of the eggshell and the routed flower patterns. Then prepare the holes for the ribbon at the middle of the egg, drawn at Step one with this precision Drill Bit. This thin drill bit is capable for refining holes drilled before.

STEP 5

Soak the inner membrane of the eggshell in water and disinfectant overnight. This will make the egg cuttings fall out. Then run decoration ribbon through the egg and fix it to the top using a Dremel® 910 or 940 Glue Gun with the multipurpose gluestick, or glue a pre-tied bow to the top of the egg.

PAPER ANGEL ROOM DECORATIONS

Bring the true spirit of Christmas into your living room with this host of ethereal angels!

Celebrate the true meaning of Christmas with a host of flying angels as your room decorations. The skirts are made of printed music paper so fill your living room with lovely ethereal Christmas music and you have your own modern take on the Nativity! Simply take your Dremel® Glue Gun and Dremel® Versatip and follow our step-by-step guide below!

TOOLS REQUIRED:

- Dremel® Glue Gun 930 and 7 mm clear glue sticks and Glue Pad GG40
- Dremel® Versatip

OTHER MATERIALS REQUIRED:

- Sheets of A4 white paper
- Sheets of A4 white paper with music print
- Polystyrene balls, 30 mm and 50 mm diameter
- Brass curtain rings, 23 mm and 34 mm
- Adhesive flat back gems, 3 mm and 5 mm
- Transparent nylon thread
- Long darning needle
- Self healing cutting mat
- Bone folder or use the back of a table knife
- Steel ruler
- Scrap piece of thick corrugated cardboard box
- Tweezers

STEP-BY-STEP INSTRUCTIONS

STEP 1
TO MAKE ONE LARGE ANGEL

In order to create the body/dress section of the angel, lay a sheet of music print paper down on the cutting mat in landscape format. Use a steel ruler and the bone folder in conjunction with the grid printed on the cutting mat to score vertical lines all the way across the paper, spacing them 2 cm apart.

STEP 2

Crease along the scored line first one way, then another to pleat the sheet of paper accordion fashion. For crisp creases, use the bone folder on its side to burnish along the pleated up section. Repeat until the entire sheet is pleated, then place to one side.

STEP 3

To create the sleeves/wings, repeat the scoring and folding process with a sheet of plain white paper. Find the centre of the pleated paper by folding it in half across the pleats. Take a long length of transparent thread and knot one end securely around the pleats at the centre point. Trim off the short end close to the knot. The remaining long end will form a hanging loop for the finished angel.

STEP 4

Set the pointed soldering tip into your Dremel® Versatip and ignite the tool, adjusting it to a hot setting. Lay the folded paper down on the scrap of thick corrugated cardboard. Holding the tool upright, position the hot tip on the folded paper and push gently so that the tip burns through all the layers; you will feel it give slightly as it pierces through the lowest layer and into the thick cardboard. Repeat the process using the tool to pierce the paper and create a lacy pattern. Fan out the ends of the paper to represent the sleeves/wings.

STEP 5

To assemble the body/dress and sleeve/wing sections, fit the Dremel® Glue Gun 930 with a 7 mm clear glue stick and set it to the cool setting. Pinch the pleats together at one end of the body/dress section. Apply a dab of hot glue to the ends of the pleats and working on the Dremel Glue Mat, offer the body/dress section to the sleeve/wing section so that it fits snugly against the transparent thread knotted around the sleeve/wing section and within the folded sleeves/wings. Fan out the lower end of the dress.

STEP 6

To affix the ball to represent the head, thread the darning needle with the loose end of the transparent thread and push the needle right through the centre of a 50 mm polystyrene ball. Apply a dab of glue to the top of the sleeve/wing section and working fairly quickly, lower the ball down the thread onto the glue so that the ball sits centrally on top of the sleeves/wings and is glued firmly in place. Knot the loose end of the thread, forming a loop for suspending the angel.

STEP 7

To add a halo, apply a dab of glue on top of the head towards the back and press a large curtain ring to it, angling the ring as seen. Pass the hanging loop through the halo.

STEP 8

Finally, use tweezers to lift and apply two adhesive gems to the front of the head to represent eyes.

! NOTE: To make a small angel cut a sheet of A4 paper in half to make two pieces that measure 210 mm x 148 mm. With the pieces laid down in landscape format as for the large angels, score vertical lines right across each piece, spacing the lines 1 cm apart. Pleat the sections accordion-style as before and use one of the pieces for the body/dress section and the other for the sleeve/wing section, preparing them as described for the large angel. To keep the finished piece in scale, use a 30 mm polystyrene ball for the head and a 23 mm curtain ring for the halo.

FRIENDLY SNAKE JIGSAW

How to make your child a wonderful jigsaw that teaches them to count…

On Christmas morning, when your child unwraps this present, this toy will be something for them to keep for life. A true heirloom made by you. And the friendly coiled snake will also help your child to learn to count. Take your Dremel® Moto-Saw and Dremel® 3000 and simply follow our step-by-step guide below!

TOOLS REQUIRED:

- Dremel® Moto-Saw with coarse wood cutting blade MS51 and fine wood cutting blade MS52
- Dremel® 3000, EZ SpeedClic Mandrel SC407, EZ SpeedClic Sanding Discs SC411

OTHER MATERIALS REQUIRED:

- 9 mm MDF 55 cms x 50 cms
- Scrap wood 7.5 cms w x 10 cms long
- Two pencils
- Gaffer tape

STEP-BY-STEP INSTRUCTIONS

STEP 1
Buy a piece of MDF and get it cut for you by your local DIY store to measure exactly 55 cms x 50 cms. When you get it home, draw a circle onto it with a diameter of 50 cms. This will become the outline for your coiled snake jigsaw.
Then, make yourself a 'drawing guide'. This will allow you to draw two parallel lines in the shape of the snake's body within the 50 cms circle. To make the drawing guide, cut a piece of scrap wood 7.5 cms wide by 10 cms long using your Dremel® Moto-Saw. Then, tape a pencil to each edge and draw the coiled body of the snake inside the circle. Create the head and tail by drawing them freehand.

STEP 2
Measure the length of your snake's body, excluding the head and tail, using a dressmakers tape and divide it into 25 equal size parts. Then draw the interlocking jigsaw outlines on each piece to act as a guide. Cut out the snake using your Dremel® vMoto-Saw and the coarse wood blade MS51 by cutting along the lines you have drawn on both sides of the body and around the head and tail.

! NOTE: You can make your snake any dimension you like, with as many parts as you consider helpful to your child. The snake can have pictures rather than numbers on it to help your children tell stories or learn the alphabet, or identify animals. The twin creative and educational task is yours!

STEP 3
Now cut out the segments of the snake, following your drawn lines including the interlocking jigsaw pieces, using your Dremel® Moto-Saw and the fine wood blade MS52.

STEP 4
Gently sand off any rough edges using the Dremel® 3000 with EZ SpeedClic Sanding Discs SC411 on the edges of the snake only. Do not sand the interlocking jigsaw pieces, as this will cause the pieces to fit together poorly.

STEP 5
Paint on one number per segment and decorate in child-friendly colours creating your own design, including pictures, to encourage engagement.

BAG TOSS GAME

For outdoor fun all summer long, build a bags game.

TOOLS REQUIRED:

- Dremel® DSM20 with cutting guide
- DSM500 multipurpose cutting wheel
- DSM600 carbide flush cutting wheel
- Dremel® Trio
- TR 563: multipurpose carbide cutting tip
- Dremel® Multi-Max MM20
- MM411 flush cut blade
- MM70W sanding paper

OTHER MATERIALS REQUIRED:

- 12 mm x 122 cm x 244 cm sheets of Plywood
- 4 Planks of 244 cm length 38 mm x 89 mm
- Wood Glue
- Drill Driver
- Clamps
- Wood Screws
- Hinges (optional)

STEP-BY-STEP INSTRUCTIONS

STEP 1

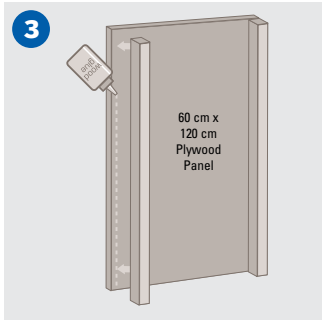
Cut two 60 cm x 120 cm panels from the sheet of plywood for the surface of the boards using the Dremel® DSM20 fitted with the DSM500 Multipurpose Carbide Cutting Wheel.

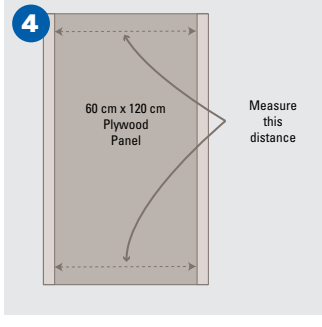
! Tip: Keep your boards lightweight and portable by using 12 mm or thinner plywood. Make sure to always secure your workpiece. This will not only make your project safer but will improve the quality of your results.

STEP 2

Cut the 38 mm x 89 mm planks for the board frames. Create 4 pieces with a lenght of 120 cm lenghts from the 38 mm x 89 mm planks. Cut each piece using a DSM20 and an DSM600 Multipurpose Carbide Flush Cutting Wheel and the 2x4 Cutting Guide.

! Tip: Place the guide near your measurement marks. Leave about an 3 mm between the guide and line to accommodate for the kerf of the wheel and its slight offset. Clamp the guide in place. Make your first pass, then flip the board over to complete the cut all the way through the 38 mm x 89 mm planks on your second pass.





STEP 3

Use wood glue to secure the 4 pieces of 120cm lenght to the long side.

! Tip: Make sure the 38 mm x 89 mm planks are flush with the edge of the board before gluing down. Use clamps to hold the 38 mm x 89 mm planks and plywood together while the glue sets. We are using glue here to avoid having any screw holes on the game board surface.

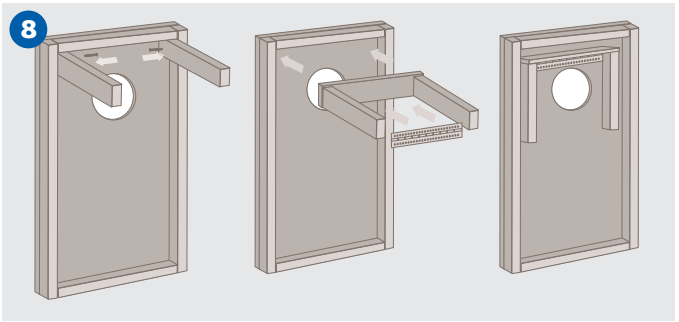
STEP 4

Cut four more pieces of 38 mm x 89 mm planks to complete the board's frame. Measure the distance between the 120 cm lengths you secured on the boards in step 3.
The distance should be around 53 cm but measure twice before cutting. Using the DSM20 and DSM600 blade, follow the same 38 mm x 89 mm planks cutting method as described in step 2. Once cut, secure these planks in place with screws.

STEP 5

Cut a 15 cm hole in the game board for the bags to be tossedinto using the Dremel® Trio, a Multi-Purpose Cutting Bit TR563 and a Circle-Cutting Attachment. Mark the pilot hole 23 cm down from the top, center of the piece of plywood. Use the Trio tool equipped with the TR563 accessory to plunge drill the pilot hole. Next, mount and adjust the guide so the distance between the bit and the guide's pivot point is 8 cm. Set the Guide's pivot pin into the pilot hole. Turn your tool onto full speed and make a plunge cut to begin cutting your circle a full 360 degrees around the pivot point.

! Tip: For more tips on how to use your Circle-Cutting Guide refer to your owner's manual.



STEP 6

Sand your plywood boards using the Multi-Max MM20 and the MM11 Hook and Loop Pad with MM70W Sanding Paper to ensure that bags can slide smoothly in.

! Tip: Have fun with your boards! Apply a weatherproof seal, paint them, or apply your favorite team's emblem on them!

STEP 7

Cut four 30 cm lengths for the legs of your boards from 38 mm x 89 mm planks using the same method as steps 1 and 4.

! Tip: Add an additional 50 cm length of 38 mm x 89 mm planks on the top of the legs for more support, especially if you want to secure the legs with hinges (as shown on step 8). The finished height of the legs of your boards should be 30 cm so if you decide to attach an extra 38 mm x 89 mm planks on top, you will need to cut off about 38 mm from the bottom of the legs!

STEP 8

Secure the legs under your board using screws or hinges. Here we used wood screws.

! Tip: You can attach the legs using hinges to easily fold your game away and store it. For more stability, lock each leg together by screwing them into a 30 cm length of your 12 mm plywood. Use a piano hinge to attach the piece of plywood to the back of each game board.

TOOLS

DREMEL DSM20

DREMEL 3000

DREMEL 4000

DREMEL 8200

DREMEL MULTI-MAX MM20

DREMEL MULTI-MAX MM40

DREMEL MULTI-MAX 8300

DREMEL TRIO

DREMEL MOTO-SAW

DREMEL VERSATIP

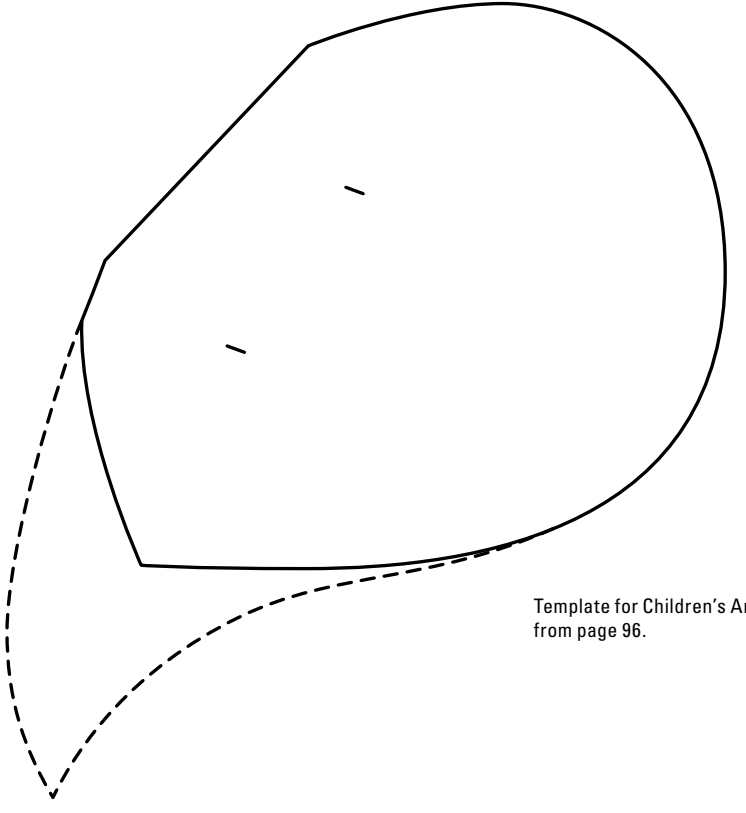
DREMEL VERSAFLAME

DREMEL GLUE GUN 910

DREMEL GLUE GUN 930

DREMEL GLUE GUN 940

NOTES



Template for Children's Angel Wings
from page 96.

NOTES

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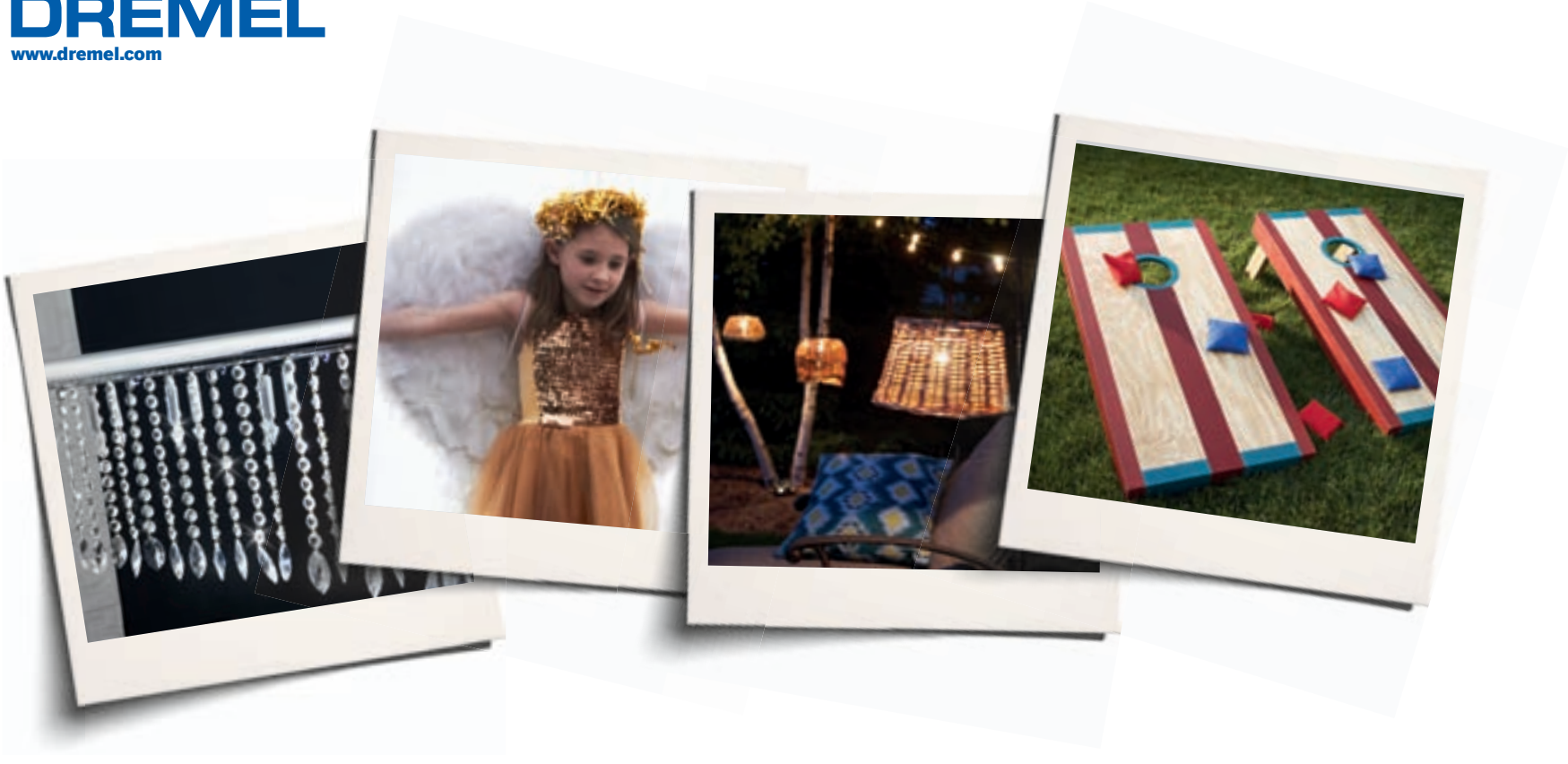

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