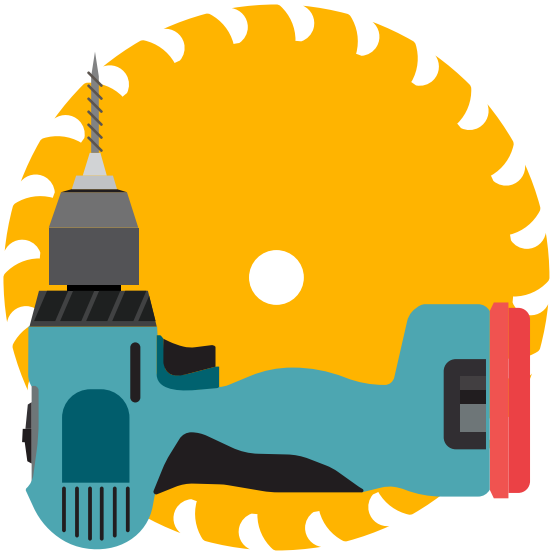


POWER TOOLS SIMPLIFIED

A simple quick start guide for the six essential power tools to get started

(c) 2023 Anika's DIY Life | www.anikasdiylife.com

BEFORE WE START

I want to **welcome you to the world of DIY and woodworking!**

If you are reading this, I bet you are wondering if you have enough tools or the right ones to get started. I am here to tell you that you **do not need** to spend **hundreds of dollars** on tools.

You **do not** need to **buy all the tools** in one go.

Start small.
Pick a small project.
Get the tools you need for it.

As you get more confident, pick more involved projects - buy the tool you need for it.

I have listed 6 of my most used and favorite tools.

Almost 90% of the woodworking projects on my site use only these tools.

(c) 2023 Anika's DIY Life | www.anikasdiylife.com

If you would like to buy t**he exact tools I use** and recommend, take a look at at them here.

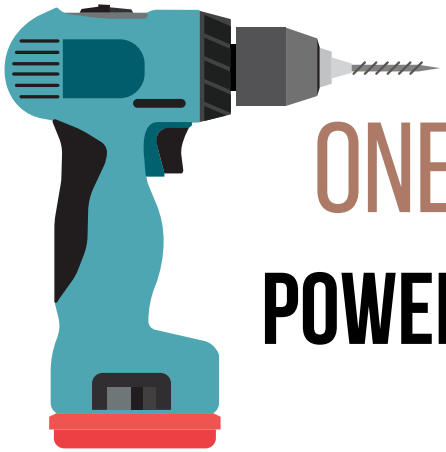
I also have a list of **essentials** I stock up on in my workshop.

Check out the **Woodworking 101** hub for lots of beginner-friendly tool tutorials and information.

In this guide, I have demonstrated parts in the tools that I own. Location and features may vary by brand. Be sure to consult the manual of your tool to see where each feature is located.

Lastly and most importantly - be sure to follow all the safety precautions and follow all manufacturer guidelines while using tools.

(c) 2023 Anika's DIY Life | www.anikasdiylife.com



ONE POWER DRILL

It is a handheld tool with a motor that spins a chuck, which holds a drill or driver bit. It is used for **drilling holes** or **driving screws and fasteners.**

KEY FEATURES

Chuck: The round clamp that holds the drill bit.

Reverse switch: changes the direction of the rotation of the drill bit.
Clockwise - for inserting a screw or drilling a hole
Counter-clockwise for backing a drill bit out of a hole or removing a screw

Torque: the force the drill uses to rotate; more torque means more force, but not necessarily a faster rotation

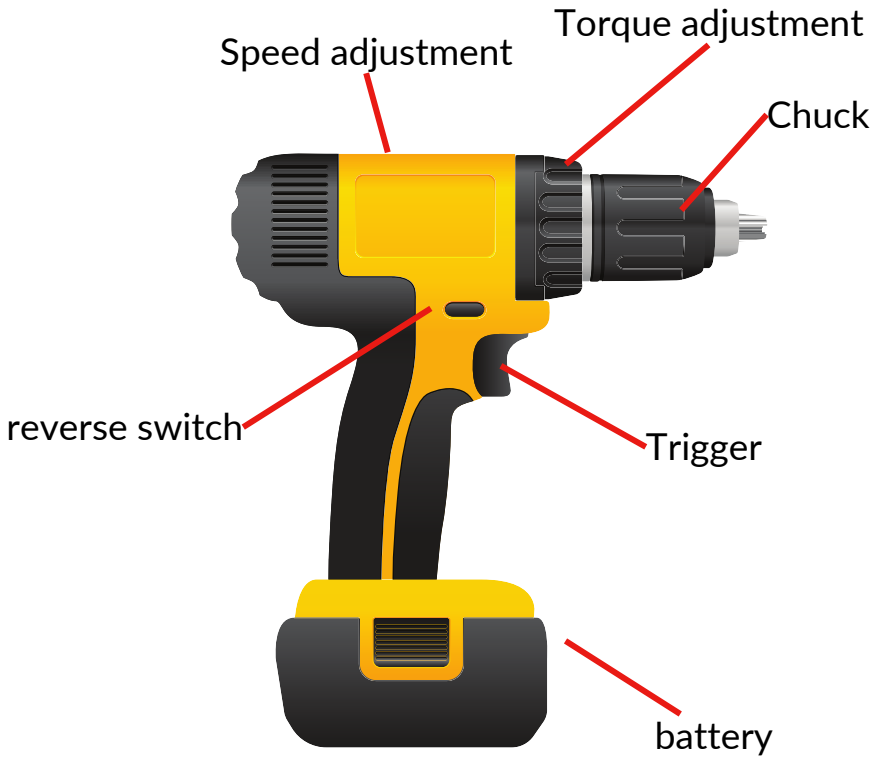
SETTINGS

Drilling

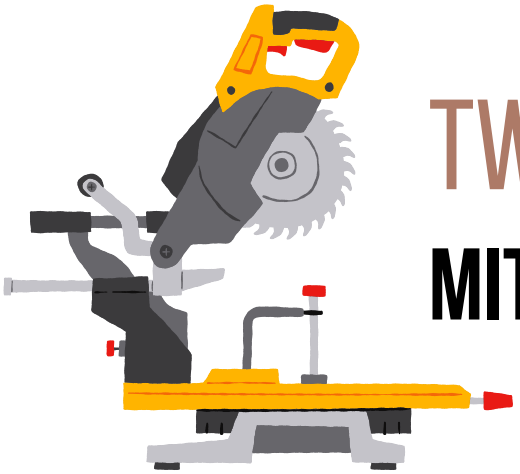
- Set speed to 2
- Set Torque to drill setting.

Driving

- Set speed to 1
- Set the Torque to a low number. Increase up as needed to drive the fastener fully.



(c) 2023 Anika's DIY Life | www.anikasdiylife.com



TWO MITER SAW

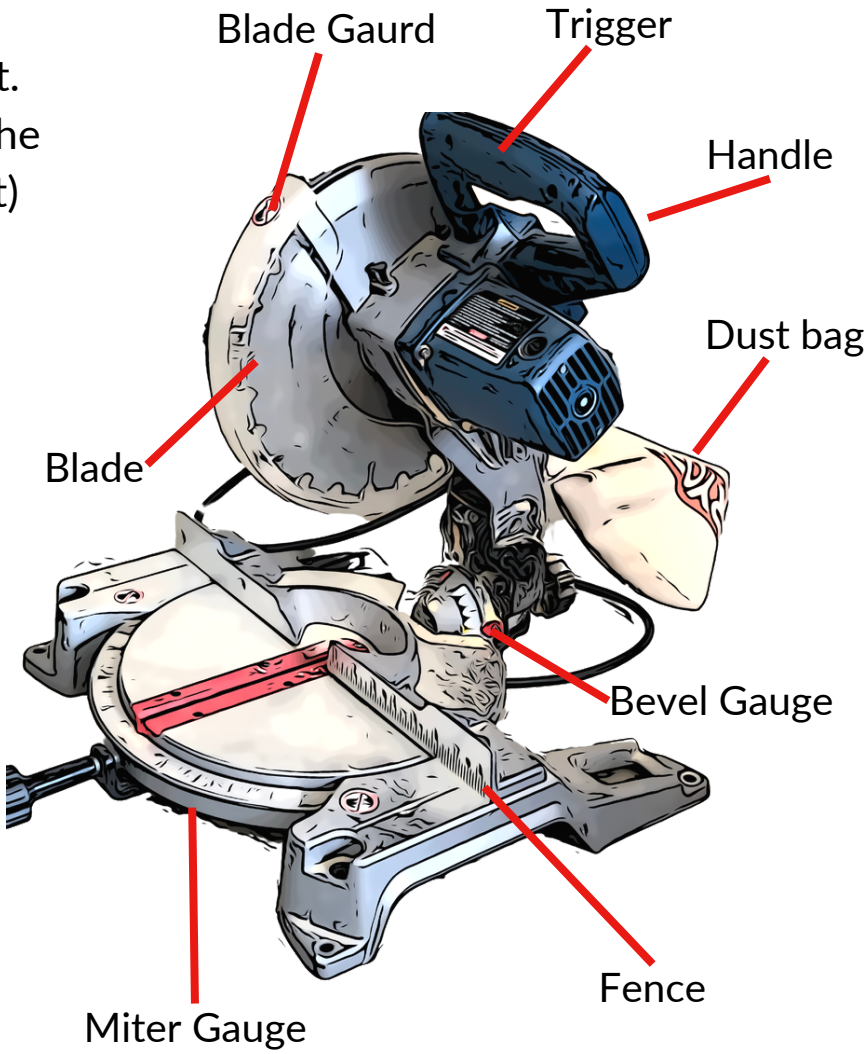
A hinge-mounted blade can be swung down into the material to be cut. The blade drops down in a controlled motion, creating clean, consistent cuts.

It can cut **across** a board at any angle.

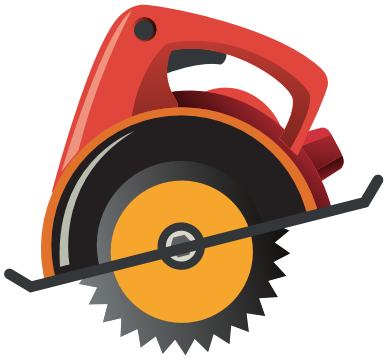
It **cannot rip** a board.

HOW TO USE

- Mark a linewhere you want to cut.
- Align the line on the board with the blade path (take kerf into account)
- Hold the board on the table of the miter saw firmly against the fence
- Squeeze the trigger and let the blade come to full speed.
- Bring the blade down slowly onto the board to make the cut.
- Release the trigger after the cut and wait for the blade to stop spinning before raising it back up.



(c) 2023 Anika's DIY Life | www.anikasdiylife.com



THREE
CIRCULAR SAW

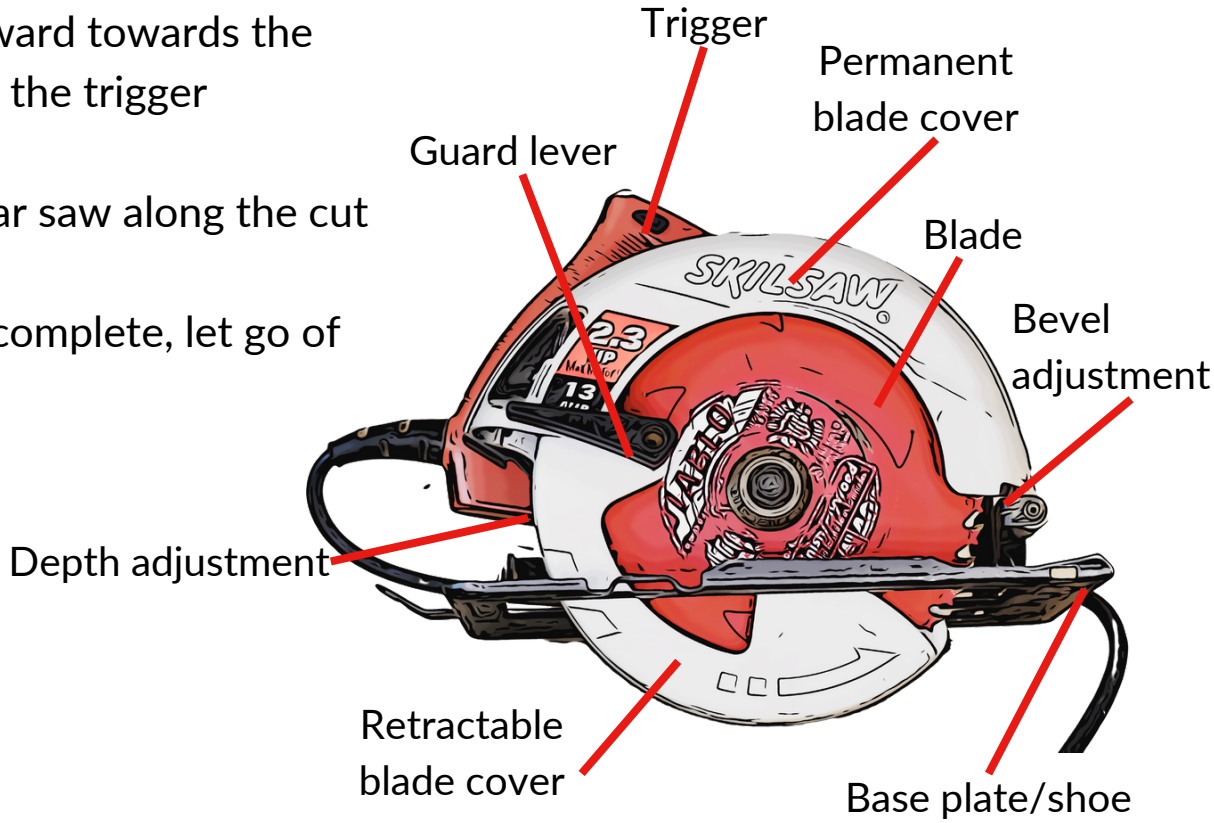
It cuts material using a round blade. The sharp blade spins around an arbor axis, and you push the saw through the material you want to cut.

You can cut various materials using it and make straight cuts, bevel cuts, crosscuts, and rip cuts.

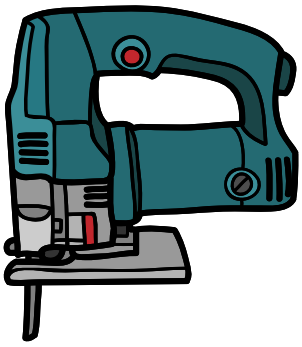
HOW TO USE

- Align the 0 notch in the base plate with the cut line.
- Press the trigger to **bring the blade up to full speed.**
- Keeping the plate firmly on the surface of your material, ease the circular saw forward towards the cut line, keeping the trigger engaged.
- Guide the circular saw along the cut line.
- Once the cut is complete, let go of the trigger.

Always **use a straight-edge guide** when cutting to get accurate cuts and keep the blade from binding.



(c) 2023 Anika's DIY Life | www.anikasdiylife.com



FOUR JIGSAW

It is a simple saw that you can use to cut out curved lines. This opens up huge possibilities in the designs you can make – from basic circles to complicated swirls.

Jigsaws can have two cutting actions:

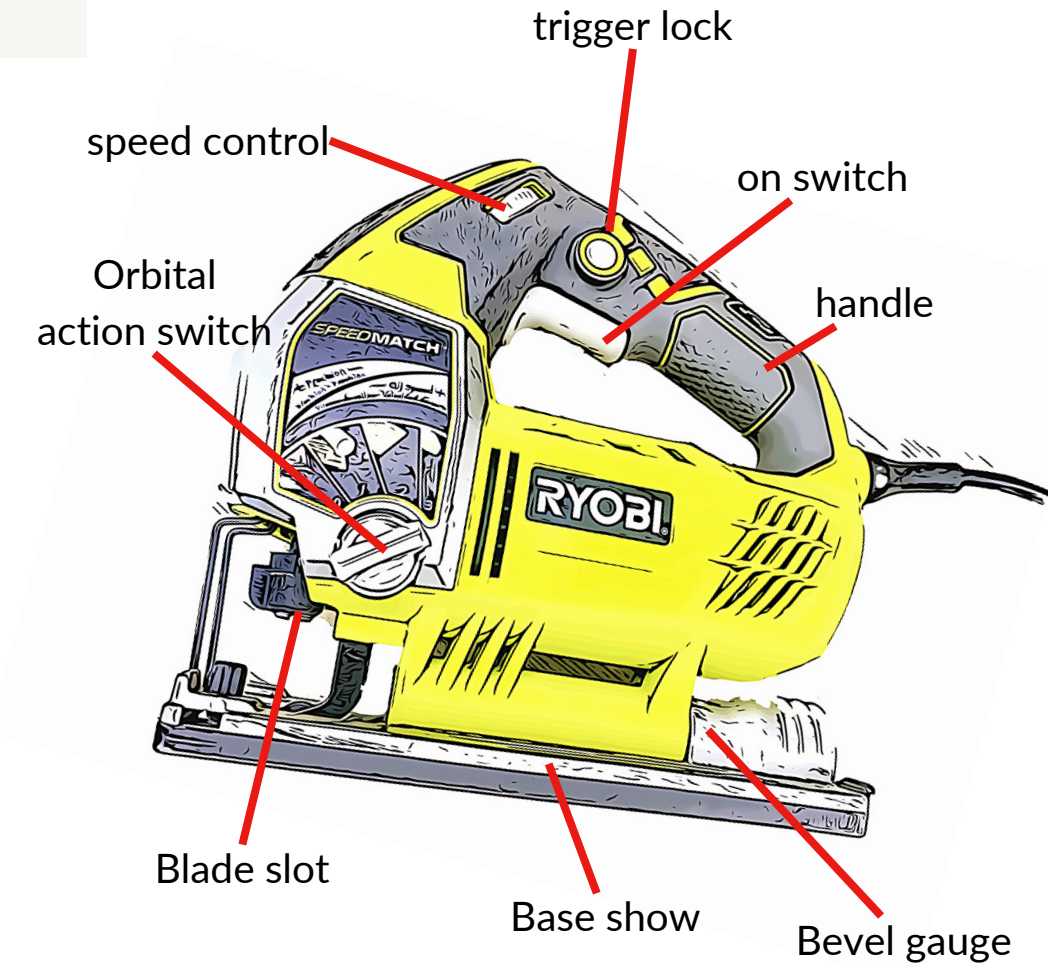
- **Straight action** – the jigsaw blade moves up and down
- **Orbital action** – the blade moves forward during the cutting stroke in addition to up and down.

Orbital action is faster than straight action but should never be used for metals or hardwoods.

Pick the blade based on the material you are cutting.

HOW TO USE

- Set the dial setting for the speed and cutting method best suited for workpiece and cut.
- Position the blade at the cut line, paying attention to the Kerf.
- Turn on the saw and slowly guide the saw along the line to be cut.



For curves and closed shapes, **make relief cuts**

(c) 2023 Anika's DIY Life | www.anikasdiylife.com

FIVE
NAIL GUN

A nail gun is a power tool used to drive nails into wood and other materials.

It can be used anywhere the joint doesn't need to bear a shearing force.

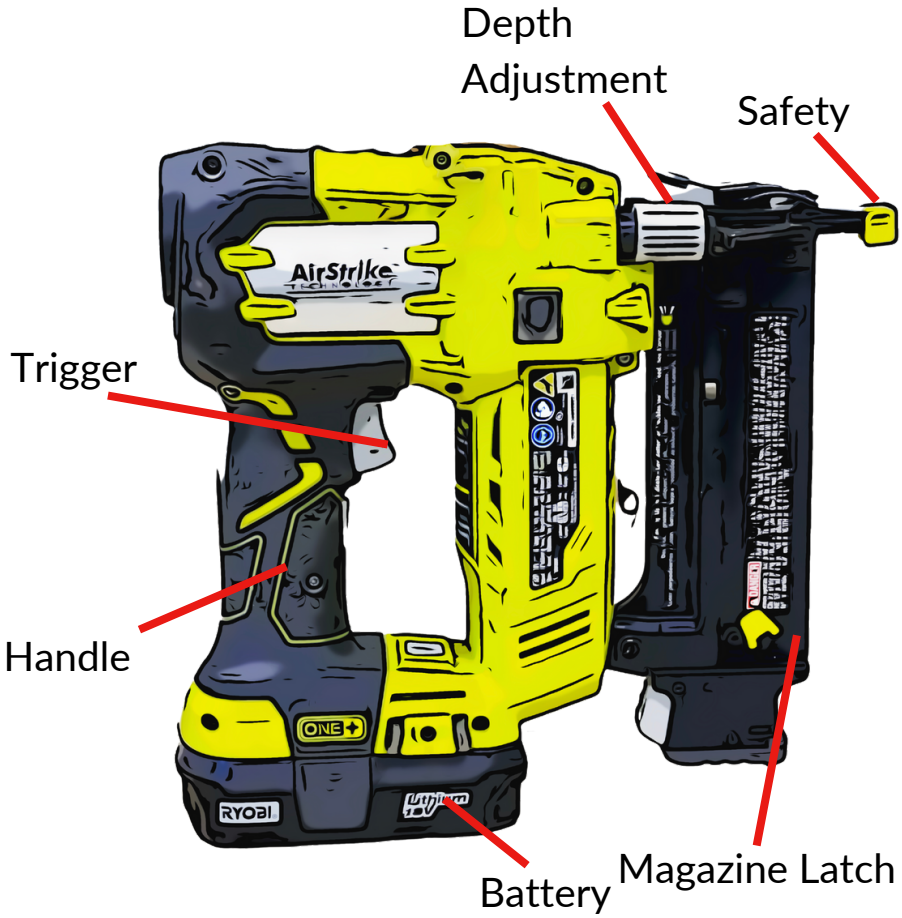
TYPES OF NAIL GUNS

- Different gauges depending on nail thickness
- Pneumatic or Cordless
- Angled or straight

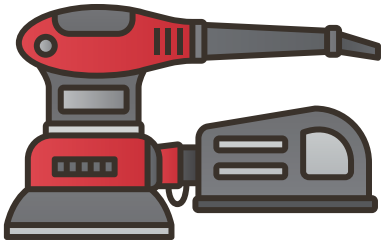
The higher the gauge, the thinner the nails.
The lower the gauge, the thicker the nails.

REMEMBER:

- Make sure it is placed firmly against your project before pulling the trigger.
- Keep hands and fingers away from the nose of the nail gun



(c) 2023 Anika's DIY Life | www.anikasdiylife.com



SIX RANDOM ORBITAL SANDER

It is an electric sander that spins sandpaper randomly in constant overlapping circles

This helps remove extra wood fibers and leaves a smooth surface with few scratches.

Always sand boards before assembling.

SANDPAPER GRITS

Sandpaper grits range from very coarse to very fine.
Grits with a lower number are coarse, while grits with a higher number are fine

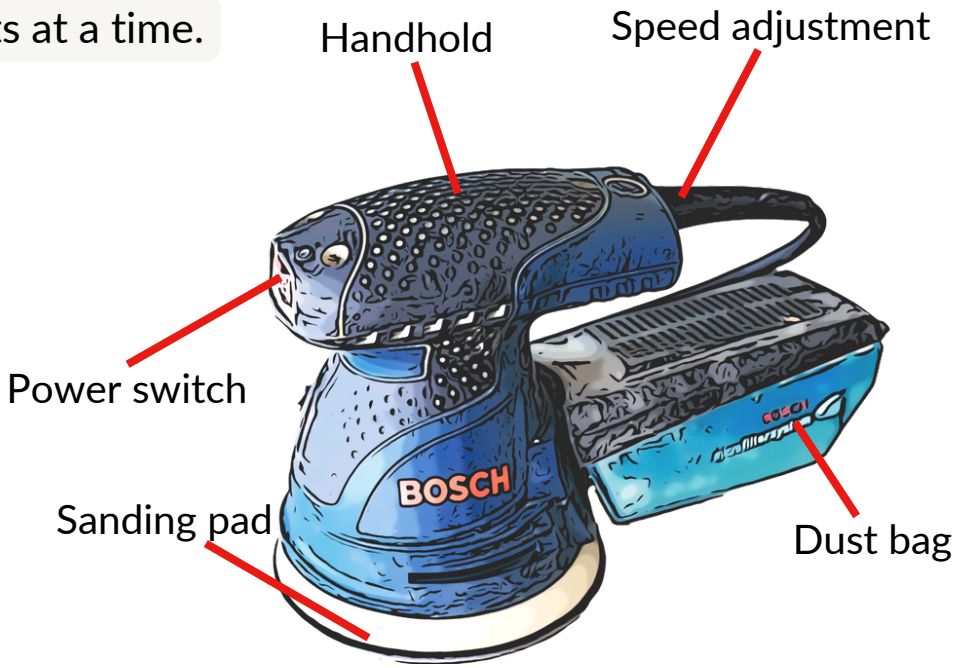
Always start with a coarse grit and work your way up to finer grits.

Painting - sand down to 150 grit
Staining - sand down to 220 grit.

Never skip more than 60 grits at a time.

REMEMBER:

- Don't move too fast.
- Don't press down on sander. Hold it gently and let it do its thing.



Scribble a pencil line to indicate when it is time to move to the next section.

(c) 2023 Anika's DIY Life | www.anikasdiylife.com

BONUS

I know you are feeling empowered to use power tools but building projects takes more than just knowing how to use power tools.

I know it can be intimidating to shop for lumber. It's like speaking a whole different language.

This is why I have included the following bonus resources that will help you

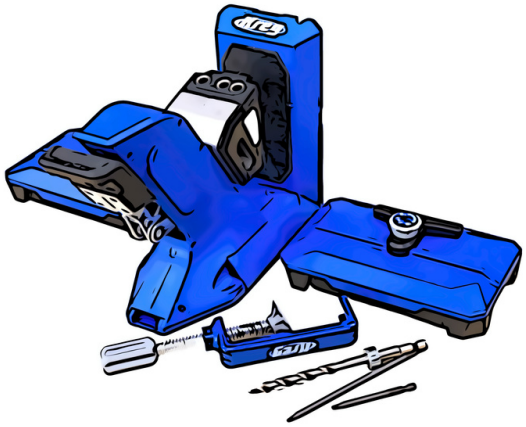
- Introduce you to my favorite technique of putting together boards to build furniture.
- Shop for lumber with confidence
- Understand the most commonly used woodworking terms.

You will not be lost in the lumber aisle anymore.

(c) 2023 Anika's DIY Life | www.anikasdiylife.com

BONUS

POCKET HOLE JIG (KREG JIG)



A pocket hole is a hole drilled at a 15-degree angle using a special jig. Kreg Jig is one of the most popular pocket hole jigs.

Pocket holes make it easy to create **strong joints without complicated techniques and tools.**

There are many models of Kreg Jigs available starting at $20.

See which Kreg Jig is right for you.

Pocket hole jigs come with a special drill bit, drill bit collar and square driver bit.

Always use **pocket hole screws** to join boards using pocket holes.

HOW TO USE

- Measure the thickness of the board.
- Set thickness on drill bit collar
- Set thickness on pocket hole jig depth
- Clamp the jig and board together
- Drill pocket hole.

Want to learn more about building with pocket holes?
Check out Pocket Hole Ninja

(c) 2023 Anika's DIY Life | www.anikasdiylife.com

BONUS

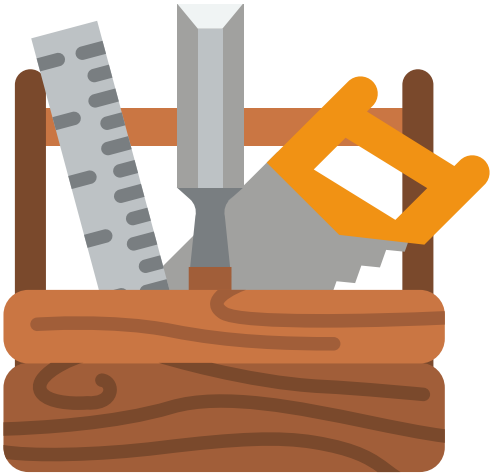
LUMBER SIZES CHEAT SHEET

Nominal sizes	Actual sizes (inches)	Actual sizes (metric)
1 x 2	3/4" x 1-1/2"	19 × 38 mm
1 x 3	3/4" x 2-1/2"	19 × 64 mm
1 x 4	3/4" x 3-1/2"	19 × 89 mm
1 x 5	3/4" x 4-1/2"	19 × 114 mm
1 x 6	3/4" x 5-1/2"	19 × 140 mm
1 x 8	3/4" x 7-1/4"	19 × 184 mm
1 x 10	3/4" x 9-1/4"	19 × 235 mm
1 x 12	3/4" x 11-1/4"	19 × 286 mm
2 x 2	1-1/2" x 1-1/2"	38 × 38 mm
2 x 3	1-1/2" x 2-1/2"	38 × 64 mm
2 x 4	1-1/2" x 3-1/2"	38 × 89 mm
2 x 6	1-1/2" x 5-1/2"	38 × 140 mm
2 x 8	1-1/2" x 7-1/4"	38 × 184 mm
2 x 10	1-1/2" x 9-1/4"	38 × 235 mm
2 x 12	1-1/2" x 11-1/4"	38 × 286 mm

Note - Actual lumber dimensions do vary by location as well so be sure to double check the measurements and adjust plans accordingly.

(c) 2023 Anika's DIY Life | www.anikasdiylife.com

BONUS



BASIC WOODWORKING TERMS

And what they mean

(c) 2023 Anika's DIY Life | www.anikasdiylife.com

BASIC WOODWORKING TERMS

1. 1x (also referred to as "1-by")
1x or "1-by" refers to lumber that is 1 inch thick, although the actual thickness of a 1x is 3/4".

2. 2x (also referred to as "2-by")
2x, "2-by" refers to lumber that is 2 inches thick although the actual thickness of a 2x is 1-1/2".

3. 5/4 Lumber
5/4 (referred to as “5 by 4″) lumber is lumber that is 1-1/4” in thickness.

4. Actual Thickness of Wood
The actual thickness of wood is the size of the board once it is milled and dried.

5. Arbor
The blades in your saw need support in the center to connect them to the rest of the saw. A spindle extends out to make an arbor that your saw blade sits on.

6. Bar Clamp
A bar clamp is a long steel bar with two clamping jaws that can be adjusted for holding large project pieces and is one of the most commonly used clamps in woodworking.

7. Bench Dog
A bench dog is a peg, inserted into a hole on a workbench and used as a stop for a project while it is being worked on. It can be made of wood, steel, or iron.

8. Bevel Cut
A bevel is an angled cut made through the thickness of the wood parallel to the face of the board being cut. A bevel cut can be done the entire length of a board or just on the end. It can be cut at any angle except at a 90-degree angle.

9. Biscuit Joiner
A biscuit joiner a tool that helps join two pieces of wood together. Biscuits are oval-shaped, highly dried, and compressed pieces usually made out of beech or particle wood.

10. Board Foot
A board foot is a unit of measurement of volume for lumber, 12" wide by 1" thick by 1' long, and is used when buying multiple boards in different sizes to calculate the price.

11. Butt Joint
A butt joint is a type of joint between wooden boards when the end of one piece is placed against another piece and joined.

12. Caul
A caul is used together with clamps to help apply equal pressure to boards when glued together.

13. Chamfer
A chamfer is a slope cut in any right-angled piece of lumber. It is used to soften sharp edges and also to prevent damage to them.

14. Chop Saw
A chop saw is a stationary saw that cuts 90-degree angles. Like a miter saw, it has a back fence for holding material in place and it has a circular saw blade with an exposed cutting edge.

15. Circular Saw
A circular saw’s primary purpose is to make straight cuts in lumber – both cross-cuts in boards and rip-cuts in plywood. It has an encased circular blade and a wide metal base that sits on the material to be cut.

(c) 2023 Anika's DIY Life | www.anikasdiylife.com

16. Clamp
Clamps are used to hold pieces of a project together, so they don't separate while gluing and act as a second, third, and even fourth set of hands for you. They are a must-have in the workshop.

17. Caulk
Caulk is a flexible material used to fill seams to help make them seamless. It is very often used in home improvement, but it can be used in woodworking to fill gaps where wood is joined together in a painted project.

18. Countersink
Countersinking is pre-drilling a hole larger than than the size of the head of the screw you will be using so that it will sit flush with the surface and not stick up once it is screwed into your project.

19. Crosscut
A crosscut is a cut that slices across the direction of the grain of your piece of lumber.

20. Dado
A dado is a groove cut into a piece of wood running across the wood grain and is used to connect one piece to another.

21. Dimensional Lumber
Dimensional lumber is lumber that is cut to standard sizes and is classified only by the depth and width, not the length.

22. Drill
Commonly called a drill/driver, a drill is a hand tool used to drill holes or drive screws. It has a rotating head that holds the drill or driver bit. It can be cordless or corded.

23. Edge Banding
Edge banding is a strip of wood veneer with heat-sensitive glue on one side, which is used to apply to plywood edges of a project for a clean, finished look.

24. Edge Joint
Edge joints are used to join boards together edge-to-edge.

25. End Grain
The end grain of the wood is the wood that is exposed when it is cut across the growth rings.

26. Forstner Bit
A Forstner bit is used to drill a flat bottomed hole. They cut very precise clean-edged holes in wood and are guided by their outside edge instead of the tip like other drill bits.

27. Kreg Jig
A Kreg Jig is a tool specifically designed to make pocket holes for pocket hole joinery.

28. Kerf
Kerf is the thickness of the cut that a saw blade makes in a piece of wood and is sometimes used to describe the thickness of the blade itself.

29. Miter Cut
A miter cut is an angled cut across the width of the board. This is made by moving the table to the required angle.

30. Miter Joint
A miter joint is made by cutting each part at a 45-degree angle so that when they meet, they form a 90-degree angle or corner.

(c) 2023 Anika's DIY Life | www.anikasdiylife.com

31. Miter Saw
A miter saw is a saw that can cut across a board at any angle. Every miter saw comprises the following parts; blade and guard, fence, miter gauge, bevel gauge, and handle and trigger. The blade is a circular blade encased halfway and turns in a circular motion when you pull the trigger.

32. Nominal Thickness of Wood
The nominal thickness of wood is the standardized size "name" given to a measurement of a piece of wood. It is not the actual size of the cut of wood. Nominal thickness is the name of the lumber, not the size.

33. Plywood
Plywood is a manufactured wood product made from plies of wood veneer that are glued together. There are many different types of plywood and different grades. The higher the grade, the better the quality and the higher the price.

34. Pocket Holes
A pocket hole is an angled hole that is drilled into one board. When you screw in through the angled hole to attach two boards, a robust joint is made.

35. Predrill
You should pre-drill pilot holes in wood to prevent splitting and cracking of the wood around the screw hole. Driving a screw into wood displaces the wood that is there, making room for the screw.

36. Rip-Cut
A rip cut divides a piece of wood parallel to the grain for a lengthwise cut, unlike the crosscut above that cuts across the grain. It is used to cut large sheets or timber, or boards down to size.

37. Router
A router used in woodworking can cut patterns, grooves, and designs in wood. It can be fixed-based or a plunge type and can be handheld or stationary.

38. Speed Square
The main purpose of a Speed Square is to layout lines very quickly and accurately. However, you can also find and draw angles and circles, adjust or guide a saw, and even use it as a level!

39. Table Saw
A table saw is a type is saw used to cut material. The blade is mounted in the center of a “table” and spins as you feed material across it to cut.

40. Tape Measure
A tape measure is a flexible ruler made with fiberglass or metal and is expandable and retractable inside the case.

41. Veneer
A veneer is a thin layer of hardwood usually thinner than 1/8 of an inch and is bonded or glued to a cheaper surface underneath it.

42. Workpiece
A workpiece is the piece of wood you are making into the project you are building. You will cut it, join it, sand it, drill it, stain or paint it until it becomes the finished product you were hoping for.

(c) 2023 Anika's DIY Life | www.anikasdiylife.com

READY TO START BUILDING?

Find beginner-friendly woodworking plans to start practicing your skills and build amazing projects you can proudly display.

Browse plans