

# MineFantasy Manual

---

This will cover all relevant information on MineFantasy mechanics.

## Contents

1. [Gameplay](#)
  - 1.1. [Changes](#)
  - 1.2. [Mechanics](#)
  - 1.3. [Survival Guide](#)
2. [World](#)
  - 2.1. [Ores](#)
  - 2.2. [Trees](#)
  - 2.3. [Other](#)
3. [Mobs](#)
  - 3.1. [Animals](#)
  - 3.2. [Monsters](#)
4. [Processes](#)
  - 4.1. [Tanning](#)
  - 4.2. [Tailoring](#)
  - 4.3. [Smelting](#)
  - 4.4. [Refining](#)
  - 4.5. [Smithing](#)
5. [Materials](#)
  - 5.1. [Basic](#)
  - 5.2. [Utility](#)
  - 5.3. [Gold](#)
  - 5.4. [Bronze](#)
  - 5.5. [Iron](#)
  - 5.6. [Steel](#)
  - 5.7. [Mithril](#)
  - 5.8. [Dragonforge](#)
  - 5.9. [Ignotumite](#)
6. [Tools](#)
  - 6.1. [Haft](#)
  - 6.2. [Basic](#)
  - 6.3. [Advanced](#)
  - 6.4. [Process](#)
7. [Weapons](#)
  - 7.1. [Guide](#)
  - 7.2. [Primitive](#)
  - 7.3. [Blade](#)
  - 7.4. [Blunt](#)
  - 7.5. [Axe](#)
  - 7.6. [Polearm](#)
  - 7.7. [Bombs](#)
  - 7.8. [Ranged Weapons](#)
  - 7.9. [Ammo](#)
8. [Armours](#)
  - 8.1. [Guide](#)
  - 8.2. [Light](#)
  - 8.3. [Medium](#)
  - 8.4. [Heavy](#)

- 9. [Misc Items](#)
  - 9.1. [Misc Components](#)
  - 9.2. [Previously uncraftable](#)
  - 9.3. [Bandages](#)
- 10. [Misc Blocks](#)
- 11. [Further information](#)
  - 11.1. [Extended Hound Information](#)
  - 11.2. [Extended Progression Guide](#)
- 12. [Supported Mods](#)
  - 12.1. [Battlegear2](#)

## 1.0: GAMEPLAY

MineFantasy aims to re-create the survival experience. It progresses through an old-century tier tree; expanding from simple primitive tools, to mythical fantasy materials. There are also hard-core options that may be selected for further difficulty.

[Back to top](#)

### 1.1: In-Game Changes

As part of adding difficulty: MineFantasy changes some in-game elements to slow things down.

Mining as changed a small bit, Iron can no longer be mined with stone: You will need to make bronze tools to mine iron. Diamond ore cannot be mined with bronze.

Recipes have changed. The “Hard-core crafting” Option disables workbench tools. Meaning tools must be forged. Diamond-tier tools are only made with the encrusted tier.

[Back to top](#)

### 1.2: Mod Mechanics

MineFantasy adds its own mechanics to aid the in-game changes. These are used to both add difficulty and to allow more complex alternatives.

Combat system: This system is used to add a few more tactical advantages to combat. One of the major features is the ability to sneak up on mobs and avoid detection. A few others include different variables implemented by weapons.

Armour traits: This is broken into 2 areas. The first being the weight of the armour; armour weight effects your mobility when worn. Heavier armours slow you down, and can apply negative effects. The second part is the variable protection. For this: the armour bar display is kind of useless. Each suit has different armour values depending on damage type(normal, armour piercing, fire, explosive, projectile, etc). The armour bar displays your normal damage resistance.

Weapon traits: There are 4 melee weapon types, 3 arrow types and a range of bows, crossbows, and other misc weapons. Different designs effect variables such as speed, balance, durability, armour penetration and of course damage. “Weapon Balance” Will throw the camera off to the side and down when swinging heavier weapons.

[Back to top](#)

### **1.3: Survival Guide**

Okay first of all: Is “Hard-core crafting” enabled (it should be off by default)

[Yes](#) | [No](#)

[Back to top](#)

### **1.3.1.0: Survival Guide Hard-core**

With hard-core crafting: Regular workbench-made tools are disabled. This means you need to forge all your tools. But before that: you need to get the resources in the first place, wood and stone tools are no exception; they are gone too.

Okay! The first thing you need to do is pull that face out of whatever pile of mud you landed in and get to work. Now you're going to need to do some things before nightfall. Tools, food, fire and shelter!, let's start with tools shall we.

The first tier of tools you will be making is primitive stone. For this: you need sticks, rocks and binds.

First some rocks: Break some dirt blocks, and place them on a crafting grid.. You should get a sharp rock. (You may also use flint). The sharp rock can be used as a weapon.

Now sticks: these are made from planks, made from wood like so:



Don't worry, you don't need THESE just yet.



As you see you get more than a few tweedy little twigs from plank blocks. Now you need some binds. You can use Vines, Tendons or spider silk for binds. You cannot mix and match

Vines are found by breaking vine blocks with sharp rocks held, you will get tendons from killing passive animals with crude weapons (stone, rocks, barehanded). Only animals drop tendons and only when hard-core crafting is active. Spider silk is obtained the same was as always.

Now for some tools: there are a few tools you can make, being a pick and axe and weapons such as spears, javelins, clubs and slings.



Okay! This pick... does not work like you think it will- you see... it's a rock tied to a stick. So it won't exactly excavate cubic metres of stone... The stone pick, will not mine. Breaking stone blocks will give you "Shale" that can be turned into 9 rocks. You CAN break copper ore: This gives copper shards. (More on this later)



Now, an axe! Can break wood! Yes...

Now for some primitive hunting, you need weapons.



The club is a basic weapon. It can block, do damage... but is relatively fragile. If you happen to find cobblestone somehow, you can make one out of that.



A spear is a nice long weapon, it has a decent range and you can throw it. Spears can't be aimed or held, hold right click for half a second, and it throws. No timing involved.

Okay, you're scared of the big monsters and want to keep at a distance?



The sling can be made from binds, and any hide (cow, sheep, horse, pig). It is able to throw rocks.



The javelin is a nice ranged weapon; it has a great force to it. Javelins can be held and aimed, charging the toss as you see fit.

Alright: You have your tools! Now you need some food, so use your weapons to kill some animals. And collect some hide.

You may need protection. So why not make some hide armour





This armour is pretty bad... but it's there.

Now unlike usual where you can dig a little hole to hide in.... you're not quite equipped for that now. It's ideal you find a cave and spend the night in there. Search the area for a cave, decent size and hold up inside. From there: You need fire! Now you don't have one of those fancy-shamshy lighters the richies have. You're left to banging some rocks together.



This is a fire pit. Place this down wherever you see fit. This needs fuel, you know those planks you saw before, right click them on the fire (or toss them on, whatever). This adds fuel. Make sure to keep this fuelled, don't want it to burn out. Now you... need to light the bugger.



Bang these 2 rocks together to start it. You need to light any block adjacent to the fire pit (or above), to light it. Corners don't count. The dry rocks will not work every time. Keep on cracking them until you get a flame. They take damage when they succeed.



Now you have a lit fire pit! Right click this with sticks to create torches. Lighten the area a bit. Now your food! You need to cook it right? Yes, but not with a pile of rocks called a “Furnace” but with a nice roast over the fire.



This should do it! plop this on top of the fire pit. Then right click the face with food (or the side for a GUI screen). And it will cook the food.

Okay! Now you have tools, food, weapons, shelter and fire! What else could there be. Well... your tools suck, you know those copper shards from before... well it turns out you can use them in substitute for rocks in tools! Make a primitive pick, but use the copper shard instead- This copper pick can mine like a real pick! Break stone with it. You can also mine tin

Alright! That’s your starters covered. Continue to see what to do next!

But before you do that there are a few other things you may need to know. Next up you will be dabbling in the new processes... but their tools are made of metal! So you need to make some stone alternatives. Here they are.



The knife! This little blade is used for cutting food, and scouring hide.



The hammer is for bashing metal into pretty shapes, needed for forging



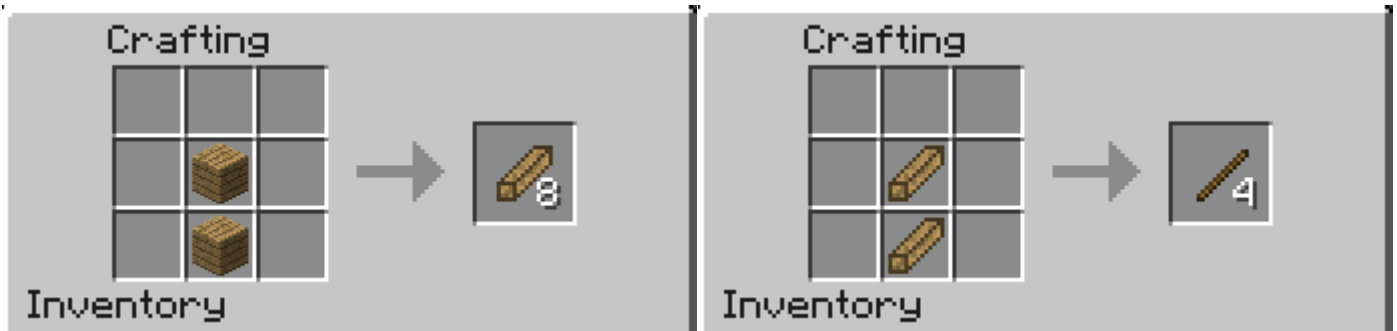
And the tongs are for picking up hot items. You will need this and the hammer to make your first metal tools.

[Continue](#)

[Back to top](#)

### 1.3.1.1: Survival Guide Non Hard-core

You know how it goes...well you should. First off on the land, do... that thing... you do... in Minecraft. First of all; Sticks! Sticks now change a small bit you get Planks from wood, and sticks from planks



Beats getting 4 twigs from 2 cubic metres of wood is it not!

[10-or so minutes later]

Alright the sun has set and you're hiding in a whole right? And your itty-bitty stone pick is not mining iron is it? Of course it won't! What you need to do now is make bronze. But time to prepare first.

The first thing come to mind is the lack of furnaces... yes stacking a pile of rocks is so bland and tasteless. Make yourself a fire.



Okay! Now with this you can make a fire. Place this down wherever. And right click planks (or throw) onto this.

Now you need to light it: Use whatever means you have to light a fire adjacent (not corners) or above this block. For that use this.



You get the rocks from putting dirt on a crafting grid.

Right click these rocks and keep trying. These will not work instantly, you've to to crack them for some time, but only take damage when succeeding

Now to cook your food place a spit roast on top of the fire. And it will cook food.



No... You cannot smelt ores on this... Gee... or blocks, junk, or anything else. Just food...

Alright you can cook food now. That's great. Now you should get these tools for later on the road.



This knife is used for cutting food, and for scouring hide



The hammer is used for pounding your first forged items



And the tongs pick hot stuff up from forges and anvils. You need this and the hammer to craft your first tools

[Continue](#)

[Back to top](#)

### 1.3.2: Survival Guide - Continued

Alright then! You have the starters... Uhh... Cave ready! So congratulations... you are now a cave-dwelling idiot. Why not build up some smarts and get some proper equipment.

At this point- I'd say you should dabble in some new techniques. That being smelting, forging, tanning and tailoring. So let's begin!

Let's start with preparation for tanning. To tan hides, you need salt or flux; I'd recommend starting with salt. Get some reeds and set up a reasonably sized farm. (Unless you found limestone or something, you're all set). But either way, get some reeds growing.

While that takes care of itself- why not get to metal works! This is a nice system, and rewarding if you put the time in. Remember that hammer and tongs you made earlier? Make an anvil to go with them.



This is a stone anvil- you see you're too poor to afford something metal right now.

Now place this near a water source, you will need it.

Okay now you can't just go forging right now, you need metal for that. Without a furnace you're not going to do very well. Before that you need a bloomery!



There! Place this near your anvil.

The bloomery is like an early furnace. To use this pile of rocks; you need your anvil at arm's reach, tongs a hammer, and a water source. Bloomeries smelt 1 item at a time, creating a bloom. These will ONLY smelt ingots. To use this, get some coal. Put coal in the bottom left corner for fuel, your input ore in the top, and some coal in the bottom right. Each smelted ore consumes one of these. Give it time to cook.

When a smelt finishes: it will produce a bloom (you can see it on the side). Right click this with tongs. The bloomery will cease to smelt when a bloom is there, so make sure to take it out. After that; put the bloom on your anvil, and hammer it. (Use left click heavy hits, 1-second apart) should be done in no time. When finished, right click the anvil with tongs and right click the water.

Note: Only forge 1 ingot at a time, you need tongs for the blooms and hot ingots, and you don't want to get out a bloom when there's nowhere to put it.

For more on what on earth you just did. Have a look at the forging section.

This is expensive and tedious. So only smelt what you need for now, mostly copper and tin. You can smelt iron ore too but that's far more slow and expensive.

Now why not make some tools on your anvil. For that you need a forge for now. Make a forge out of cobblestone bricks.



Place this down next to your anvil.

Now with your smithy set up: it's time to make some tools. Pay attention to your anvil. See it's made of stone... and is small. You can only work basic metals on this (Copper and Tin).

Alright, time to start. Make a copper pick firstly, those stone tools can hold out for now. For this, you need 2 plank items, and 3 copper ingots. Ready your hammer and tongs, and get a piece of coal or two.

Right in order to get anywhere, you need to learn how to smith. Copper is easy to work, and can be done with coal. So, right click different areas of the top of the forge to place copper ingots in. place 3 ingots in wherever you want, and then put a piece of coal in. The forge will light and tell you how much fuel it has, the gui shows it's heat (blue arrows) and its item heat(white line) the item heat determines the temperature the forge will burn at with that fuel, it will approach this area.

Now let's have a look at our recipe.



You see it takes 2 planks and 3 copper. But wait... what are you doing with the forge? Some items in recipes require heating, metals usually, so when building this item: the 3 copper ingots must be heated until they say "Workable". It is possible to ruin ingots if they get too hot. But don't worry that is really hard. And coal does not burn hot enough alone to ruin copper, so take your time, and if fuel gets low, add more coal. To use the forge, put some coal in it (one should be enough). Then light it, to fire up the forge, right click it with a lighter (right now, all you have is dry rocks) keep going until it succeeds.

Now place your 2 planks on the anvil so the shape can take place, when your copper ingots turn workable (they will sparkle when so). Right click on them with tongs, and then right click on the appropriate square with them on your anvil. Do this with your 3 ingots when their ready.

Now, if the shape is right, and the ingots are workable, a metre will appear, displaying the name of the item, and a quality metre. Before trying to craft it; here's a few pointers.

The 'Quality Metre' is a feature that determines the durability of some items. Don't worry about this if an item can't be damaged. The green arrow shows the max durability (this means the tool will be undamaged); it is higher depending on the games difficulty.

The black arrow shows your quality. When you finish crafting, the tool will be damaged if this is lower than the green arrow, make sure it's as high as you want. Don't worry how low it gets, the quality only matters when you finish- so if the marker gets below the max quality, you can fix that as you go.

The red X is the point of no return, if by any reason your quality hits that point, the recipe is ruined. Keep it above there.

Now: How do you do this? There are 2 hits you can do. To craft items, click the anvil with a hammer. If you right click- it does a light hit, fixing it up and increasing quality. If you left click, it does a heavy hit filling the craft bar faster, but at cost of quality.

Make sure to hit your hammer slowly, (keep hits 1 second apart from heavy hits, and half a second for light hits). The best technique is to use heavy hits in 1 second intervals, when quality gets low notch up some light hits about ½ second apart.

Don't expect to get this straight away; it's easy to get used to and hard to explain. And don't stress. It is really hard to ruin an item.

When the craft metre fills, an item will be made, some items (like this pick) are hot. Right click the item with tongs, and then right click water. And then you have a tool! Its durability is determined by the quality metre.

There are videos explaining how to do this, and it's much easier to understand.

You now have a pick! You should get some more tin, copper, and coal while you're at it. And if you want more things to craft, make a weapon, or some tools. And be sure to upgrade your hammer and tongs while you're at it.

Metal hammers and tongs are forged. So you need stone tools to start out. So make sure to craft them before your previous ones break. Why not make something soon. And if you want to get ahead, make some shears out of copper.

When crafting tools; remember to pay attention to what haft is required. Stronger materials need stronger hafts to support them. Copper and tin use planks, bronze tools need a bronze anvil or better, and must be made from a basic haft.

Now... you may have noticed you got some rather nasty burns from doing that? One of the hazards of using forges; you will be crafting something to help there in a bit. And some of you may have learnt it is not wise to pick up hot ingots by hand: and that's why you use tongs.

So on to the next processes. Tanning and Tailoring: these processes allow you to work leather, wools and a bunch of other stuff.

To begin, set up your tanning station:



Alright put that down wherever you want. (Keep it a reasonable distance to a water source however)

Now, you know that knife you made earlier? Get that, grab some raw hide, and come to the rack you just made. Right click a hide to place it on the rack, now click that with the knife. Keep going until it finishes, this creates messy raw leather, take that off with a right click.

Now, you have a disgusting lump of skin do you now? You need to clean it! For this you need either salt or flux as mentioned before. Flux is obtained by banging limestone hunks on an anvil as well as other ways. Salt is found from using paper on some water sources. To get salt, make some paper, and right click a large area of water that is bedded by sand (Lake, ocean, beach) and then place that on a crafting grid to make salt.

Now place either salt or flux on a crafting bench with your raw leather. Take the result, and right click a water source. Keep going until you get cleaned leather.

This will give you leather (if you have hard-core leather on, there's another process needed, look into that). Leather can be used to make many things.

Now tailoring! This is needed for putting leather together. First off craft yourself a tailor bench:



Place this down wherever.

To use the tailor bench; you need a needle, and string. Different recipes use varied amounts of string, and different times to sew them; higher level recipes use stronger tiers of strings. However; most items use twine.

To get twine; you need a spinning wheel



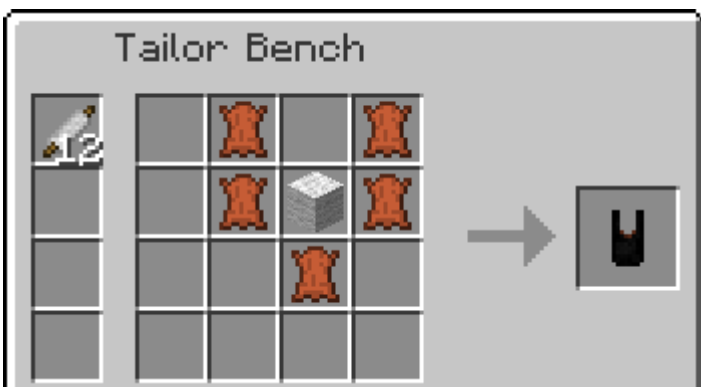


Place this down anywhere, but its best to keep some space around it.

To use the spinning wheel; you need sticks and wool. Might want to make some shears and get some from sheep. To use this contraption; place sticks in the back-left corner (clicking the top), and then placing wool on the front-middle of the top, this will shove some wool on the stand. And then; right-click the wheel and keep going until it finishes. Twine will appear in the back-right corner: right click that to take it: Leave 1 wool handy, you will need it.

You may notice the spinning wheel has no GUI screen. Doesn't have one, nor does it need one. It's all about where you click. You will get used to it quickly.

Now with twine; put that in the left slots of the tailor bench (you can click them on the block). This will be consumed as you craft. Now why not make something!



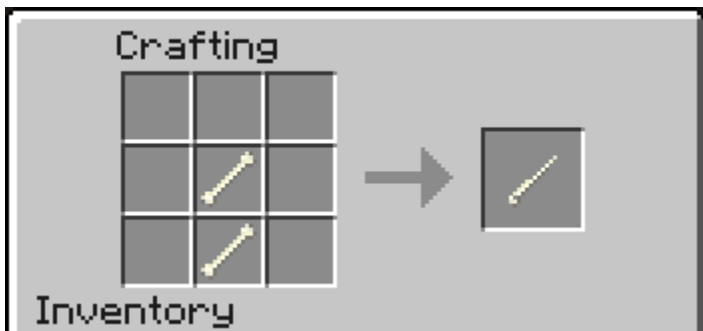
The blacksmith apron is worn to prevent burns when forging- you know how you kept getting hurt when using the forge- this helps.

Of course the apron will not stop everything: if you foolishly stand on the forge, or try to pick ingots up without tongs; you will still be burnt.

Now pay attention to the recipe before crafting. The left shows what string and how much is needed. You don't need to have this exact amount; it just shows how much it consumes in the process. Meaning you can have as much twine as you want. Each stitch you make consumes this, and increases progress. So if you half-finish an item and throw it away; you will not get that string back.

Place at least 12 twine in any of the 4 left slots. And then put your 5 leather and that piece of wool you should have saved earlier on the grid.

If everything is all well; you can get ready to craft. But just like the anvil- you need to interact with the block to craft.



To sew items, use a needle on the top of the block. Unlike anvils, you can hit this as fast as you want. This bone needle is pretty poor and you should look to crafting a proper metal one later. For now; make an apron, keep going until it finishes.

You should now have an apron. Take care of it and only wear it when you need to.

Now you have a decent forge set up, why not get some proper tools, copper and tin are rather poor materials, and have limited uses. First of all; put a bit of tin aside and make a proper fire starter. You know how awkward it is to light a forge with dry rocks... or anything with dry rocks. Make yourself a tinderbox.



This isn't quite a flint and steel, and still takes a couple of hits to succeed. But the tinderbox is decent and efficient enough to serve its purpose.

Now with a proper means on starting a fire, you can get to work. To reach your full potential: you need a proper metal. Now you should create some bronze.

Before this, Why not go mining first; get lots of ore, and coal. Smelt them and come back later.

When you are back from your trip, it's time to start alloying some metal.

To make an alloy; you need a crucible.



Place this over a heat source such as a fire pit or forge. The heat of the source depends on the speed this works. Put some fuel in the source and leave it unlit until needed.

Now a crucible is just a big pot: chuck some metals in and they will mix into an alloy. You will be making bronze. Crucibles use ratio in their recipes: Bronze is 2:1 copper: tin. This means for every 2 copper, you have 1 tin. This means you can have 2 copper, 1 tin and make 3 bronze, 4 copper, 2 tin for 6 and so on... here is what it looks like



This is an example of how it's set out, 2 slots have copper, and 1 slot has tin. Each smelt has a base time and an incremental time on how many slots are occupied. The crucible will smelt slower if you double the ratio, but is still faster overall. This means if you cook 4 copper and 2 tin to make 6 bronze on one lot. It takes less time than smelting 2 lots of 2 copper and 1 tin. Since each individual alloy smelt has a base timer.

But for now, you don't need to care too much about time optimisation. But now, you should make something out of bronze.

Right now; you have a stone anvil, that anvil is horrible, make a proper anvil.



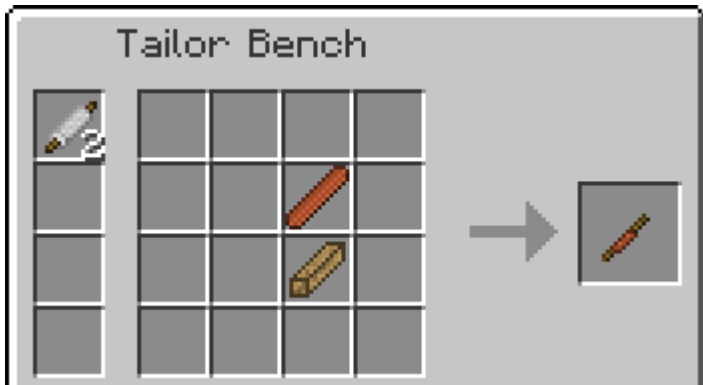
The bronze anvil is able to work everything the stone one could, but also bronze. Each anvil tier can make the stuff the other one could before it, but can craft higher metal tiers, though you still can't forge iron yet.

Now you should upgrade some stuff, make a weapon, some tools, and maybe even some armour; keep that tinderbox handy for your forge. But why not upgrade some essentials? Well: you are making bronze now, this is a proper material with some good uses, you're going to want something better than a piece of wood to hold this up, and need to make a haft.

Before you make a haft you will need to make some leather strips. Leather strips are made from putting some leather on a tanning rack, and using shears on them. When finished you will get some strips.

Gather some wool and make plenty of twine, and get some wood and leather strips.

With these resources, make some hafts. Make a decent amount of them too.



As you see each haft cost 2 twine, planks and strips, these are super easy to make.

These hafts are used for both bronze and iron. So you can make a fair amount of them for later.

With these hafts, and some bronze how about you do some crafting and test out your skills. Make yourself a few new tools.

Put on your apron, ready hammer and tongs, put some coal in your forge, place hafts on your anvil in preparation for your recipe, put the required bronze into the anvil, and light it up.

You can choose to either make one item at a time, or put as many resources in you can fit. Do note that although you are unable to ruin any ingots with coal despite the time, your forge will burn out if you take too much time, and don't keep filling it. The forge will tell you how long it has until refilling, so if you want to make a lot of items in one sitting, then keep some coal handy.

Start off by making a new hammer and tongs, in total using 3 bronze and a haft. Make the hammer first, and leave the materials for the tongs ready in the forge, a single piece of coal should be enough to forge these.



You should be able to make the hammer fast enough to still have the material for the tongs ready.

As you see; materials for multiple items can be prepared at once, it just takes a bit of resource management. Mass production is difficult, but later on hoppers can feed coal in for you.

Anyway: if you seem ready, why not make something more advanced, like a needle.

For something as small and precise as a needle, you will need to scale things down.



Hunks are able to do smaller items. These aren't used much, but to make such dainty little items, you will need to make these hunks, but then individually heat them up again, to maximise flexibility. So make a set of these, and heat them up again.



With the 4 heated hunks, make a needle, this needle is stronger and more efficient than a bone needle, meaning you require less effort to make stitches.

Now you've pretty much had a go at preparing multiple recipes, and re-heating items. How about you give it a go yourself, no assistance, make some more tools





There is 4 items, make them in whatever order, or speed you want.

Alright then, handle that well? Most cases you would only need to make 1 or 2 items at a time, and just create more as you need them. There is a wide variety of tools available, and each of them useful in their own part. Don't concern yourself about them too much; you can dabble in that later. The bronze pick also, is able to mine iron ore (as well as a bunch of other stuff) it has the same harvest level as iron tools, but cannot mine diamond ore.

Now how about a new weapon, just like tools: there is a variety of weapon types in the mod, broken down into 4 types, blade, blunt, axe and polearm. The anvil you have is small, good for tools, but cannot make heavy weapons. Heavy weapons are slower, bulkier and more damaging. For now just make something simple. Pick one of these 3 weapons to get started.



A sword is the average-versatile weapon. It should be a decent weapon of choice for all purposes. This weapon can block, and is rather efficient.



A war axe is a more offense oriented weapon, if you don't care to block attacks, might want to use this instead. The war axe does more damage than the sword, but is slightly slower on recovering between hits. The war axe is less effective against armour, so heavier enemies would render this less damaging than a sword. This weapon is good for mob hunting; most basic mobs have low armour, and wouldn't degrade the damage that much.



The mace is the opposite of the axe, it does the same damage as a sword, but is even slower at recovering. 25% of damage from maces penetrate armour, for most armour: this will ignore all calculations. Plate armour is an exception, and is able to resist the armour penetration at lesser effectiveness. This weapon is good for PvP, as most players would have themselves armour, the mace would be able to do bonus damage to the durability and ignore some armour.

Now these weapons could have been crafted from tin and copper, but bronze is far better and at this point: you might want to branch out a bit on tactics.

Now with a weapon and toolset, you should make some armour.

Armour crafting isn't as easy as tools. Armour takes a lot of material for a full suit. There are different methods you can use to ease this process: Forges can connect, sharing heat and fuel while extending your capacity, bellows can increase the speed of heating, and hoppers can distribute coal automatically.

Armour is made of components (scales, chains, splints, and plates). The crafting of these components is similar to the crafting of tools. A suit of armour is pretty much the same as crafting a toolset, and requires multiple crafting setups.

Right now, improve your forge. Make some bellows



Bellows increase the temperature of forges, and is able to make it 50% higher than the item temperature. As you see with your forge, there is a heat metre. The white line indicates the temperature your fuel can burn at, and the blue arrows indicate the heat of the forge. The heat will approach the item temperature. When you use bellows, you can help the forge heat up to this temperature, or you can increase the temperature temporarily to both increase forging time, and ingot temperature.

Be careful, the bellows increase the temperature the forge can burn, it may only be temporary- but using bellows and coal, can ruin tin ingots. (But you shouldn't need bellows for tin anyway)

Now with an improved forge, you should make yourself chainmail armour. Chainmail costs 16 ingots, and is classed as “medium armour” it slows you down slightly, offers average protection, and a high projectile resistance.

For more information on armour, and their variables see the armour guide. For now; chainmail is a good option, and is ideal hunting basic mobs. Splintmail would also be a decent choice, and is slightly better for PvP). It’s up to you.



Chainmail is made from chain sheets, chain sheets are made from chain links. To make a full suit of chainmail, get 16 ingots and make 4 lots of these links. I would recommend you put 2-3 pieces of coal in your forge, and heat up 8 bronze. When bronze is hot, put it in here, after getting 4 ingots, put 4 more ingots in, craft these links, pick them up, and then get 4 more ingots. Don’t use bellows, it will be hot enough to maintain the temperature at workable, and you should have enough time.

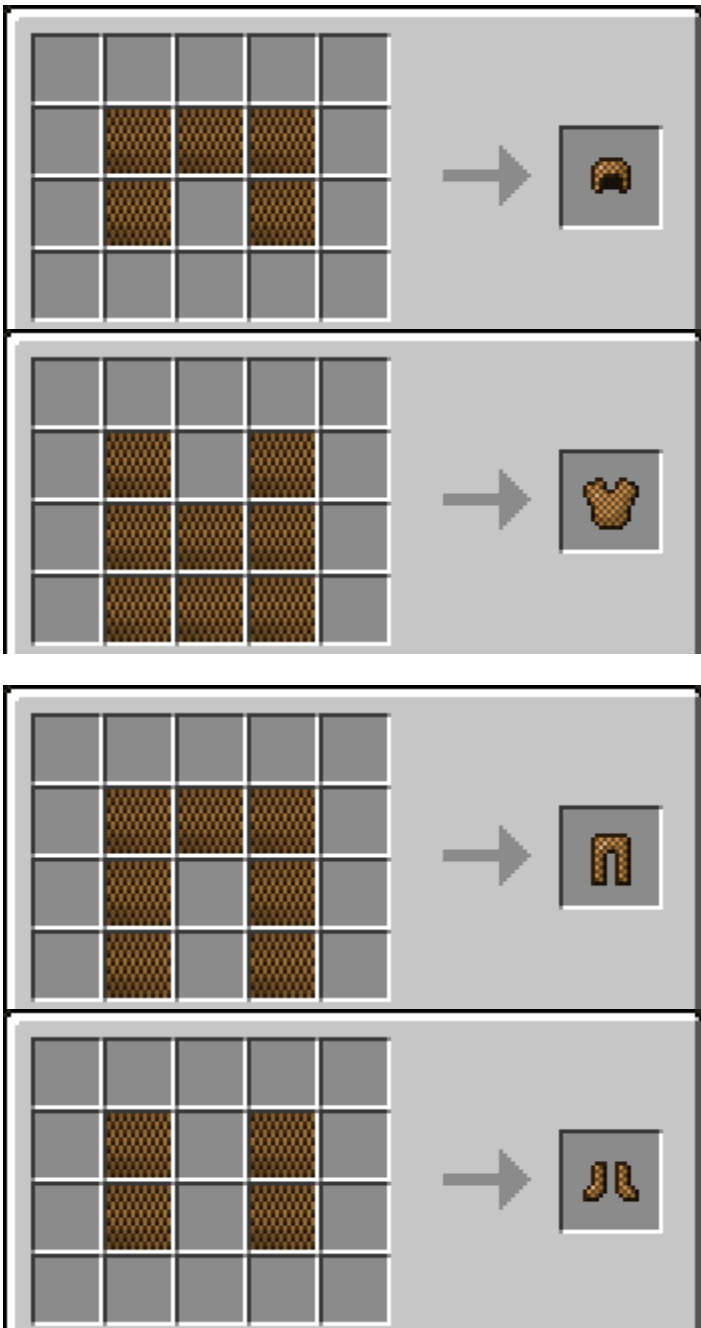
After creating 4 lots of these links, you will have 96 links (1 stack + 32), position these on your anvil (might want to use the GUI for this)



Stack this evenly so there’s 4 stacks of 24. Craft 24 chain sheets with that.

Now with the sheets, you can make your armour.





This suit of armour is now finished, you can choose to wear it now, or store it for later when you might need it. Chainmail slows you down... but not that much, it's hardly noticeable. Most armours are best left off and equipped when you need it. Scalemail and leather are good for round-the-house wear as they weigh nothing: but they're not very protective either. Heavy armour like Heavy chain and plate weigh a lot more, but are far more protective.

When it comes down to it, light armour(leather, scale) is good for wearing at all times, Medium armour(chain, splint) are good for average combat needs, and plate armour(heavy chain, plate) are good for stronger fights. Stronger armours means you don't need to be as cunning. Medium armour is the best for average purposes. Just keep on guard and ready for anything.

Now with tools, weapons and armour, why not settle in a bit, gather resources, maybe build a farm for food. And put your facilities in an actual building now. And you will need a good storage room, it is ideal to store some materials on-site (ingots and hafts best kept at the smithy) for easy access.

Now there's a few things that can be added to your home. First of all, look at that crummy old bloomery; you certainly need something better than that to properly smelt ingots.

For this, you need a proper furnace. Unlike regular furnaces-that are just a hunk of rocks. MineFantasy furnaces are moderately expensive, bulky and complicated machines. Unlike what you're used to, a furnace simply can't just be made and chucked into any corner seen fit. One of these is a heavy and expensive piece of equipment, and allows smelting to be much easier.

Furnaces can smelt anything, like ores and blocks. The only thing is that they cannot cook food. If you try to cook food in a furnace, it will burn it to the point of charcoal. A single furnace costs 44 metals. Gather some bronze and make one, Also: craft 2 forges, and gather some cobblestone.

The first thing you will need to make is the furnace heater. These are easy to make



After that; forge a bronze furnace block, this takes a lot of time to forge the quality doesn't matter, as this cannot be damaged. However keep it above the red x



Furnaces are multi-block structures. You will need a stone base, and a metal body. For a bronze furnace; use your remaining bronze to make 4 bronze blocks. A single furnace is 3 blocks wide, 2 blocks deep and 3 blocks high. Find a place to put it.

Now with that, place your furnace heater on the ground, it will face towards you, this is the front. Now behind, and over the sides, surround with cobblestone. On top of the heater, facing the same direction; put your bronze furnace block. And then on both sides, back and top; go the 4 bronze blocks. This will be the basic single furnace.

You can choose to put as many furnaces in between the 2 walls as you want, for example: you can make a 4 wide furnace containing 2 adjacent furnaces and heaters in the middle.

Large furnaces are able to smelt 4 items at once. The heater blocks accept the fuel. Heater blocks function like forges, the hotter they get, the faster the furnace smelts. Using hotter fuels will smelt faster. To use this, place some fuel in the bottom, and cook items in the top.

You can use bellows on them by pointing them at the side of the whole structure (the bellows can power their bonus through the wall block into the heaters between).

Do note that iron ore cannot be smelted; only Bloomeries are able to make wrought iron from ore. You will need a blast furnace to properly refine iron ore.

Now you are able to smelt pretty much anything, ore, stone, glass, and a bunch of other stuff. But, is there a special furnace for cooking food you ask? Why yes there is.

An oven is similar to a furnace, only this cooks food. Ovens are much easier to make and use than furnaces.

Start off with a bronze oven



Just like the furnace; this takes a long time to make, the oven does not use temperature like furnaces do. These function more like regular Minecraft furnaces and each fuel has its set smelt value. For bronze ovens: fuel lasts half as long as a regular MC furnace will.

Now this is pretty much it, everything else; you can figure out on your own. If you want to go to the next level, and see to surviving through all progression, while dabbling in some other crafts, you can continue.

[Extended Progression Guide](#)

[Back to top](#)

## 2.0: WORLD

The world gen in MineFantasy is rather average, it contains a selection of ores, trees, and formations each being useful for progression, aesthetic, and utility.

[Back to top](#)

## 2.1: Ores

MineFantasy has a variety of ores that generate in the world.

### *Overworld ores*

#### **Copper Ore**

Copper is found below layer 96, it is half as common as iron ore, but seems less so due to its more varied height. Copper ore can be smelted directly into copper ingots. Copper ore can be mined with stone



#### **Tin Ore**

Tin ore has the same height variation as copper, but is half as common. Tin ore can be smelted directly into tin ingots. Tin ore can be mined with stone



#### **Silver Ore**

Is just as common as gold (because minecraft gold is fairly common) and smelted directly into silver ingots. Silver ore must be mined with bronze or better



#### **Mithril Ore**

Mithril is pretty rare, its vein size is 4, and is found below layer 16. Mithril must be refined through a complex process but creates more ingots. Mithril is mined with diamond/encrusted or better



### **Ignotumite Ore**

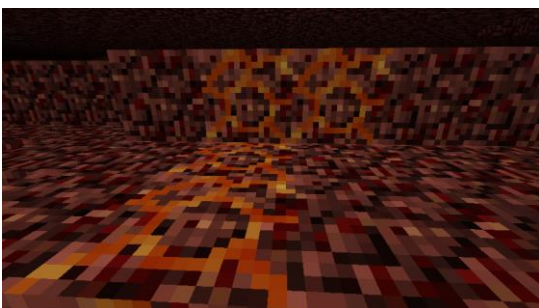
Ignotumtie ore is rare.. And I don't mean that petty "you won't find it but end up having some trips rare" I mean you can go your whole experience without finding it. But ignotumite cannot be broken, it has infinite durability. (Still being an item, lava still destroys it). It is found below layers of 16, and is pretty easy to recognise. Ignotumite has a long process of refinement. Ignotumite is mined with Mithril or better. Ignotumite tier tools recover hunger when digging and weapons drain life.



## ***Nether Ores***

### **Inferno coal Ore**

This is the coal of the nether, as it is found in the nether. Inferno coal is common; you're bound to find it. Inferno coal burns just as long as normal coal, can't be used as carbon, and doesn't make coke. But it burns twice as hot; making it good for high-tier metals in forges and makes MF furnaces faster. This ore drops Inferno coal directly. Inferno is mined with bronze or better



[Back to top](#)

## 2.2: Trees

MineFantasy has a selection of trees, the wood from these trees has limited uses, but is superior than regular wood, mostly for decoration, these trees are also required for high-tier hafts.

### Ironbark

A common sight in forests and jungles, Ironbark is known for its dark brown bark and orange wood planks. This material is stronger, more flame resistant and makes mithril-tier hafts.



### Ebony

This uncommon and majestic tree can be sighted in forested areas, it's known for black bark and purple planks, ebony trees vary in size and are used for high-tier hafts.



[Back to top](#)

## 2.3: Other

MineFantasy has a small group of rock types, and formations. Each one has its use, aesthetic and functional.

### Limestone

This formation generates in beaches, oceans, and even near rivers. Limestone can be broken up into flux. Limestone can be mined with stone



### Slate

This is a dark grey, aesthetic rock type. Slate is found in large groups, providing a neat building material, and is used to make Iron furnaces. Slate can be mined with stone



### Granite

Granite is found throughout the land, but far more in mountains, just like slate, granite has large groups, Granite is used as a premium building material or to make steel furnaces. Granite is mined with bronze or better



[Back to top](#)

## 3.0: MOBS

MineFantasy mobs vary from simple and tough, to smart and dangerous. There is a small selection of mobs, mostly hostile. MineFantasy classes mobs into 3 categories.

Lurker mobs (or basic mobs) are your everyday bashing monster, average drops, health, and armour, they are nothing to fear. MineFantasy doesn't add any lurkers, but regular MC monsters fall under this category.

Brute mobs are strong and nasty; they normally are less common but pack a punch, having large health, damage and armour. Brute mobs have more valuable drops, but nothing fancy.

Elite mobs are the smart and deadly creatures of the spectrum. Each of them has complicated AI mechanics, as well as tactics of their own, Elite mobs tend to vary their attacks, avoid damage and some even adapt to their enemies.

Unlike what you're used to, living in your home in the hills somewhere... MineFantasy restricts that, if you want to live in some exotic lands far away, you need to work up to that. The further you go, the stronger the mobs you find will be. This means you have to settle close to spawn for your first times, and then move up. Mobs have their spawning environments, attacks and AI tactics. You must learn and understand these if you are to live with them.

[Back to top](#)

## 3.1: Animals

MineFantasy hasn't many harmless animals: there is only one, the hound. But even that can be aggressive.

### Hound



Hounds will spawn naturally in 6 breeds. Each breed has slightly different base stats. Hounds are found in forested areas mainly, but can be found in plains. A hound is a complicated animal; they can be tamed, but have a difficult process on doing so. Unlike your regular wolves, that one might raise an army of. Hounds are a more treasured companion, and you need more than just bones to get one on your side. Upon taming: hounds will be rather weak, you will need to keep them fed, and train them to be more powerful. Hounds can wear equipment, carry goods, and learn a small selection of abilities.

A hound is able to learn 4 abilities that unlock as they level up. The abilities are basic, but can be useful in the right situations. Hound training determines their damage, hunger and health. There is a wide range of items that hounds can use, and a decent amount of different commands that can be given.

[Hounds: Extended information](#)

[Back to top](#)



### 3.1: Monsters

Monsters in MineFantasy are far tougher than anything you may have seen before. MineFantasy monsters range from tough and dopey, to powerful and cunning. Mob spawning for these have more variables, most mobs only spawn at a certain distance from the world spawn point, while others might come after players who have a bad habit of staying alive too long.

#### Minotaur



A Minotaur is a 'Brute' mob. They will spawn in dark areas, and are fairly uncommon. There are 3 breeds of Minotaur: The brown Minotaur is the most common, it's the average stats, and fairly dangerous. The Cave Minotaur is found in the Nether, and low-lying caves, they are immune to fire and do more damage. The Albino Minotaur is found in snowy areas, it has more health and armour.

Minotaurs have a charge ability that increases their speed and damage. When seen, a minotaur would usually charge immediately. Minotaurs are also able to see you from much further away, meaning you should always be on guard for surprise attacks. They can spawn with heavy weapons (greatsword, battleaxe, greatmace and warhammer). They can do extreme damage with these weapons, they will spawn with nothing when near spawn, further distances increase their tier. They drop steak and Minotaur hide.

Sometimes, a "Minotaur titan" can spawn. These are much larger and stronger than their normal counterparts, and extremely aggressive. Titans increase their max health every kill they make.

#### Drake



Drakes are 'Brute' mobs that spawn during the day. Unlike most other mobs, drakes will only spawn at a certain distance to the world spawn point. Drakes are found in hills and plains (mostly in plains). They aren't that dangerous compared to most MineFantasy mobs, but they do pack a punch. Drakes are pretty easy to kill alone, but are deadly in groups. A fully grown drake does large damage, and can run much faster than you, be cautious travelling when lightly armoured, and be ready to fight back.

Drakes can spawn as juveniles, but grow over time. Younger drakes are weaker drakes, and should be killed when their weak. Drakes can sometimes settle in caves, or under trees, becoming extremely territorial. There are 3 breeds of drake, the further you go, the stronger they get.

## **Basilisk**



A basilisk is a mob you don't want to mess with, they are 'Brute' mobs, but carry a unique danger. A basilisk is a slow, bulky and rather passive creature. They do large damage with their bite, but their primary weapon is extremely dangerous. Basilisks are able to apply afflictions at their targets through gazing. If you look at a basilisk while it's facing you; you will be affected.

Basilisks come in 3 breeds, each more powerful than the last. The first breed is the blue basilisk, these spawn pretty far from the spawn point and are uncommon, and they spawn in the dark, at night or in caves. Upon gazing, they will poison their target. The brown basilisk is even more dangerous, they have more health, armour, and damage. A brown basilisk spawns even further away, and less common, Brown basilisks can paralyse their targets, making escape near impossible, then they will move in for the kill. Melee creatures are unable to kill a brown basilisk due to their size, and you will have difficulty fighting them off. Nether basilisks are huge, and have massive health and armour, their gaze lights foes on fire, and they are they are hard to take down.

Basilisks drop basilisk hide, their hide is greatly used in tanning, and basilisk meat can give you temporary damage absorption and restore some health. Nether basilisks drop nether warts.

## **Skeletal knight**



The skeletal knight is an adaptive, powerful and resourceful enemy. They are 'Elite' mobs that spawn around players with high experience value. If anyone has more than 35 experience levels, these knights will spawn near them. They will spawn for either 1 of 2 reasons, you're hoarding on experience, or you're just not dying enough. Skeletal knights are heavily armoured, and have a range of weapons, attacks, and tactics. With proper weapons; a skeletal knight is rather easy to dispatch, but they know that well.

Skeletal knights have 3 layers of defence. The first layer is their allies. A knight is able to 'Rally' nearby monsters, calling them forth to attack their target. Upon getting into a fight with one of these, all nearby monsters(including creepers) will turn towards you, left alive long enough: it can be a massacre.

Here is an example:



Now this isn't a very common scenario, but all the zombies in their "lets raid a village day" decide to turn to you. You can see their carrying the items of the last player that tried to defeat it.

When it comes to groups, you normally attack the damages first, and kill the tough guy last, in this instance, you're forced to kill the knight, or it's going to keep alerting the nearby monsters.

When fighting a skeletal knight, it has a second layer of defence: and that would be its tactics. Skeletal knights have an array of weapons; they will use a broadsword, and block attacks accordingly. If you have a high armour rating- they will equip a warhammer, and they can also try sneak up on you with a dagger. At a range they can throw shrapnel bombs and use a composite bow, if you trap a knight, it will start to shoot arrows. While using these weapons, skeletal knights will also sprint towards their target, block attacks and jump around to avoid hits. They are difficult to hit, attempt to replicate pvp behaviours.

Finally, skeletal knights also have their high armour rating, knights are hard to kill, blunt weapons help greatly, so does silver, One on one, you should be able to handle them, but it's best to run most times.

## Dragon



Dragons are powerful and intelligent 'Elite' mobs. They spawn in hills far away from the spawn point. Dragons will swoop down and attack their targets from above, if their targets let their guard down; dragons will be more likely to swoop in for a cheap shot. When taking excessive melee damage, a dragon will fly into the skies out of range, flying around the distance to avoid projectiles, and then they will swoop back down with a cascade of fire. Dragons will break blocks on occasion, and their fire can shatter glass. Weak materials like glass and leaves will not slow these monsters down; they will rip through leaf litter and branches to get to their target.

Dragons are pretty easy to beat with sheer brutality, but their ability to fly and their fire breath will foil any chargers. There is a range of tactics that can fight dragons, from light-and active, to heavy and defensive, there's no real tactic that can beat them any easier. The best way to beat these is preparation, and knowing their tactics. Their ability to fly makes melee inefficient, while their fast moving and fire breath can disorient their targets. A dragons bite does large damage, and even the heaviest of armour will feel the force. The fire breath is the most dangerous weapon, and used with its bite make this monster unlike any other. If you manage to hide from a dragon, and lose it inside, it may take to the skies and fly around, out of sight some times, returning later to strike. When disengaging, it's recommended not to flee, dragons will return to their targets when they leave their guard down, and can follow them back home to strike again.

There are 4 breeds of dragon, 2 basic breeds (red, and green) green are more melee oriented, while red are more fire oriented, and 2 rare breeds (gold and black) gold dragons are more close-up and personal, while black dragons are more agile, and unpredictable. Upon dying, dragons drop gunpowder and a flame gland. Flame glands can go towards alloying dragonforge steel.

At a very far distance, rare breeds are all that spawn, rare breeds are extremely dangerous.

Dragonforge is a powerful tier, and is greatly used in combatting dragons, lighter armours give fire resistance and allow you to be mobile, and dragonforge plate makes you immune to fire and is ideal for dragon combat.

[Back to top](#)

## 4.0: PROCESSES

MineFantasy has a variety of different processes for both getting and working with resources. Some processes are more complicated than others, many processes replace are designed to replace the crafting and smelting in regular Minecraft.

[Back to top](#)

### 4.1: Tanning

#### Tools of the trade

##### *Knife*

The knife is used to scour leather on racks



With hard-core crafting (right image) knives need binds.

By default use the left image. Sharp rocks are made from putting dirt on crafting grid.



##### *Shears*

Shears are used to cut leather into strips; leather hung on racks can be cut



## Process

Leather is a commonly used material in MineFantasy. Tanning is a method on turning raw hide into useable leather. Animal hides are able to make multiple pieces of leather, increasing abundance.

Tanning involves a 2-stage process, Scouring and then cleaning

## Scouring

Hide is dropped by most animals; each can be tanned into different amounts of leather. For this: make a tanning rack.



You will need a **knife** to scour leather. Right click an empty rack with a tannable hide to place it, and then click the rack until progress fills, items can be taken off with right-click.

## Cleaning

This creates raw leather, raw leather must be cleaned. Place **salt** or **flux** on a crafting grid with raw leather, and then right click this on a water source until it cleans.

## Rough leather

If the “Hard-core leather” Option is active on config. This will create rough leather, if not: you get regular workable leather. Rough leather has limited uses, but works well enough for simple purposes. Rough leather armour is less durable. To soften rough leather, place it on a grid with rotten flesh, then place that on a **bench top** and hit it with a **mallet**.

## Leather Strips

Leather strips are used for a small amount of purposes, mostly in hafts, but also in belts. Leather strips are made from using shears on a tanning rack when leather is hung.

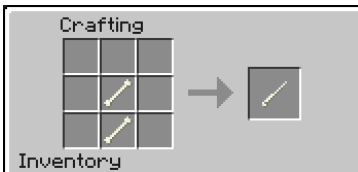
[Back to top](#)

## 4.2: Tailoring

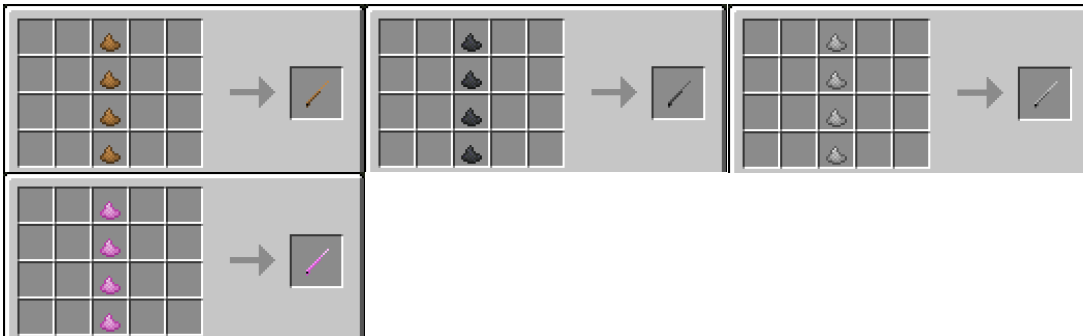
Tailoring is a process that involves sewing material together to create items. Tailoring is used for making leather armour, hafts and other cloth items. And no, there’s no clothing or any of that pointless clutter. This is simply used for making leather/cloth items.

## Tools of the trade

A needle is used to sew items, right clicking this on tailor benches higher tier needles sew faster



The bone needle is simple, and low cost



## Reagents

Tailoring uses string as well as shaped recipes. Each craft has its minimal string tier needed. Most recipes use twine. Recipes each have a set quantity used, each stitch made increases progress and consumes string. If you take items off the grid and ruin the recipe; you will not get your string back.

## Twine

Twine is used from most tailoring recipes; it is created from wool, and wrapped around sticks. For twine production; you need a spinning wheel.



The spinning wheel doesn't use a GUI screen. Instead; it's all about where to click. Clicks are handled from the top of the block, right-click the middle-front with wool; it places it on the stand. Right click the back-left corner with sticks. With sticks and wool ready, right click the wheel to spin the twine; twine will be crated in the back right corner for collecting.

Twine can also be used to create string using glue

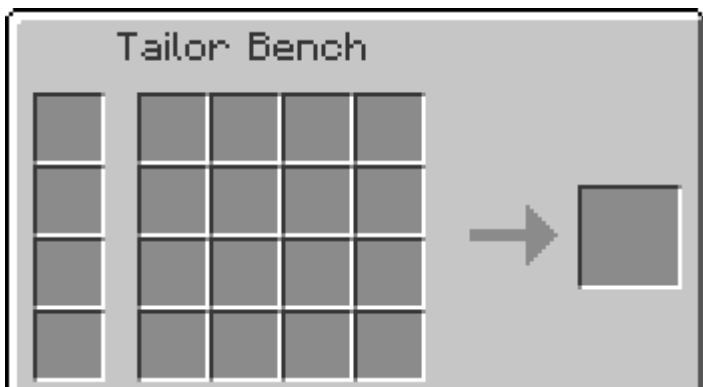


## Tailor Bench

The tailor bench is used for sewing items, for this, you need a shaped recipe, string, and a **needle**.



The tailor bench works similar to an anvil.



The 4 left slots are used for string (like twine), place them in that area. The top slot is consumed first. So put the higher tiers lower, so low-tier recipes don't consume it. The grid in the middle is used for the recipe shape itself. The arrow displays progress (this consumes every stitch made). And the right slot is output

To craft: right click the top of the block with a **needle**. Each recipe and needle varies on the time; stitches will be made, as a stitch is made: string is consumed and progress increases. Easier recipes and/or high-tier needles will greatly increase speed; sometimes it can be fast enough to apply multiple stitches with one swing.

[Back to top](#)

## 4.3: Smelting

Smelting processes is similar to regular Minecraft but with a few changes. Regular furnaces have been removed, and replaced with a more advanced furnace machine.

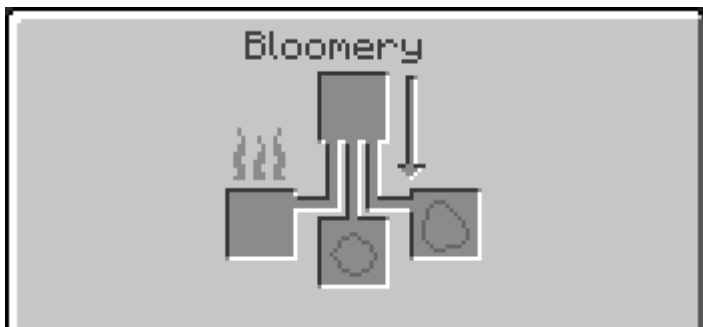
### Bloomery

Bloomeries are early-game furnaces. They are a long, slow and costly means of producing ingots.





To smelt ingots in a bloomery: you require a fair amount of coal.



Put your ore in the top slot, fuel in the left slot, and an equal amount of coal as ore in the right slot. Bloomeries will slowly process this ore, and consume coal from the right each smelt.

By default: This will produce a bloom. Blooms cannot stack, and must be forged on an anvil to create an ingot. This means you need to constantly process blooms as they smelt. On the right of the block, a bloom will become visible; right click the block with tongs to pick it up. (Do not pick it up by hand). Transfer the bloom to an anvil, and hit it with a hammer a couple of times, right click the anvil to pick up the hot ingot, and right click water. Make sure to work 1 bloom at a time, you need empty tongs to pick things up. As soon as you see the bloom smelt, pick it up, forge it and cool the ingot before even thinking of picking up another. Though it will consume fuel, the bloom is better waiting in the bloomery, and you can only hammer one at a time. You don't want to end up with a second bloom and nowhere to put it. This will produce a "Small slag" put 4 of these together on a 2x2 shape on crafting. And it makes a piece of slag. Slag has no use other than to be a piece of garbage, place it in the world and/or break it when placed it, and you might get something in return.

If by choice "Hard-core Bloomery" is inactive: you will not need to do this long process. Instead, Bloomeries will produce ingots instantly.

Although you cannot smelt iron: Bloomeries can produce wrought iron, but it takes a long time, and is cost-heavy on coal, so it's not recommended to make large amounts of iron. You will need to make at least 22 wrought iron in the bloomery to create a blast furnace (17 for the blocks, and 5 for an anvil).

You can increase bloomery smelting speed by applying bellows to the side.

## Large Furnace

The large furnace is MineFantasy's counterpart to regular stone furnaces. By default: the regular furnace will be disabled, and the Bloomery, Oven, and large furnace will replace them. Large furnaces are multi-block structures and are rather expensive to build.

The point to these furnaces is rather than a simple block found round the house, Large furnaces are expensive pieces of equipment, their valuable machines to have and greatly useful to have. There are 4 tiers of furnace, each at a milestone on progression. Each costs 44 metal and stone blocks dependant on their tier. A large furnace is fuelled by the same items as a forge. However: furnaces function on a heat trait, hotter burning fuels will make smelts faster (as will better tiers). **Bellows** can be applied to large furnaces to increase the heat, and the speed of smelting. Large furnaces can smelt 4 items at a time.

### Construction

A single large furnace is 3 blocks wide, 2 blocks deep and 3 blocks high. The width of a whole furnace can vary dependant on how many blocks are within. To build a large furnace: you will need the heater block, a large furnace block, stone blocks under certain specifications, and metal blocks of equal tier.

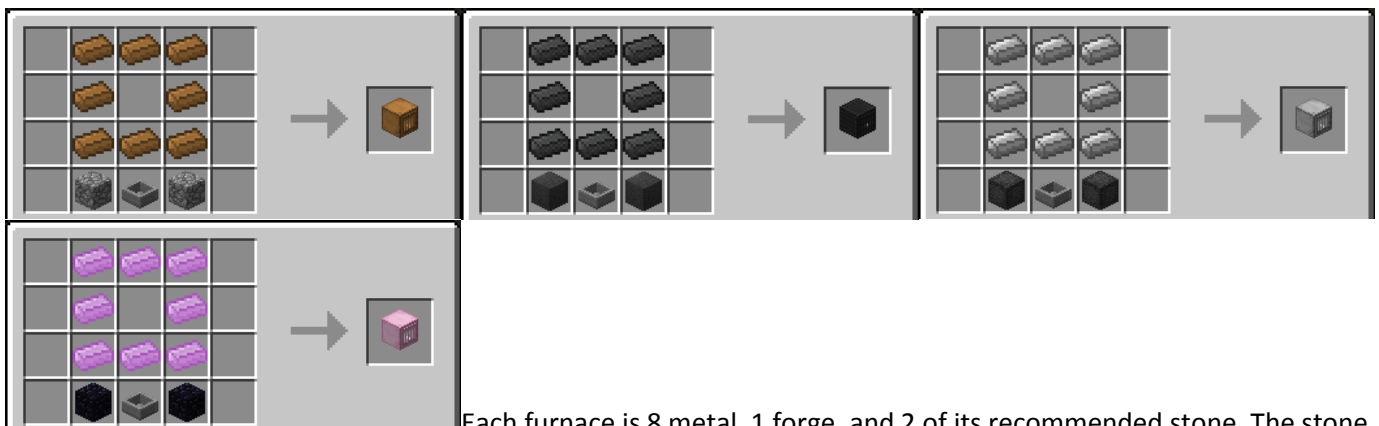
The tiers furnaces are made of are bronze, iron, steel and mithril. Each of these require at least 4 metal blocks of their material, and a certain stone quality.

Bronze furnaces are made with stone, and can use any stone block as a base. Iron furnaces are made with slate, and require stone at least 2.0 hardness (like slate). Steel furnaces are made with granite and require stone with 5.0Hardness (like granite) mithril furnaces are made with obsidian, and require 10.0 hardness (obsidian is the only material higher)

The furnace heater is made as so:

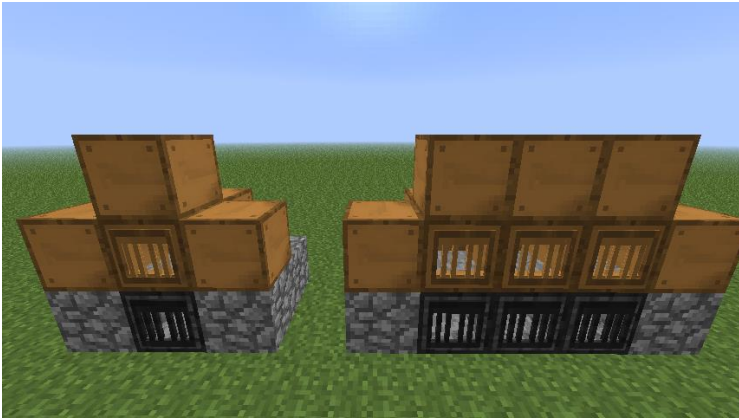


And the furnace Block is made on an anvil. This takes a long time to make.



Each furnace is 8 metal, 1 forge, and 2 of its recommended stone. The stone used must be the ones displayed, but the base can be anything similar.

To start construction, find an area to build the furnace, Place the “Heater” Block on the ground facing the front. (This will mark the front-bottom). On top of that: place your furnace block. (You can line multiple of these modules up to make larger furnaces). Next, you surround the base over the back and sides with the proper stone block. And on the sides, back and top of the furnaces: put metal blocks of the same material.



Here is an example of bronze furnaces- on the left is a single furnace. On the right is an example on how multiple furnaces can connect.

### Connectivity

Large furnaces can have multiple furnace blocks between their walls. Doing this saves on resources, and you can use bellows to supply a bonus to all of them.

### Bellows

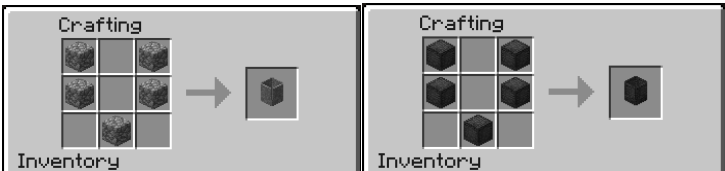
You can apply bellows to large furnaces by pointing them at the side wall, facing the heater block; the bellows will power through the wall, and into the heaters, all adjacent heaters will be powered as well.

### Special smelts

Higher-tier furnaces have special recipes that come with them. There are 2 kinds of special smelts, the first one works like a regular smelt, (this is for things like coke). Single special smelts are just smelted directly; like normal, but only work on certain tier furnaces. While Alloy smelts (like steel) function like crucible alloys, this not only requires a certain furnace tier, but multiple slots have to include certain items to work. (As an example, steel ingots use 1 wrought iron to 3 carbon)

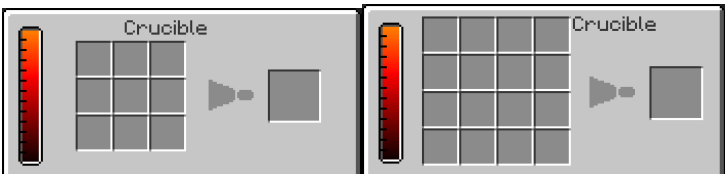
### Alloys

Alloying is a process in mixing multiple materials, into a single superior material. Alloying is handled by a crucible. There are 2 crucibles that can be made, Normal and granite. The granite crucible is larger, and can support a higher-tier smelt.



Granite crucibles can replace regular crucibles, they do the same thing.

Crucibles must be placed over a heat source: Heat sources can be fire pits, forges, plain fire, or even lava. Different sources have different temperatures. Higher temperature means faster smelts. Lava is the best source if you can find some, it doesn't cost a thing to run, however a forge is able to get a lot hotter if you use the right fuels, and bellows

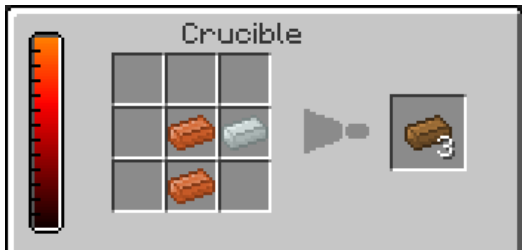


The left is a normal crucible, it has a 3x3 grid, and the right is a granite crucible with a 4x4 grid. Check recipes on if they need a granite crucible or not, even if an alloy can fit in the 3x3 grid, it may still require a granite crucible. (An example for this is steel; steel requires a granite crucible to make, despite its small size)

The metre on the side will display the heat of the source, and that will make smelts faster.

### *How to alloy*

All of MineFantasy alloys use a "Ratio". The recipe includes a list of input items that function like shapeless recipes. But so long as the ratio stays the same; you can smelt multiple items at once. The ratio is determined by what slots contain what items. If you were to smelt bronze, that would be 2:1 copper: tin that means 2 slots must have copper ingots, and 1 slot must have tin ingots:



This is the recipe for bronze, as you see the ratio of slots is 2:1. But you can increase the amount smelted if you keep the ratio of 2:1 so if you put in slots of copper, and 2 slots of tin, the ratio is still equal and will create 6 bronze.

### *Smelt timing*

Each smelt time is calculated, every smelt has a set base time. And each occupied slot will add to this time. A smelt that includes 6 slots will take longer than a smelt that takes 3 slots. However bulk smelting is more fuel efficient. For example: If you were to smelt 9 items in 1 lot it would take a lot of time; but smelting 3 lots of 3 items will take longer. This means maximising your ratio will be more efficient.

[Back to top](#)

## **4.4: Refining**

Refining is similar to smelting. Some material requires more processing than others. Refining is a process on purifying material for a more workable state. The blast furnace is a large device used to refine materials. It is a large resource consuming machine. Some reagents are used in refining such as flux and coke.

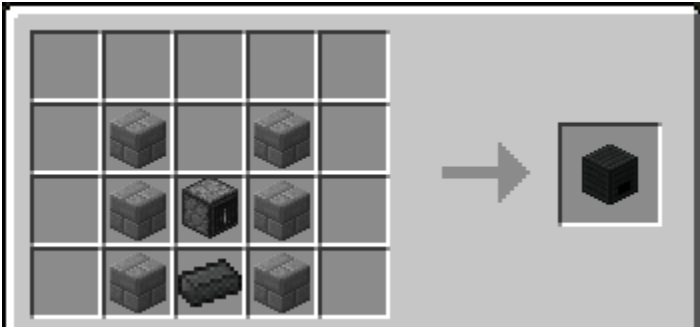
### **Blast furnace**

The blast furnace is a large multi-block structure. It is made out of wrought iron. They take a bit of time to use, but are only needed for later-on resources. Blast furnaces are made on iron anvils or better.

To build a blast furnace, you require stone bricks. (so at start game- you will need a bronze furnace). You will also need to make 6x shafts, 1 input, 1 fuel storage and 1 output.



The blast furnace heater is where the fuel goes. It requires heating before use



The Input block is where the smelts begin, carbon, flux and ore goes here



The furnace output is where the result will go, this produces slag



The furnace shafts are the body of the structure, and make up the main shape, you need 6 of these

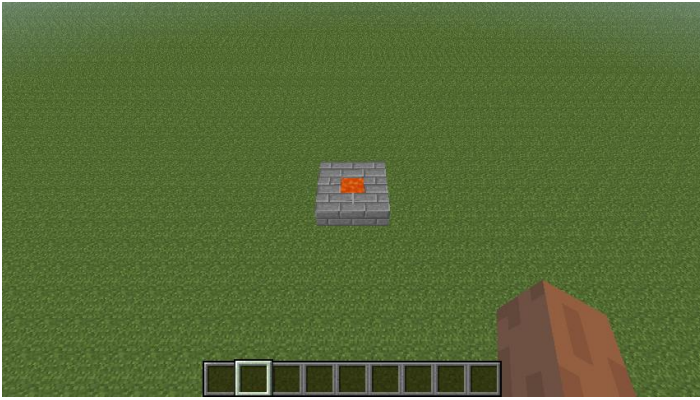
### **Construction**

Blast furnaces are made out of stone and furnace blocks. The furnace blocks you just made will be enough for one; you will also need stone bricks for the base, and more stone for the bodywork.

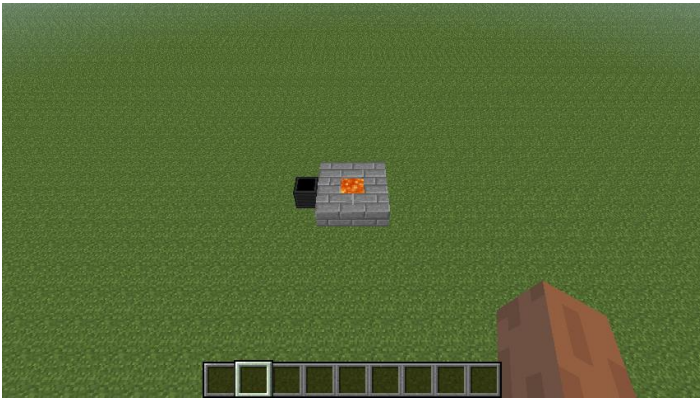
**Step 1:** At ground level, build a 3x3 floor of stone bricks where the base will sit



**Step2:** On top of that, place a circle of stone bricks, and lava in the centre. *(Buckets can be made from tin)*



**Step3:** Place the output block on either one of the 4 sides on the ground (adjacent to the ring)

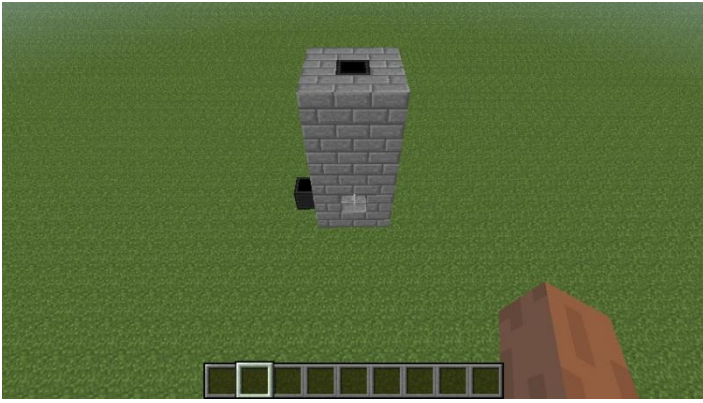


**Step4:** Place the heater block above the lava, and surround it with stone (*any stone should do, you can leave the front, or corners empty*)

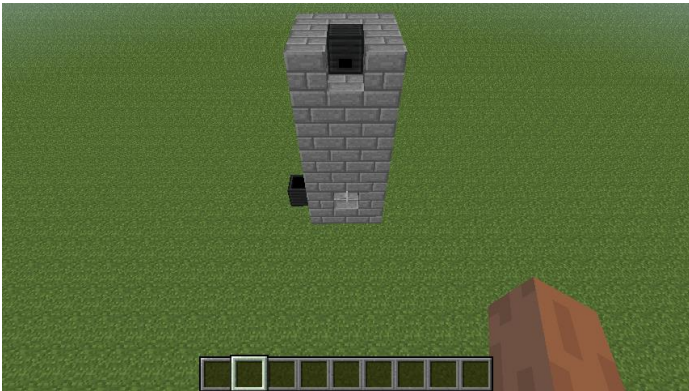


**Step5:** Stack 4 shaft blocks above this, and surround them in stone (*any stone should do, you can leave the corners empty*)

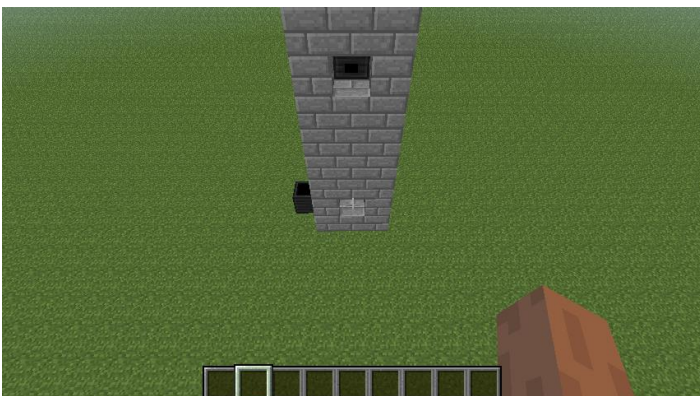




**Step 6:** Place the input block on top of the shafts, surrounding in stone (*any stone should do, you can leave the front, or corners empty*)



**Step7:** Stack 2 more shafts on top of the heater, surrounded in stone (*any stone should do, you can leave the corners empty*)



Finally, build a ladder down the side, and 2 floors for the heater, and the input: for easy access. You should also enclose the whole building for aesthetics. Also: be a bit decorative at using this. Don't just chuck the barebones in the corner. Put it in its own room.

### *How to use*

The blast furnace requires fuel, carbon, flux and an input. To start out: get your input, and an equal amount of flux and carbon (things like coal, coke, etc). Every smelt consumes carbon and flux. Put fuel in the heater, and it will

warm up. The furnace will not refine until it is heated, it doesn't take long. It is ideal to smelt items in stacks, hoppers can connect to the heater, fuel storage and output (the heater and input do not need stone surrounding, but shafts do) so if you use hoppers, you would need 2 hoppers to branch out the sides and back, while leaving the front empty.

You can apply bellows to the walls pointing at the heater, and this will increase the smelting speed as long as you keep pumping it, that means you smelt faster when working on it manually. The output slot will produce slag. Slag has no use, but it can be placed and/or recycled.

### Slag

Slag is a messy, sludge produced by blast furnaces, and hammering blooms. Small slags can go together to make a piece of slag.

Slag can be placed on the ground, and piled up. (It's mostly an aesthetic for showing off what junk you refine). But when breaking slag, it has a chance on dropping flux and coal, slag cannot be smelted, nor can it be used in any recipe. The only way to recycle slag is constantly digging it up like gravel.

At the end of the day, slag is garbage and it's your responsibility to dispose of it or try salvaging something out of it.

### Trip hammer

There is a lot of hammering in MineFantasy. Simpler recipes such as blooms, wrought iron and pounding dusts can be handled by a trip hammer. The Trip hammer is an automatic hammer; **it cannot forge items**, but it can handle the basic shapeless smashing recipes. Trip hammers are greatly used for pounding dusts.



This hammer pretty much handles the smashing. It has a single slot for your smashing needs. Trip hammers have full hopper support and will be able to accept any item input while extracting all results.



The trip hammer crank powers the hammer; the hammer is useless without it. This block must be placed directly behind the hammer, and connecting to the back, in line. When holding right click, this wheel will spin, and the hammer will smack. If a Redstone source is applied to this block (like a lever) it will automatically hit items (only when it has a recipe). This method is greatly used to automatically process items. (This is one of the few exceptions where automation is recommended in this mod: because no one likes smashing the basic things). Forging items are still done by hand.

[Back to top](#)



## 4.5: Smithing

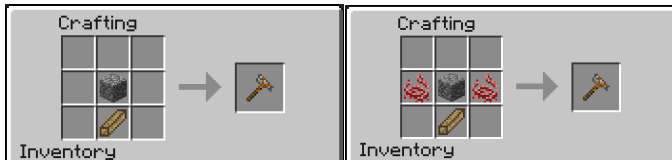
Smithing is the oldest and most balanced process in MineFantasy. It's the process used in making most of the items. This process has been added right at the beginning and has gone through a fair amount of milestones.

### Tools of the trade

Forging is split between the use of blocks and tools. Here is a list of tools you will need:

#### *Hammer*

A hammer is used for forging the items; hit the anvil with it dummy



A stone hammer requires binds (right image) on hard-core crafting, by default, use the left image.



Metal hammers are forged so you need a stone hammer to start out, each hammer has its set stats, and higher tier hammers have higher forging speeds, be careful making a low-tier item with a high-tier hammer.



An ornate hammer is needed for forging hazardous materials (dragonforge and ignotumite). You do not need an ornate hammer to work silver or ornate items

#### *Tongs*

Tongs are used to safely move hot items, Tongs only hold 1 item, make sure you have an empty pair, and think before you pick things up(you need to have a place to put them)



With hard-core crafting you need binds to make these (right image) by default, use the left image. Sharp rocks are made from dirt on crafting table.

## Lighter

You know what they are: The flint and steel, MineFantasy also adds a tinderbox and dry rocks, early game, make a tinderbox as soon as you can afford it.

Flint and steel: You know, but must be made out of steel, not iron.

Tinderbox:



(These work most of the time)

Dry rocks:



(These have a low success rate, keep trying)

Lower tier lighters take a few tries to work. Dry rocks aren't very good, so make the tinderbox when you can.

## Extinguisher

As forges need to be lit with lighters, you can extinguish them with a few items

Water bottle: This simply decreases the heat, no real purpose otherwise.

Water: If water is poured on the forge, it will extinguish and ruin fuel

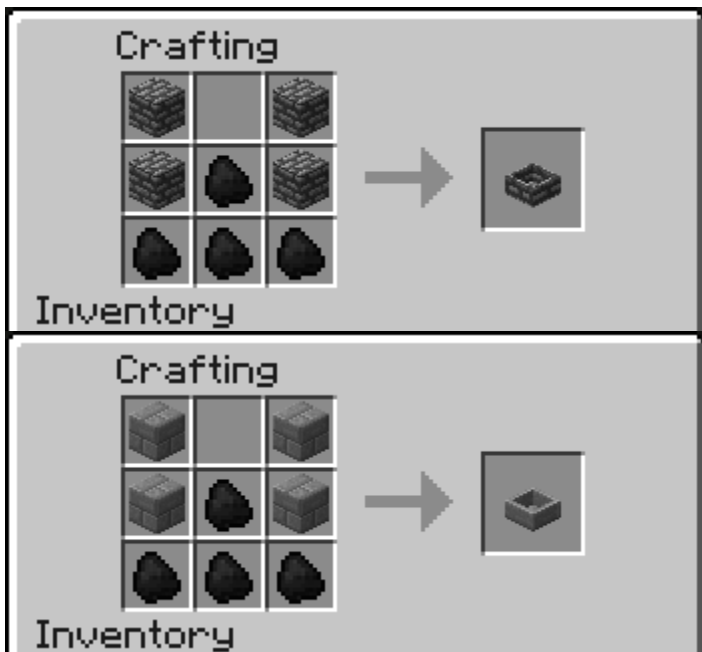
Sand Blocks: Sand is the best and most practical extinguisher. Right click sand blocks on forges to extinguish them, and leave the fuel untouched.

## The Process

This process is split between the anvil and forge. These 2 blocks are to be used together in a group in order to properly work. There is a certain skill involved in properly and efficiently working items with minimal cost and time, and this is a process that can't easily be explained.

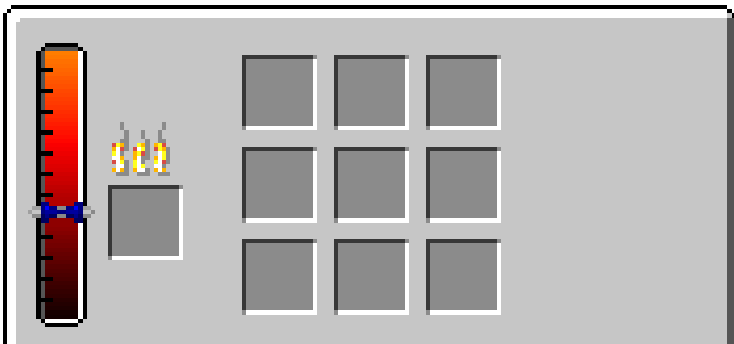
## Forge

It all starts off with the forge:



The forge can be made from either cobblestone brick, or smooth stone brick. The material is purely for looks, and has no difference in functionality.

The forge is used to heat up items. Hot items are a major element in the forging process. In recipes: some items (like ingots) must be heated for them to work. The rule is pretty much anything metal requires heating. The forge has a heat variable. Different fuels have a different burn temperature:



This is the GUI for the forge: You shouldn't need to use this, as most interactions are handled by the interaction.

On the left is a "Temperature Gauge". This shows you how hot the forge is. The hotter the forge, the faster items will heat, and the hotter they get. The White line shows the temperature your current fuel is burning at, while the blue arrows show the forges temperature. The forge temperature will approach the item temperature, this means the forge will heat up as it burns, and cool down when it gets too hot. Items inside will not burn hotter than the forge itself, this means you will need a hotter forge to work stronger materials. The flame displays its fuel in relation to its max fuel (this is greyed out when not lit)

To fuel the forge- Right click on it when holding proper fuel. It will consume the item, and add the fuel to its fuel metre. The max fuel can burn up to 5 minutes. (Coal increases fuel by 2 minutes). Be careful with fuel, if you add more fuel than can fit, it will simply max and you will not get any bonus, this means putting 2 minutes on a 4 minute forge will set it to 5 minutes, and waste that other minute.

However: The slot on the left of the GUI can also be used as a fuel input, it only stacks up to 1, and will automatically apply the fuel when it's able to fit in. This slot is only really used for hoppers, as hoppers require a slot to work.

## Using the forge

To use the forge, first: put some fuel in, the forge will fill up, and show you the fuel, however will not consume yet). When the forge has fuel, you must light the forge, simply right-click on it with a proper fire starter (Dry rocks, Tinderbox, flint and steel, and even- a dragonforge hammer). The dry rocks and tinderbox may take a couple of hits to succeed- as they have a certain success rate. (Mod support needs to be added through the API). When the forge is lit, it consumes fuel and burns away, heating ingots. You can extinguish the fire by right clicking a block of sand (this is great for saving fuel).

When you interact with a lit forge, you sometimes burn yourself. Equip an apron to prevent this. Now, to heat items a hot forge will heat up items that are inside, to place an item: simply right click it anywhere on the top of the forge block, and it will place it there. (There are 9 slots, so where you click depends on position).

The items will increase temperature and pass certain stages: When items reach the state “Workable” is when you should take them out, ingots must be at least workable to allow recipes. When workable: Items will glint purple (like enchantments) on the block to show their able to be worked (purple is easy to notice. **Do not try pick up hot ingots by hand.** To properly pick up hot items, right click on the item on the block with tongs. When holding tongs: the grid of anvils will become visible, use this to place ingots. Hot items DO NOT STACK; you have to make items 1 at a time. When ingots get too hot they become “Unstable” this doesn’t affect workability, but if it gets too hot the ingot will be ruined. Ingots will not get hotter than the forge. So if the forge isn’t hot enough, you can leave ingots sitting in the forge and they will not be ruined. Blocks cannot be heated or picked up with tongs, only items

## Anvil

To craft items, you need an anvil



To start off: This is a stone anvil; this is the first you need to make early game



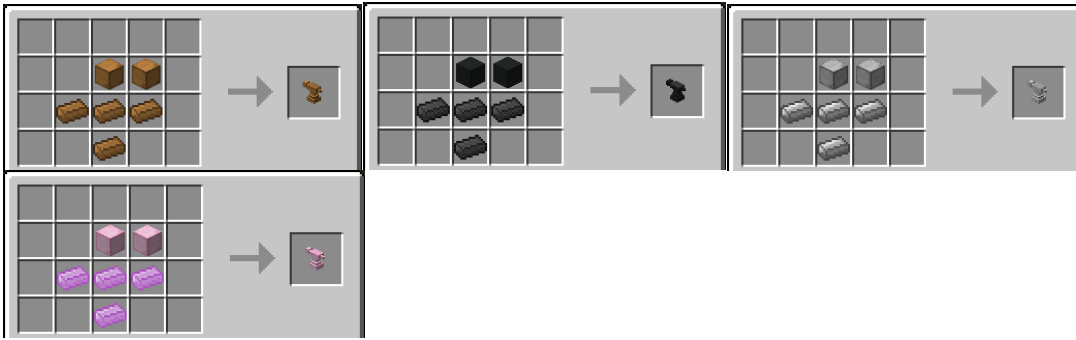
These are metal anvils. Each anvil is better than the last

Anvils are tiered. Each material increases the materials it can work. Stone anvils only work basic metals like copper. Bronze can work up to bronze, Iron can work iron and silver, steel can work up to encrusted, and mithril can work anything.

As you progress tiers: you will need to upgrade your anvil to work your new materials. A small anvil has a 5x4 grid and can work most items.

## Large Anvil

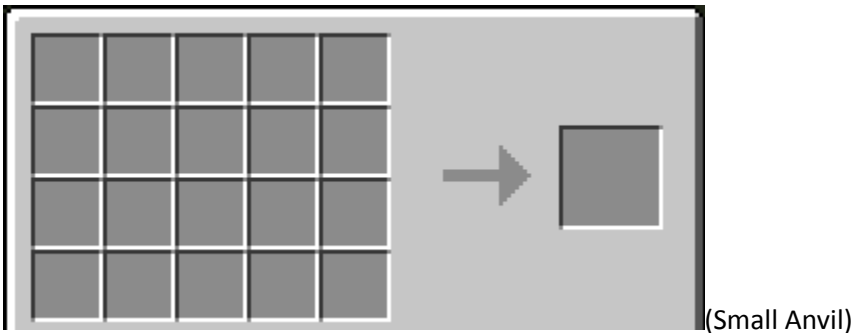
Large anvils are forged on anvils, (You can make them on 1 tier less than their material)



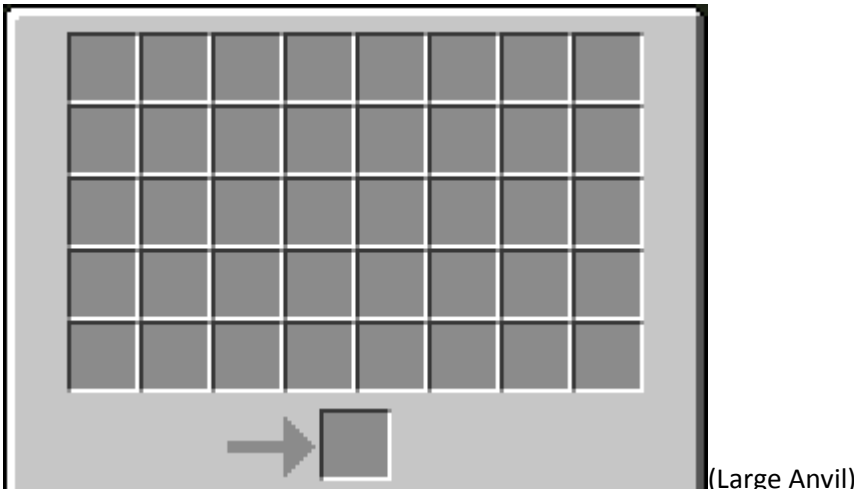
Large anvils have an 8x5 grid: they can work anything that a small anvil can. Large anvils are able to make larger items. (Mainly for heavy weapons)

### How to Forge

These are the GUI screens for the anvils



(Small Anvil)



(Large Anvil)

To forge items: You first place all the required items on the grid just like workbenches. However: materials that need heating (metals) require being hot and workable first.

Begin by placing non-heatable items on the grid. (Things like hafts, leather, components, etc.). Armour components (scales, plates, chains, etc.) do not need to be heated. Armour assembly can be done there-and-then.

### Transferring hot items

For items that do need heating: Use the forge, the when the items are workable, right click on them with **tongs**. And then click on the anvil. When holding tongs; the grid on the anvil will appear on the block, just click the slots there. If you put it in the wrong slot, it can be moved. (You can move hot items in the GUI too; you only get burnt if they're in your inventory). For this: it's best to work 1 item at a time. But if you think you can handle it: make as many as possible. Coal does not burn hot enough to ruin ingots! This means you can leave hot ingots in a forge as long as you want, ingots will not ever get hotter than the forge, if the forge cools down: so will the ingots.

So don't be paranoid about ruining ingots, unless you use hot fuels (but that's a responsibility pro smiths only need) most materials need coal. Do note that bellows also help with increasing temperature; this is recommended for steel heating. Bellows and coal can ruin tin ingots, but you shouldn't need to worry there either).

### Forging items

After your shape is on the grid, and all heatables are workable; you can start to forge. A greyed bar will appear on the screen, so will a smaller, coloured bar:

The Greyed bar displays the progress. When this fills, the item is crafted.

The Coloured bar displays quality, if this reaches 0 (the red), the recipe will be ruined. If an item can be damaged (like armours, tools, etc) its durability will be affected. The black marker displays your current quality; the green arrow displays the 100% mark. For damageable items: when the item is crafted, the item will be damaged if you are below the green mark. (The mark is higher on harder difficulties). It doesn't matter as much if you're below the green arrow when crafting, quality only matters when you finish crafting (Unless it hits the red, which ruins it).

To Craft items: you need a hammer. To increase progress, hit the top of the anvil with a hammer, simple enough. However there are a few things to take note:

Left click does a 'Hard hit' this increases progress more, but the quality metre goes down. Make sure to space about 1 second between hard hits.

Right click does a 'Light hit' this doesn't increase progress as much, but it increases quality, you can do light hits a bit faster, (1/2 a second, or even less). You can still space it 1 second apart for more effectiveness.

Filling progress and maintaining quality is a matter of mixing both: Start with heavy hits, then a couple of light hits. Be cautious: because some recipes might craft quickly, and heavy hits might be too much. This is a difficult matter to explain, you will get used to it. It takes time and feeling. Items won't be too badly damaged anyway unless you mess up really bad.

When progress finishes: it creates your item; right click the top of the anvil to pick it up. If the item is hot (some outputs are) right click the top with empty tongs. Then right click those on a water source to cool them. You can cool items in cauldrons, but since their coded in a stupid way, you need to shift-click them. Then you can pick your item up.

Get some practice in, and you will get the hang of it. It may sound complicated, but it's actually really simple. You can disable the quality trait in config.

### Tips

If you need some more guidance on how to optimise your performance-

1: The first thing is rhythm. This is learnt over time, each recipe has its set time, and higher tier hammers have more progress filling. The trick is to know when to start light hitting, so you get the heaviest hits in, and only light hit to fix it at the end. More heavy hits means faster crafting and less hits total.

2: Make sure to have a good set up, keeping your anvil, forge and water source very close. Producing large amounts of items, or armour requires a smooth continuation. You can improve your forge in many ways, giving it bellows, linking forges together, and adding hoppers to feed coal. Utilise the ability to light forges too, keep a lighter and sand nearby. When you start, put coal in and light it, when you finish, extinguish it. Hopper-fed forges waste coal, extinguishing the fire will counteract this. Dragonforge hammers can light forges.

3: if you are working tin. Do not use bellows. Tin ingots can be ruined easily. And for most cases, use coal. It does not ruin ingots, is abundant and will be hot enough for most resources, hotter materials like mithril and dragonforge will need hotter fuels, save your inferno coal for them. Another trick is to learn the materials heat them up and see how

hot they can get, while experimenting with different fuels with bellows and not, this can help you understand what the best fuel is and the risk of ruining if you do want to use hotter fuels.

[Back to top](#)

## 5.0: MATERIALS

MineFantasy aims to re-create the survival experience. It progresses through an old-century tier tree; expanding from simple primitive tools, to mythical fantasy materials. There are also hard-core options that may be selected for further difficulty.

[Back to top](#)

### 5.1: Basic

Basic materials are simply able to be smelted, either in a bloomery or furnace. These materials are Copper, Tin, Silver and Gold

Copper and tin harvest level is 1 (same as stone)

[Back to top](#)

### 5.2: Utility

Utility Materials are used for either aiding processes or as an optional bonus. These are generally used in refining

#### **Flux**

Flux is a powder designed for the purification of ores; impurities are drawn to flux and away from the element.

#### *Crafting*

Flux is hammered out of certain materials such as Limestone hunks (limestone on crafting) and nether quartz. Different materials yield more flux. You can simply hammer the material on any anvil, or put it in a trip hammer.

#### *Uses*

Flux is used mainly in blast furnaces, but it is also applied in some crucible recipes.

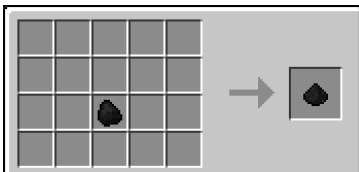
#### **Coke**

Coke is a refined carbon element, made from coal. It has a 2-stage process, but you can get 2 coke for every coal. Coke potentially doubles your carbon, and can be used as a fuel. A piece of coke burns as a fuel 20% longer than half that of coal. This means 2 coke is 20% longer-lasting than a whole piece of coal. But mainly: coke is used to loosen the cost on carbon use, mainly for blast furnaces, and steel production. You need an iron furnace or better to make coke.

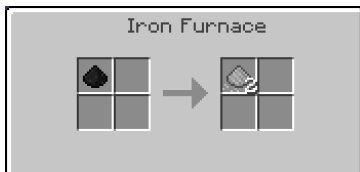
#### *Crafting*

Coke is made from coal. It has a 2 stage process. Firstly: coal must be ground into powder on an anvil or trip hammer





Then smelt this in an iron furnace or better: This produces 2 coke, so smelt stacks of 32



You can do this in a higher tier furnace (like steel) as well.

### Uses

Coke can be used as a fuel. It is 20% better than half that of coal (You get 2 coke for every coal). This makes it a slightly better fuel, but isn't worth the process that much. Coke burns the same temperate as coal. If mass-produced, it can end up more economical as fuel.

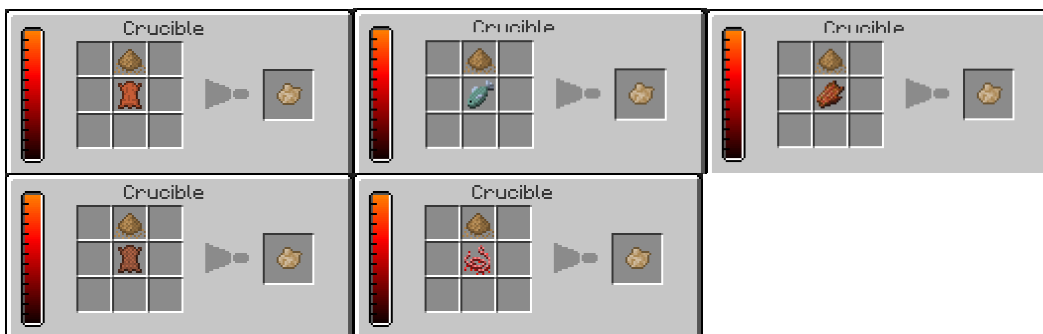
The main use of coke is as a carbon element. (When substituting it for coal in steel production, blast furnaces and even Bloomeries). As you get 2 coke every coal, it potentially halves the cost of coal when refining.

### Glue

Glue is used for making hafts, and binding things together, there are 2 glues

#### Crafting

Weak Glue



Rough leather and tendons are only obtainable in some hard-core options.

Strong glue



### Uses

Strong glue is used in hafts, and some wooden items, and a few other things.

## Salt

Salt is found in water, and can be refined for limited uses

## Crafting

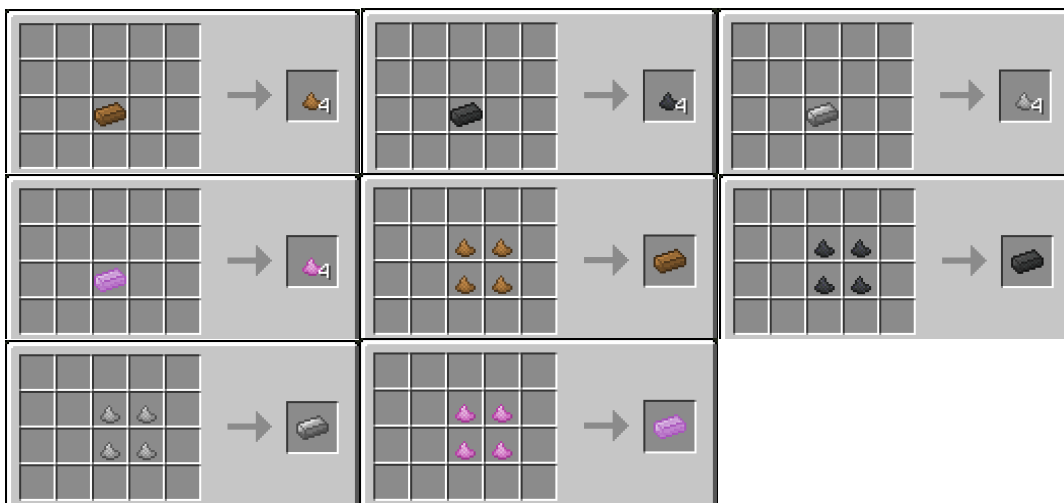
You can get salt from right-clicking certain water sources with paper. You will get salt in an open source, which is bedded by sand. You need to click in an area with at least 1 radius of water like a 3x3 area. Then place salt on a crafting grid to filter it out. You can also cook salt in a furnace or oven to refine for double the output.

## Uses

Salt can be used in cleaning hide for tanning; it can be used instead of flux. Putting 2 salt on crafting makes flux.

## Metal Hunks

Some things are small and delicate: requiring smaller material:



Metal hunks will output cool, but need to be re-heated before working anyway.

[Back to top](#)

### 5.3: Pure Gold

If you've played Minecraft long enough, you may notice gold is pretty common all things considered. Regular Minecraft gold is impure, and has a low carat level. For some of the more glamorous applications: you need to purify it:

Pure gold is only used in gilded armour. Ornate weapons use normal gold



Don't think of a piece of pure gold as 4 gold ingots... Think of it as its own ore that happens to be 4 times less common. Of course dragonforge and guilded is bloody expensive if you think of this as 4x the gold... but gold is common so whatever!

[Back to top](#)

## 5.4: Bronze

Bronze is the first proper material you get, it can make anything really. Bronze is an alloy of 2:1 copper: tin



Pretty simple, don't get used to it, materials get significantly harder to process. Bronze is simple and easy.

Bronze harvest level is 2(same as iron)

[Back to top](#)

## 5.5: Iron

Iron is slightly more complex than most ores. There are 2 types of iron: Wrought iron is workable and used for forging, White iron (normal MC iron) is used for other purposes, but is brittle and cannot be forged. Iron ore can't be smelted in conventional furnaces. There is an "Easy Iron Smelting" Option that simplifies the method.

### *The bloomery method*

Iron requires a bronze furnace to smelt. But like anything else; can be done in a bloomery. Iron ore takes 8x longer to smelt this way(4x for easy iron), so it's harder and less fuel efficient. This means iron isn't a feasible resource early game.

### *Smelting Iron (DEFAULT OPTION)*

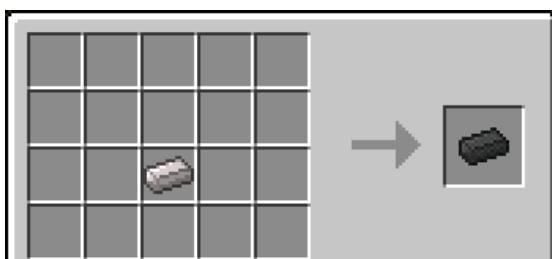
(This is for when easy iron is false, as is default) Iron ore works different to what you're used to. In order to properly smelt iron you need a blast furnace, the blast furnace will create regular Minecraft ingots. Normal Minecraft iron can be worked into wrought iron when hit on an anvil. Iron must be workable to do so.

First off is the regular iron from blast furnaces



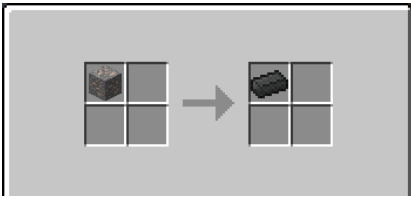
The blast furnace GUI does not look like this, this is a mix between what the input and output shows.

And this can be worked into wrought iron: Must be heated and workable



### Smelting Iron (EASY IRON OPTION)

(This is an option to make iron easy) When you have a large furnace (you can make one from bronze). You can smelt iron. Iron ore smelts directly to wrought iron. This can be used for most purposes. Any MF furnace can handle this.



### White Iron (Normal MC Iron)

Normal MC Iron is still used in all its forms. To get this, simply melt wrought iron down in a crucible with some flux. Don't smelt all of it. White iron is unworkable, and cannot be turned back, neither made into steel.



[Back to top](#)

## 5.6: Steel

To make steel: you need wrought iron, and granite (for the blocks), steel is expensive and cost a lot of coal, so coke is recommended. There are 2 methods on obtaining steel:

### Crucible steel

This needs a **granite crucible** and is an early method on making steel. This method isn't as efficient, but is needed to start. When you can afford a steel furnace then you would be able to easily create steel. But before that, use this method. (**Coke** can be used instead of coal)



Now THIS only makes a steel nugget. You need 3 of these to make an ingot



This means 1 steel ingot costs 3 iron and 6 carbon! Expensive? Yes it is. It is HIGHLY recommended you save up for a steel furnace as soon as possible, (a single steel furnace costs 44 steel)

## Furnace Steel

This method is the main method, as soon as you have a steel furnace. Use this.



Steel is made from wrought iron and 3 carbon. (**Coke** is used as an example, but you can use coal... coke is far more cost efficient)

Now this method is just 1 iron and 3 carbon, the other method is 3 iron and 6 carbon! With this, steel is still a highly-valued resource, but it's affordable (with the use of coke, each ingot cost 1 iron and 1.5 coal)

Steel harvest level is 2(like iron) encrusted harvest level is 3(diamond)

[Back to top](#)

## 5.7: Mithril

Finally used to steel huh? Well mithril is not only more difficult, but the stuff is rare! But you do get more ingots than you have ore. Mithril has a 2 step process



The blast furnace GUI does not look like this, this is a mix between what the input and output shows.

Simply smelt Mithril in the blast furnace.



Now alloy this into some silver, with some flux in a granite crucible. (That's right mithril... is a silver alloy). So each ore does give you 4 ingots.

Mithril harvest level is 4(diamond +1)

[Back to top](#)

## 5.7: Dragonforge

Dragonforge isn't needed for progression, it's just awesome. You know them dragons hulking about in the far lands, their amazing flame powers can be infused with steel, making an alloy of great flame resistance. Dragonforge also ignites things on fire. Hammers can light forges, saws and axes can create charcoal, and knives can cook food! Dragonforge is certainly a useful material. First step is killing a dragon! Then get its flame gland



Yeh... you need some gold for this... pricey! But it didn't quite turn out as expected. Seems the flame glands have some impurities you don't want in it.



Clean it up a bit... and there we go one nice expensive ingot.

### *Other flame gland uses!*

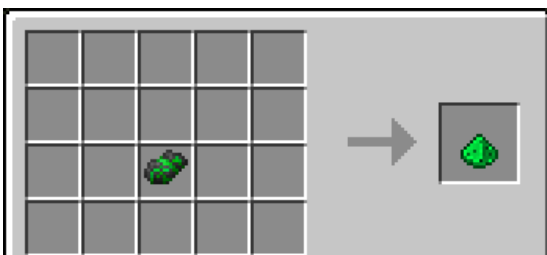
If you think the flame glands aren't worth it... then remember they can still make flame bombs, and hellfire coal.

Dragonforge harvest level is 2 (like steel)

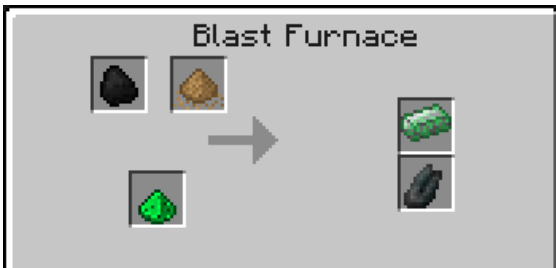
[Back to top](#)

## 5.7: Ignatumite

Okay. This stuff is rare, and expensive. And the items made have infinite durability! This is a toxic ore, so you can't make armour out of it. But it makes the best tier tools on the market. Just like dragonforge, this material is not needed, so don't make a fuss if you never find any. Ignatumite drops a hunk. If you get the block (silk touch), just smelt that in any furnace



First off- ground this into powder (trip hammer can handle that)



The blast furnace GUI does not look like this, this is a mix between what the input and output shows.

Then refine it in the blast furnace: but it's still a bit... messy and not quite formed. Some flux can handle that.



Ignotumite harvest level is 4(like mithril)

[Back to top](#)

## 6.0: TOOLS

There is a large variety of tools in MineFantasy each have their own use, either as a useful addition for the lazy, a new mechanic for decoration, a tool for the new processes or just a forged counterpart of regular tools.

### 6.1: Hafts

Each tier has a different haft required. The higher the tier, the stronger the haft needed: Copper/Tin uses a wooden plank item, Bronze/Iron uses a haft, Steel, encrusted and dragonforge use a strong haft, Mithril uses an ironbark haft, Ornate uses an ornate haft(made with ebony) and Ignatumite uses an Ebony haft.

See tailoring on how to work the recipes

Each recipe is ordered by Haft tier and is better than the one before it.

#### *Basic haft (well... a plank)*



For copper and tin, 2 sticks can also make a plank

#### *Haft*



For bronze and iron

#### *Strong haft*



For Steel, Encrusted, and Dragonforge

#### *Ironbark Haft*



For Mithril



### *Ebony haft*



For ignotumite

### *Ornate Haft*



For ornate

[Back to top](#)

## 6.2: Basic

Basic tools are the ones you're used to that being the Pick, Spade, Axe, Hoe, and Shears. Each of these dig items and/or have a unique ability.

### *Pick*

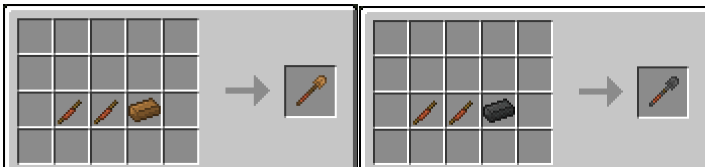
This is used for breaking stone and metal





## Spade

Used for digging up ground blocks like dirt, sand and clay



## Axe

Used for breaking wooden blocks, like trees furniture and planks





Dragonforge axes have a chance on dropping charcoal when breaking logs (you still get the log)

### Hoe

This is used for farming; right click the ground to tile fields.



Encrusted doesn't make a hoe... what's the point, and ignotumite is toxic... don't let that near your food.

## Shears

Shears are used for shearing the wool off sheep, and for cutting leather



No encrusted or ignotumite shears, tools such as these don't need them

[Back to top](#)

## 6.3: Advanced

Advanced weapons are an additional bunch of tools added by MineFantasy. Each tool has its own use, adding new features, and making life easier. These fancy tools are not made out of that lousy copper and tin.

### Handpick

Handpicks aren't smaller versions of the pick... far from it. Handpicks have their own method for mining. Handpicks are slower and less durable than their larger counterparts. When you break blocks, there is a chance on getting a special drop. Most drops are on stone, dropping resources such as flint, coal, flux and even phosphate. This is the only method on obtaining phosphate. When breaking some ores like coal, emerald, diamond, lapis and Redstone: you will get bonus drops. Coal has a 75% chance on dropping a second ore, diamond is 20% emerald is 15% and lapis/Redstone will drop 1 additional item every time. (The tier of handpick doesn't affect these chances only the dig speed, harvest level and durability as usual). Breaking nether stone can drop gunpowder and blaze powder. Breaking stone under layers 32 with encrusted tier or better can drop gunpowder.





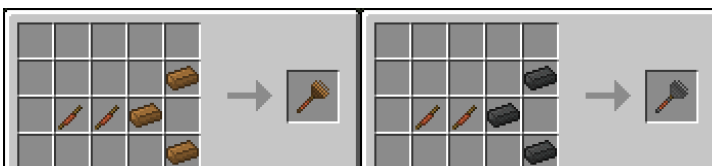
### Mattock

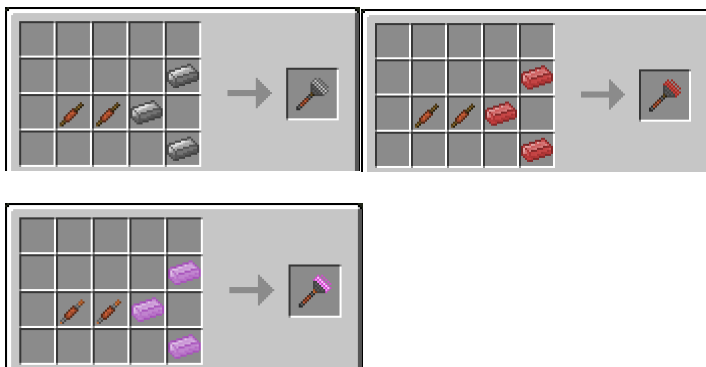
Mattocks are not tool hybrids (hybrids make tools obsolete); a mattock can break dirt and stone, just not very well. The main purpose of this tool is to create roads. Right-click on dirt or sand to create a road, there is a small selection of materials that can cover this, like stone, sand, cobble, cobble brick, dirt, and a few others). Due to the way blocks work, road materials are extremely limited, hence the fact only some materials have support. You can right-click on roads with a spade to make them into half-roads.



### Rake

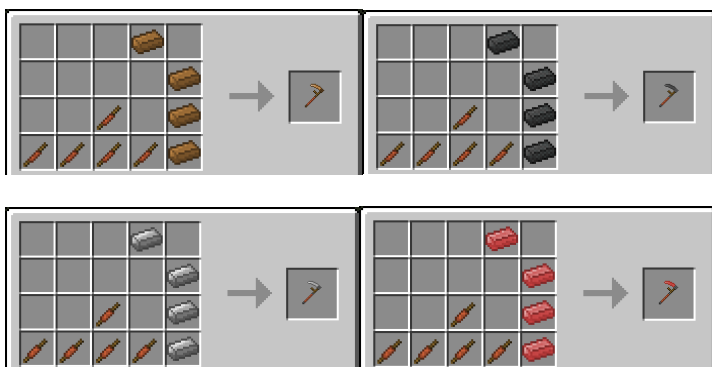
The rake is a simple tool. This can draw items at a small range towards you when holding right-click on the ground. This is good for farming, as you can get items out of reach without trampling. This tool isn't very useful, but it has its uses.





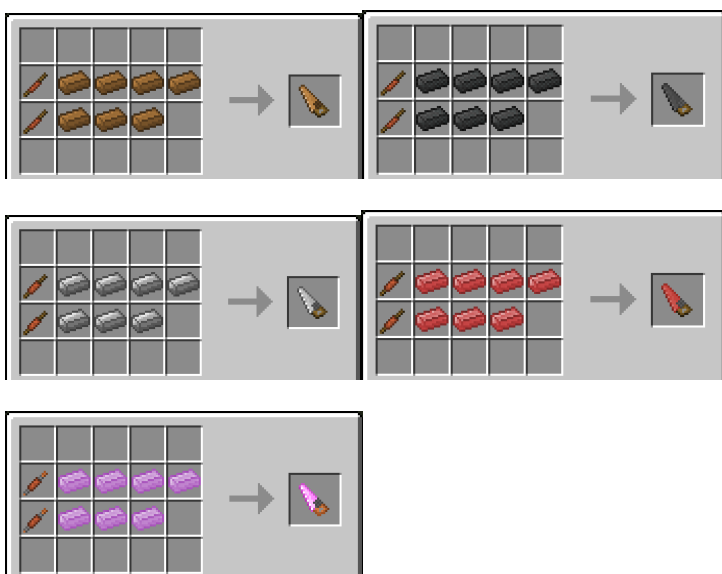
### Scythe

This first of all... is not a weapon. It's a tool for cutting down grass. The scythe is rather useful in farming (used with a rake even) and road building (used with a mattock). Scythes are able to break grass, flowers, crops and other similar blocks with one right click swing. You can also do the same on leaves, with less range.



### Saw

The saw is a counterpart to the axe but does not replace it. A saw takes a different aim from axes: They cost more and have less durability, but are faster. Saws aren't as profitable for logging as axes are, as you get less wood per tool. Saws can break wood faster and break leaves quickly without loss of durability. Unlike an axe: The purpose of a saw is to cut down big trees. If you have a stubborn branched tree outside that needs to vamoose, pick up a saw and rip through it like tissue. And cut the remaining logs with ease. This is best done standing on top of the tree and working down. Dragonforge saws have a chance to drop charcoal (you still keep the log)



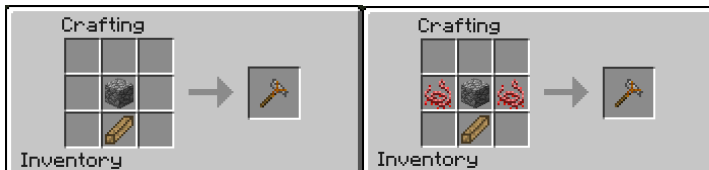
[Back to top](#)

## 6.4: Process

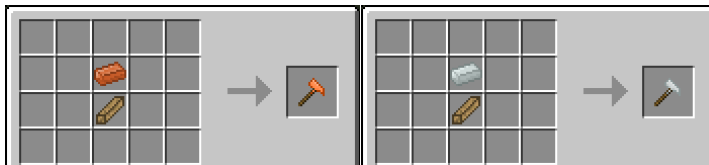
The tools here are designed for use in processes:

### *Hammer*

Used to forge items



On hard-core crafting (right image) use binds, by default, use the left image. Dragonforge hammers light forges



Ornate hammers can forge dragonforge and ignotumite

### *Repair hammer*

This isn't used in a process but is still used on anvils for repairing. Repairing will not display a progress bar.

Repair hammers have a "Max Repair" This limits how far it can be repaired. Example: max repair of 50% Means you cannot repair an item with more than 50% Durability. The efficiency determines how much durability it recovers. Ornate repair hammers are needed to repair enchanted items.

To repair items, just throw what you want to repair on an anvil, and hit the anvil with hammers. It will repair items from top-left to bottom right, moving to the next when it's repaired to its level. It's a basic system, and for compatibility: Does not cost any materials.

Tier1:



Tier2:





Tier3:

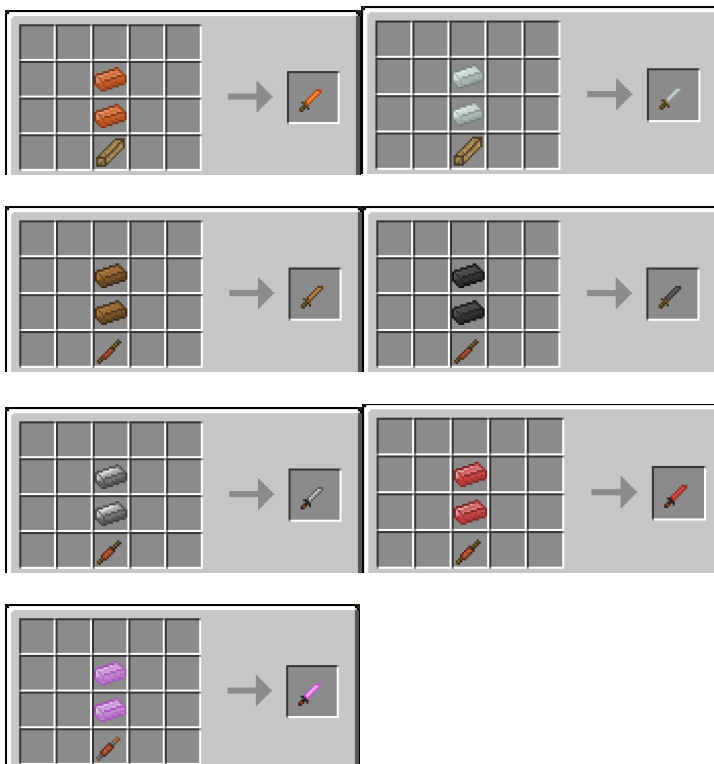


### Knife

Knives are used for scouring leather, and cutting food on bench tops (dragonforge knives cook food)

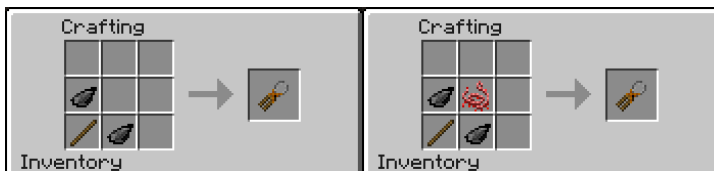


With hard-core crafting (right image) use binds, by default: use the left image) sharp rocks made from dirt on crafting

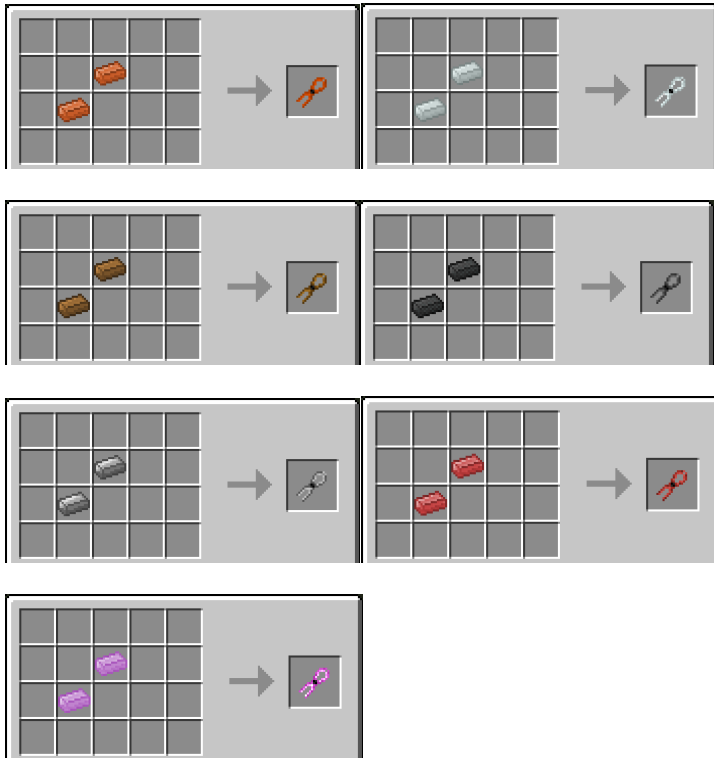


### Tongs

Tongs are used for picking up hot items

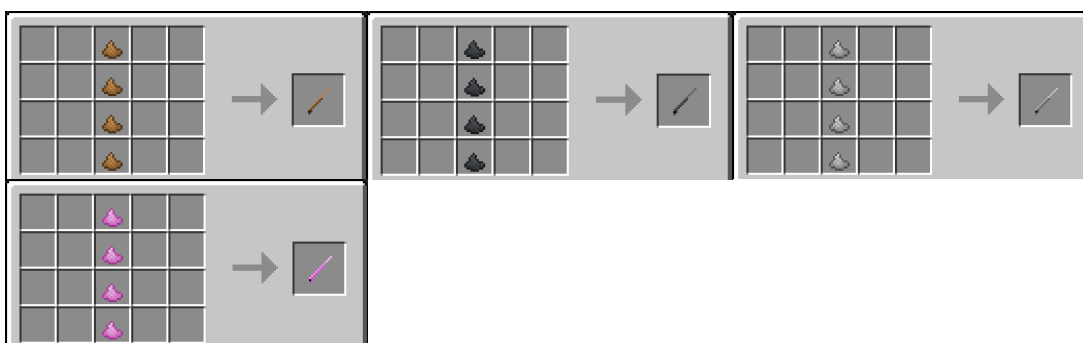


With hard-core crafting (right image) use binds, by default: use the left image) sharp rocks made from dirt on crafting



### Needle

Needles are used for sewing, right clicking tailor benches



Metal hunks made from single materials, must be re-heated

### Mallet

Mallets are used to change textures to bench tops, but are also used for pounding leather in "Hard-core leather"



[Back to top](#)

## 7.0: WEAPONS

Just like tools; there is also a large variety of weapons to be crafted. Weapons in MineFantasy aren't just a new texture and a cost-scaled damage. Each weapon type and design has its own set traits giving each of them an actual purpose. There are 4 melee weapon classes, and a small amount of designs within, there are also 4 bow classes, 4 crossbows, 3 arrow designs and 4 bomb types. Ornate weapons devastate undead.

The higher the tier, the stronger the haft needed: Copper/Tin uses a wooden plank item, Bronze/Iron uses a haft, Steel, encrusted and dragonforge use a strong haft, Mithril uses an ironbark haft, Ornate uses an ornate haft(made with ebony) and Ignotumite uses an Ebony haft.

See tools for more information on hafts. Each recipe is ordered by Haft tier and is better than the one before it.

### *Heavy Weapon Bonus*

"Heavy Weapons" are larger counterparts to other lighter weapons. They traditionally just do more damage, and have some negative effects, such as slowdown and balance loss. There is an option to give heavy weapons an additional bonus: This is off by default, as regular MineFantasy is kind of favoured to heavies enough. This option is recommended for the Battlegear2 mod as shields make light weapons more useful. Heavy weapons slow you down so long as they're in the quick bar (this is to stop switching slots, making battles look stupid). You will be slowed down depending on the heaviest weapon there. (Battlegear2 doesn't slow you down when sheathed)

## 7.1: Guide

Unlike tools: most weapons probably aren't needed. It depends on what you may be dealing with. Blades are usually able to handle all your needs, while axes are rather decent for mobs for example. PvP servers do increase the variety of weapons that should be held, and it's recommended to have an armoury to easily stock up. Tactics and preparation can play a great role, as the actual combat itself is just meaningless button mashing: equipment could save you. In single player, things are much simpler.

### *Guide to mob combat*

"Basic Mobs" (your average ol Minecraft mobs) are weak and low on armour. Axes are rather useful against them. The stronger MineFantasy mobs might need something with more power, blades are great if you don't know what to expect, and blunt weapons are good for the tough mobs of MineFantasy. If you're near the spawn, low on experience and relatively new, the odds of finding strong mobs are significantly reduced, the worst you would get is an ender man or an unarmed Minotaur. So axes are a good choice. As for ranged attacks: recurve bows add suppressive fire, but are the weakest bow available. Longbows aren't very useful, as there's no real purpose in killing mobs that can't even see you from that far. Shrapnel bombs are great for groups, and concussion bombs are best used on skeletons.

### *Guide to player combat*

Players may be more familiar with this concept than expected. It's mostly a matter on what weapon beats what armour. Blunt weapons are best for players, as most players have armour. Debilitating weapons like war picks are especially effective at players and mobs alike, but do much more damage to armour durability to players. Axes are less effective, and only good at the unprepared and lightly armoured. Long bows are great for both offense and defence. Bodkin arrows yield a huge range and accuracy, over a loss of damage. Concussion bombs and poison bombs are great against players, being highly debilitating.

[Back to top](#)

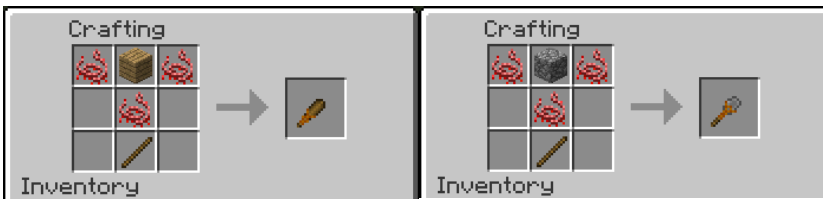
## 7.2: Primitive

Early game (particularly with Hard-core crafting) these are your weapon of choice. Not that you choose them for any decent reason, their rather poor at functioning as a weapon. There are a few choices to make, but at the end, it doesn't really matter. All primitive tools have low durability, as their rocks and sticks bound together. Primitive weapons drop tendons when killing animals but only on Hard-core crafting. (Any "Bind" Can be used in substitute, so long as you don't mix and match) Binds are Tendons (kill animals with crude weapon or by hand), Vines (break vine block with sharp rock), and string (string)

### Sharp Rock

You get this by putting dirt on crafting. It's just a rock, but does a small amount more damage than hand; it's used to get tendons before you have weapons.

### Club



Clubs can be made from wood and stone, despite being a blunt weapon: these can block, think of them as primitive wood and stone swords.

### Spear



Spears have a long range (not as much as a forged spear) and can be thrown. Spears cannot be charged, hold right click and wait for a throw (1 second). You can use "Copper Shards" In substitute for rocks. Flint also works.

### Sling



A sling is a poor ranged weapon, used to throw sharp rocks, hold to charge, and release to throw. (Any raw hide can be used from pig, sheep, cow and horse) \*This weapon has an issue with rendering.

### Javelin



The javelin is a powerful ranged weapon. Unlike spears: the javelin can both stack to 8, and you can charge the toss as much as you want. Javelins don't do much melee damage. But they can be recovered.

[Back to top](#)

### 7.3: Blade

Blades are versatile, and are balanced between all types of armour levels. This is your basic weapon class, and is pretty average. Most blades can block attacks.

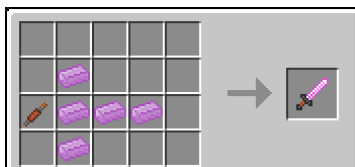
#### *Dagger*

This weapon can't block like other blades. It does low damage, fast hit recover and does a huge amount of damage in sneak attacks. Daggers are also able to drop attack, successfully hitting an enemy when falling transfers fall damage, doing huge damage to the target, leaving you unharmed.



#### *Sword*

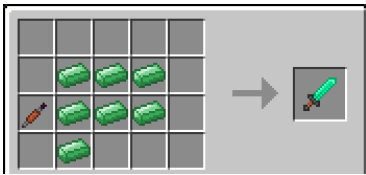
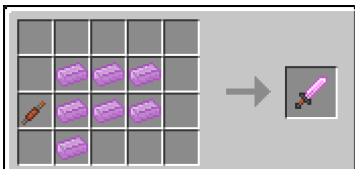
A sword is your average weapon. It can block, has an average hit recovery and average damage. Swords can be made from basic materials



### Broadsword

This is a defensive counterpart to the sword. It does less damage but has great defence bonuses. Passively, when holding a broadsword: you receive 25% less damage. When blocking, you receive half the damage.

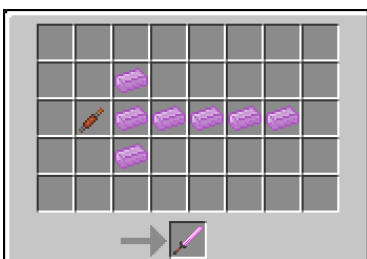
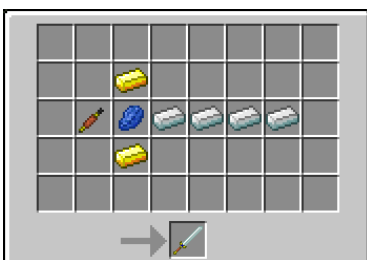


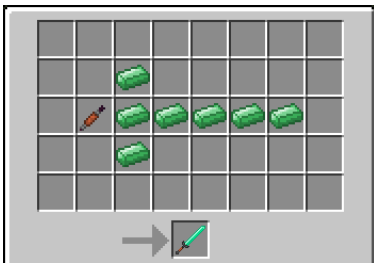


### Great sword

This is a “Heavy Weapon” and is a larger counterpart to the sword. Great swords do 50% more damage than a sword, slow you down 10% (Mithril tier is lighter at 5%). They need a large anvil to create. Great swords will throw you off balance.

Heavy weapon bonus: “Hold the Line” you will get resistance and speed randomly when attacking (only when wearing plate armour)





[Back to top](#)

## 7.4: Blunt

Blunt weapons do similar damage to blades, only have a slow hit recovery and a portion of their damage ignores armour. (Plate armour can resist this, at lesser efficiency). These weapons are good for PvP.

### *Mace*

Standard blunt weapon; the mace does the same damage as a sword, and has more durability. 25% of damage ignores armour. These can be made from basic materials:

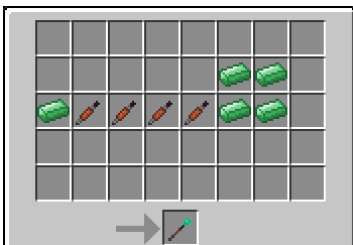
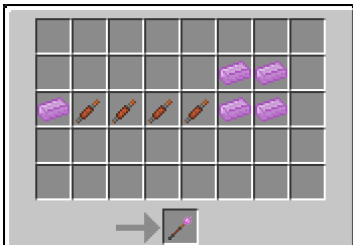




### Great mace

The great mace is a heavy counterpart to the mace. Great maces do 50% more damage than maces, still 25% armour piercing. Great maces slow you down 12% (Mithril is lighter at 6%). Great maces have a moderate balance loss. These need a large anvil to craft.

Heavy weapon bonus: “Push Forward” you will get damage buff and speed randomly when attacking (only when wearing plate armour)



### War pick

A war pick is a debilitating weapon; it does less damage than a mace, but with 50% armour penetration. War picks are debilitating, doing additional damage to armour durability, and having a chance on afflicting targets with slowed movement, and weakness. War picks are good for PvP and mob hunting, but more useful in PvP. A war pick can mine stone blocks, but isn't very good at it.

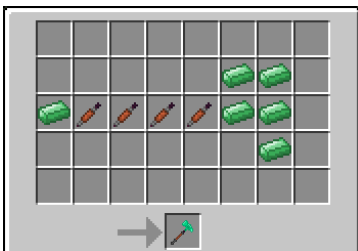
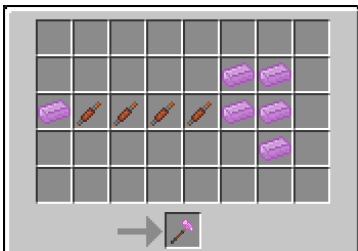
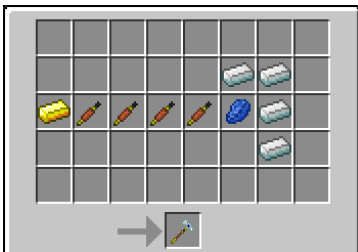


### Warhammer

A Heavy counterpart to the War pick, Warhammers are heavy and debilitating. Unlike war picks, their special hits have an explosive force, and afflict with slowness and a concussion. Warhammers slow you down 20% (Mithril is lighter at 10%) and throw you highly off balance. Warhammers need a large anvil to make.

Heavy weapon bonus: "Heavy Strike" The satisfaction of the explosive force on warhammers gives you a bonus to strength for a short time, and gives you some hunger saturation, allowing you to smash skulls for longer.





[Back to top](#)

## 7.5: Axe

Axes are the opposite to blunt, They do the most damage, but are less effective against armour, axes have a hit recovery more than blades, less than blunt. These weapons are good on mobs, as most have low armour.

### War axe

The war axe does more damage than swords, but is half as effective at armour. War axes can also break wooden blocks, although not as well as tool axes. These can be made from basic materials:

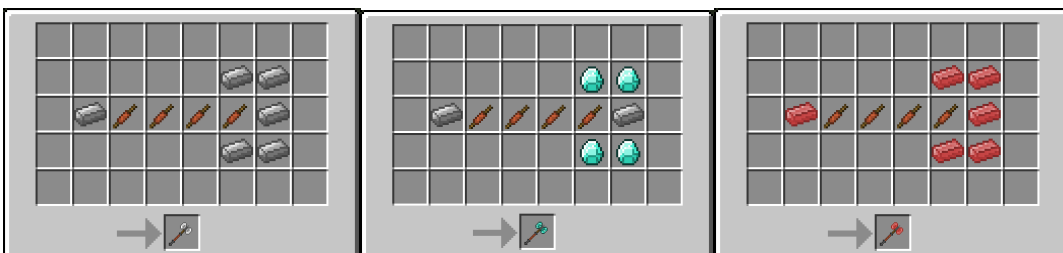


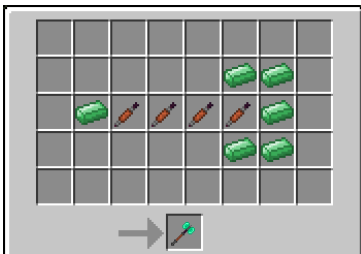


### Battleaxe

This is a brutal, highly damaging weapon. It is a heavy counterpart to the war axe. Battle-axes slow you down 16% (Mithril is lighter at 8%). Battle-axes have a moderate balance loss. These need a large anvil to craft.

Heavy weapon bonus: “Berserk” When falling below 35% health, you will be granted strength and resistance buffs. When falling below 20% you will gain even more, and bonus move speed. Projectiles will give bonus move speed when health is low, and creeper explosions also give a bonus. This is the most powerful heavy weapon bonus, but only applies in Light armour or when unarmoured; as it compensates for lack of armour.





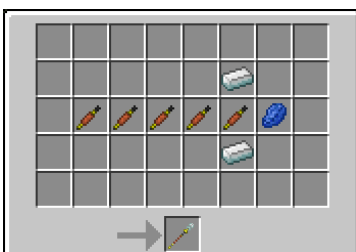
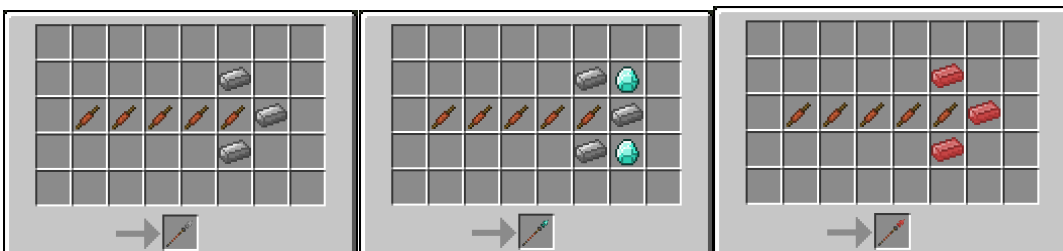
[Back to top](#)

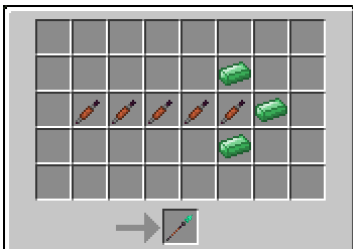
## 7.6: Polearm

Polearms are long, poking weapons used for defence. They are heavy, but don't have heavy weapon bonuses. Polearms need large anvils to make.

### *Spear*

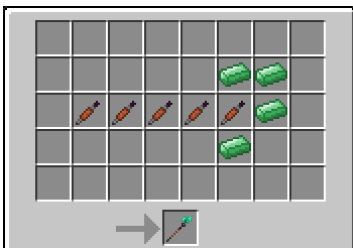
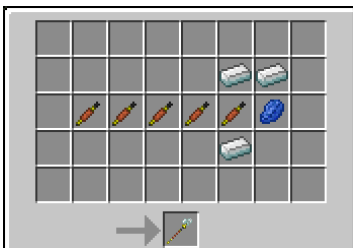
Spears are your average pole weapon. They do decent damage, and a long range. Spears can be thrown but not charged, hold for half a second and it throws itself. Spears throw you off balance and slow you down 10% (Mithril is lighter at 5%);





### Halberd

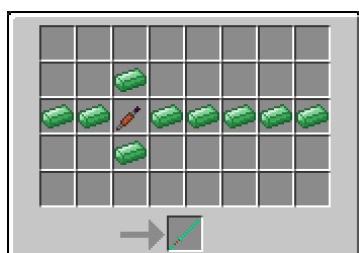
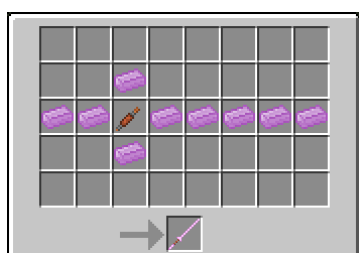
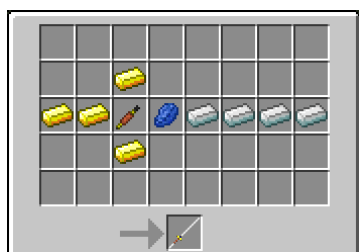
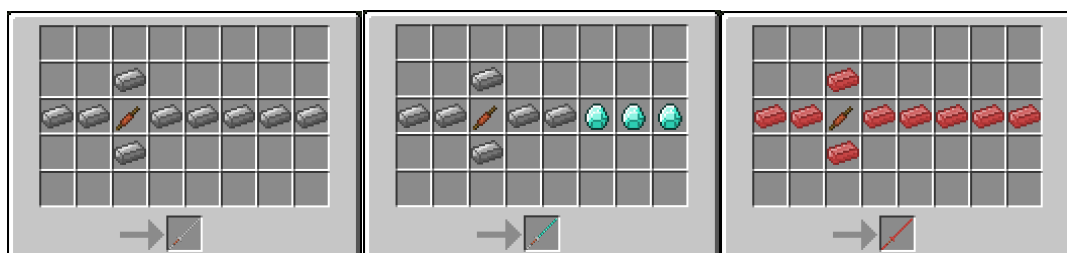
This is a heavier version of the spear, equipped with an axe blade; the halberd is more damaging, but heavier. Halberds throw you off balance quite a bit and cannot be thrown. Halberds slow you down 20%(Mithril is lighter at 10%)



### Lance

A lance is a big, clunky weapon. It does hardly any damage, throws you off balance a lot, and slows you down 25% with mithril at 12.5%. On a basis it's terrible. However when mounted: this weapon increases in damage based on speed, charging on a horse, pig or even mine cart will allow you to joust this weapon, doing massive damage, and knowing targets off their mounts if it's powerful enough.

\*It seems to have some knockback and damage overpowers.. But you see horses seem to have a crazy max speed in some cases.



[Back to top](#)

## 7.7: Bomb

Bombs are explosive thrown weapons. They can deal large damage to groups, or carry debilitating debuffs. There are only a few bombs available, but their greatly useful in their own ways. Bomb explosions don't do environmental damage.

## Reagents

Blackpowder is used in creating bombs, it is made from creeper power, coal and phosphate. You get phosphate from mining stone with hand picks. Charcoal can also be used, for 3 powder



Bombs are also made of Clay and String, you know how to get them.

Shrapnel is used for shrapnel bombs



Fire dust is used for flame bombs, Dragon flame glands make 8



Fermented Spider eyes are used for poison bombs

Redstone is used for concussion bombs.

## Bomb types

Shrapnel bomb: Does large damage, and sprays shards at a range. Bombs are easier to recognise in game



Poison bombs poison enemies at a range, but do low damage (poison can't kill enemies alone)





Fire bombs set enemies on fire, and can start fires



Redstone makes concussion bombs, these will disorient targets (Mobs will hit less, and skeletons will miss more often)



[Back to top](#)

## 7.8: Ranged Weapons

First of all: Bows in MineFantasy have been significantly nerfed. This compensates for the added arrow tiers, bow types and easier mod support for arrow types. Regular MC bows now have the same power as a shortbow now.

\*MineFantasy bows don't have that zoom feature... Minecraft likes to be stubborn with these features. Since bows can no longer fire at full force(except for longbows), criticals are now random.

Crossbows are more basic, they only fire 1 projectile type, but bolts can be made from the same materials as arrows. There are 4 crossbow types. Heavy crossbows fire arrows. (Battlegear quivers don't work with these) so that means there's no choosing ammo, but crossbows are simple and not for the tactical, they just shoot stuff.

### *Shortbow*

The most basic of bows, it does average damage



### Longbow

This is a powerful, but slow bow. It has the same power regular bows used to.



### Composite Bow

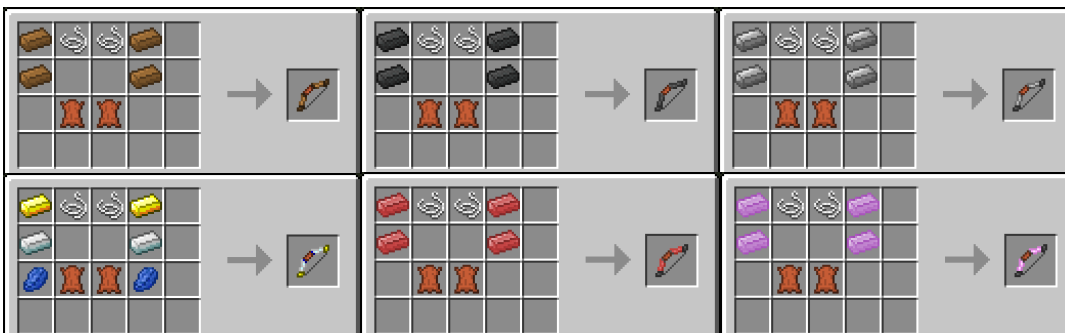
This is an upgraded shortbow, slightly less drawback speed, but significantly more durability



They all have the same stats, but each is more durable than the last

### Recurve bow

These are made from metal and they have a fast drawback speed, but the lowest power. Recurve bows are suppressive and keep enemies back, but don't do much damage. Dragonforge bows can ignite arrows (battlegear quivers still have a minor issue there) and ornate bows don't have any real bonus



### Crossbow parts

Crossbows are made of a variety of parts, being mechanisms, and bolt boxes for repeaters.

#### Firing Mechanism

This is your average firing mechanism for all basic designs.

#### Repeater mechanism

This mechanism is designed for repeater crossbows.

#### Bolt Box

This is used in repeater crossbows.

### Hand Crossbow

The hand crossbow is a weak, but quick hand-held weapon. It is rather underpowered but useful for a simple ranged attack.

### *Light Crossbow*

This is a full-sized version of the hand crossbow. It does full damage for bolts, and is relatively accurate. The light crossbow is slow to reload, but makes up for that with accuracy

### *Repeater Crossbow*

The repeater crossbow is an automatic firing version of the light crossbow. The repeater is slightly less powerful and accurate but can reload faster. This crossbow can fire 6 bolts in succession but each must be loaded 1 at a time. Repeaters fire bolts in reverse order than you loaded.

### *Heavy Crossbow*

The heavy crossbow fires arrows. It is a slower, bulkier version of a light crossbow. Battlegear2 quivers do not work on this.

[Back to top](#)

## **7.9: Ammo**

There are 3 types of arrow, and a single bolt design. Each can be made from nearly any material. Some tiers have special traits: Silver arrows devastate undead, Dragonforge arrows set targets on fire and Ignotumite arrows drain life from enemies. Some arrows do a lot of damage, and compensate for the low damage of bows. Mithril arrows are made with ironbark shafts, and Ignotumite is made with ebony shafts.

### *Basic ammo*

This ammo is made of poor materials, used for a basic ammo support

Reed arrows are made from feathers and reeds. These are low cost but rather poor, these will break on impact

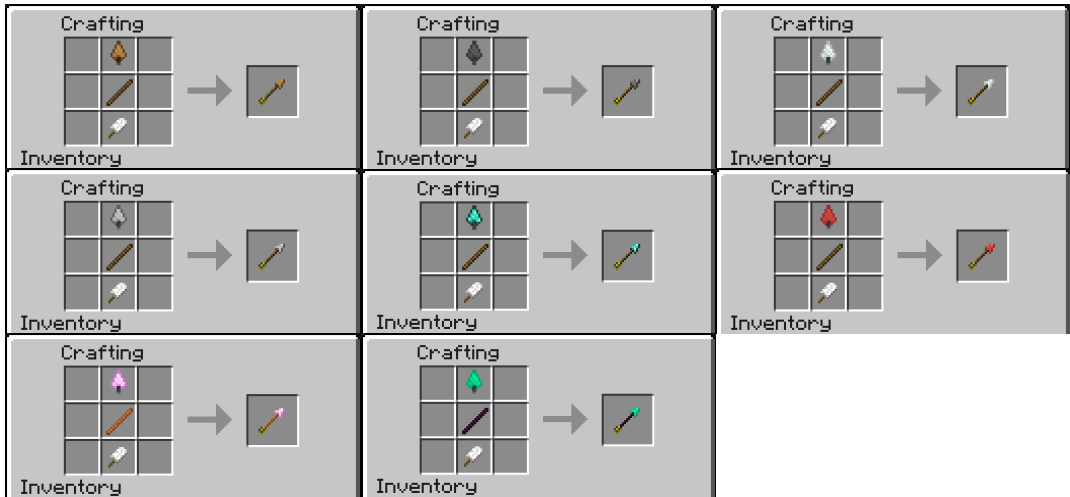
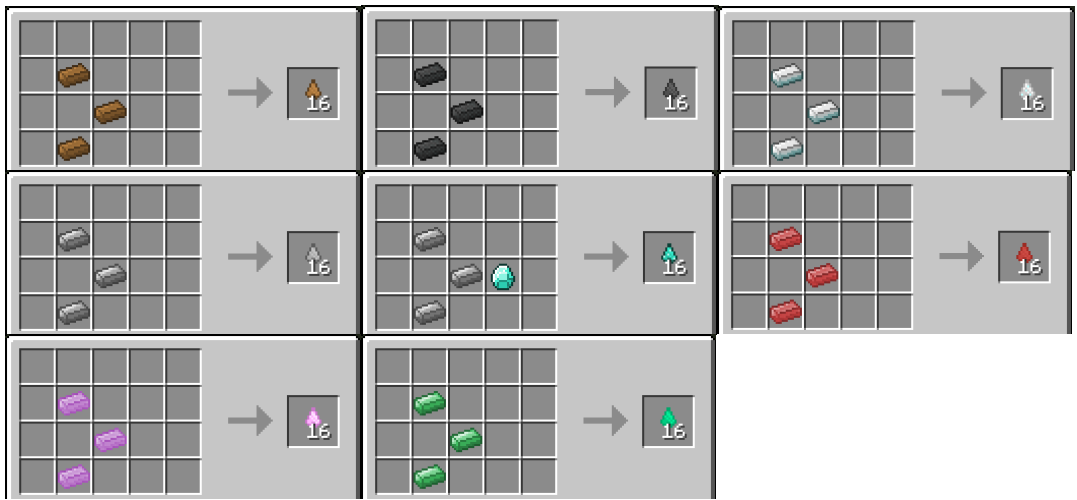


Flint bolts are basic crossbow ammunition.



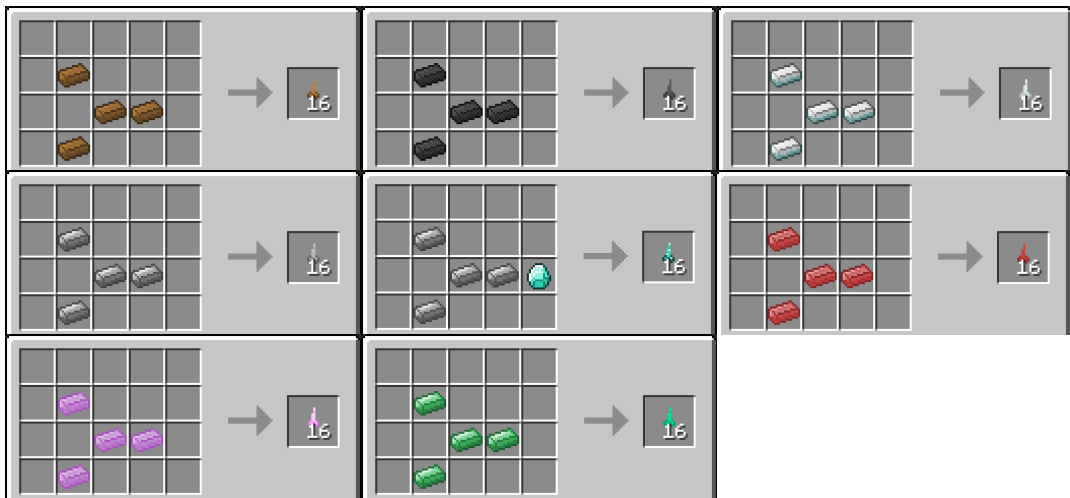
### *Normal Arrows*

Normal arrows do average damage and range. They are the lowest cost to produce and can handle your average needs. These arrows use sticks as shafts.



### Bodkin Arrows

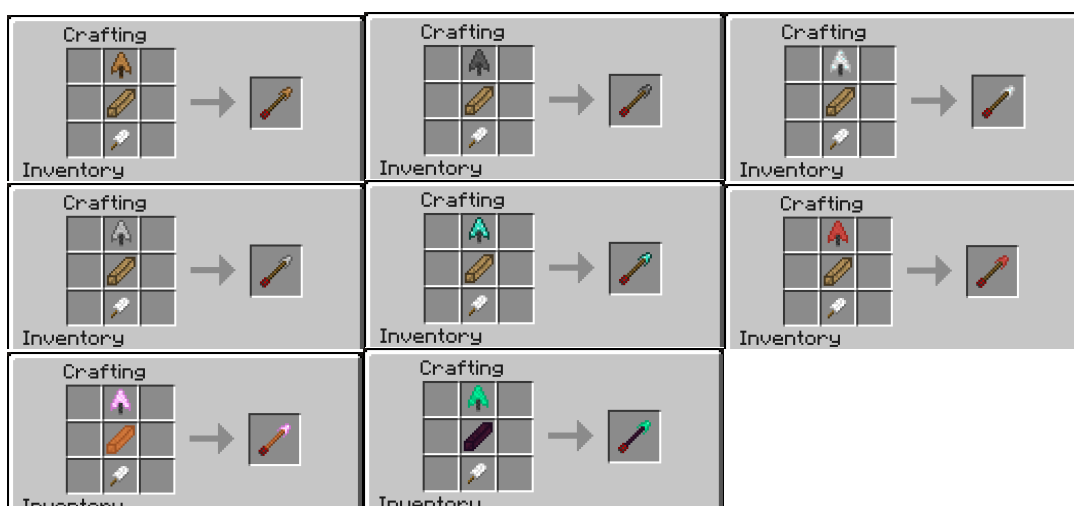
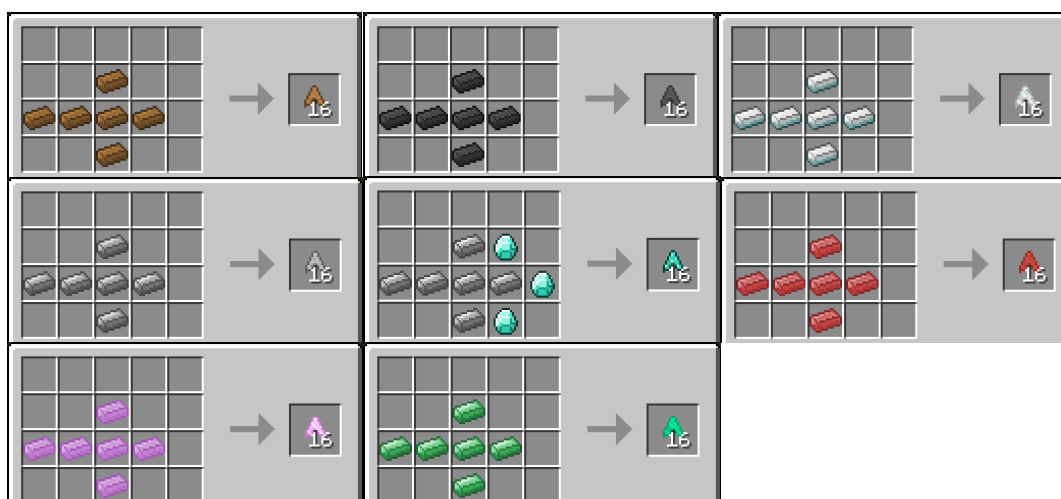
These are less powerful than your average arrow, and cost slightly more. Bodkin arrows are more aerodynamic and are able to fly much further distances. These arrows are ideal for long-range sharpshooting. These arrows use sticks as shafts.





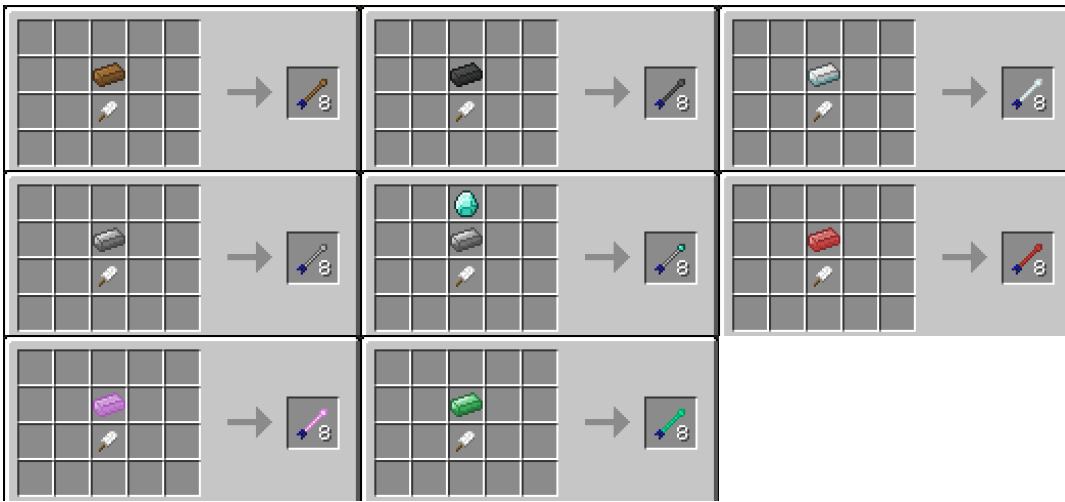
### Broad Arrows

Broad arrows are heavy and damaging. They are the most expensive arrow and the heaviest. Broad arrows have a low range but a large damage. Broad arrows can penetrate some armour. These arrows are good for high armoured opponents. Broad arrows can pierce enemies when killed. These arrows use planks as shafts.



### Bolt

Bolts are basic ammunition fired by crossbows. There's nothing much else about them.



[Back to top](#)

## 8.0: ARMOUR

Armour in MineFantasy is broken into 3 groups, being light, medium and heavy. Armour has a weight mechanic to help extend the tiers. Unlike regular Minecraft armours; you can't just toss on the best suit and call it a day. Things like that just result in looking stupid, and making armour seem rather pointless and forgetful. Battles just ended up looking like a bunch of diamond Smurfs. Instead: there's armours for all different contexts. Light armour would be your everyday wear, being able to protect you, but not being able to care that it's on. Heavy armour is highly protective but slow to move in, being great for combat, but not the thing to wear everywhere. Medium armours are for your Average combat needs taking the best of both worlds.

[Back to top](#)

### 8.1: Armour Guide

Now many of you would just chuck on the best stuff and call it a day, to return and complain that you move slowly... that being a pain because you're not getting the point. As you see those little inferior suits you thought were useless actually are there for a reason. Being able to just slap on full protection and never give a second thought seem to be a tactical waste, as you're always on guard. Instead: you suit up for combat when you need it.

In most cases medium armour is your best bet. Medium armour allows you to take on your average combat needs, this can be used for hunting and caving. It just isn't really convenient for wandering your home back and forward for all the stuff you need to do in your MC day. Light armour is able to protect you without any means of caring when it's on. It doesn't weigh anything and give small protection. Sure it's not much, but it's enough for you to react and even flee from tougher fights. Light armour in more dangerous environments isn't recommended, unless you're cunning and tactical. Heavy armours are for when you really need an edge as their designed for fighting strong mobs, dealing with crowds and dungeons, or if you can't be bothered planning an assault and want to just take the damage. This armour is good for PvP, but blunt weapons can keep you down.

At the end of the day; you can get used to wearing heavier armours everywhere, it just takes a bit longer to get from a to b. MineFantasy armour tiers are highly dependent on this system and without it pretty much all the armours will be entirely useless. So it is extremely recommended to keep it active. Each armour has its own values per damage type. (However the armour bar on the hud is rather useless, it displays your basic damage protection, but that's it, and cannot go above 20 (10 icons). Best way to know what is better is each material is better than the last, chainmail is worse against things like fire and explosions and plate resists armour penetration from blunt weapons. Some materials weigh differently (eg. Mithril is half the weight)

[Back to top](#)

## 8.2: Light Armour

Light armour weighs nothing, but has limited protection. It is good for every day wear and for scouting.

### Leather Armour

Standard leather armour can be made from leather or rough leather: leather is made on a tailor bench. Rough leather (Hardcore leather option) is just as effective, with less durability

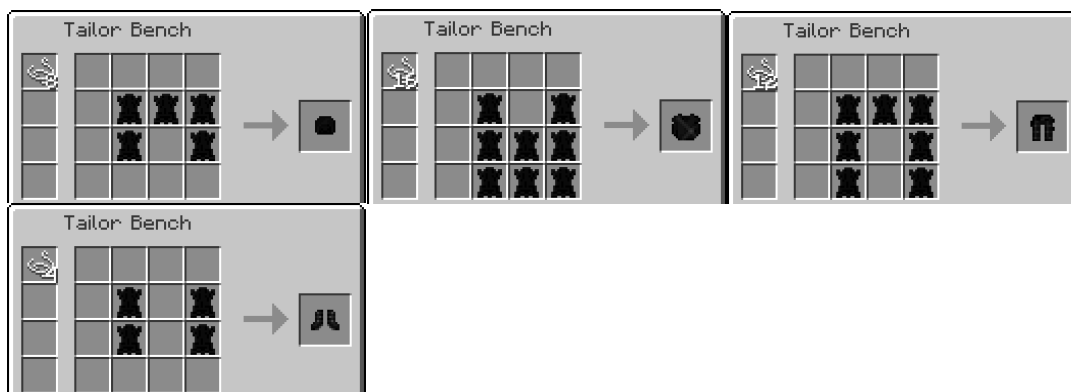


### Stealth Armour

This is a super light suit, this armour is designed for the fast-moving ninja (so to speak). You can move faster in this, and resist fall damage. Mobs will notice you less when sneaking.



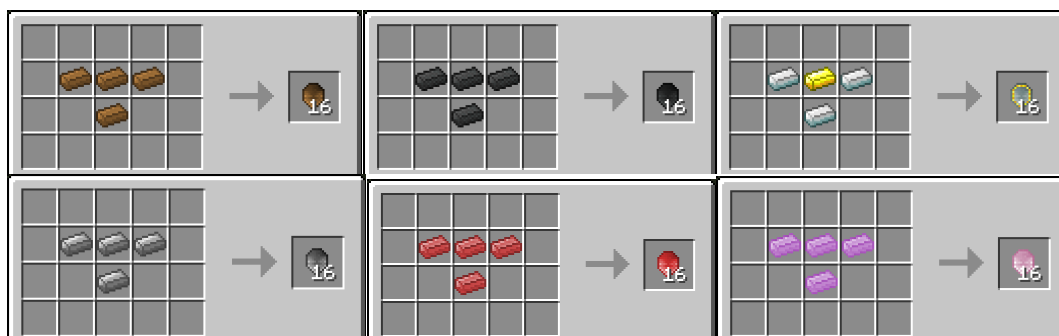
(Made with strong glue: Texture changed is all)



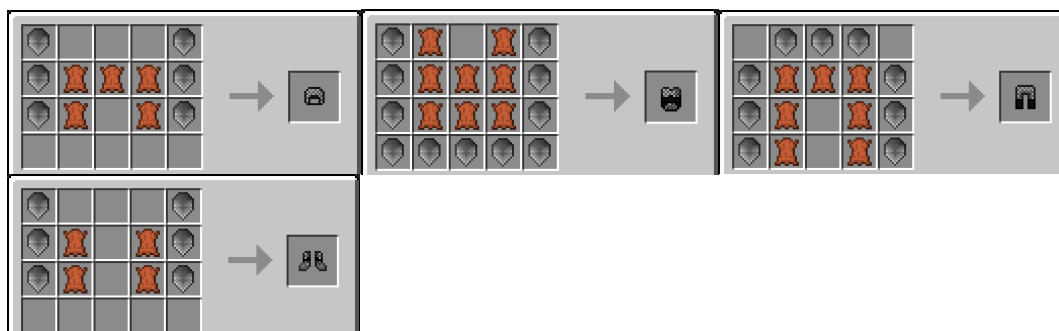
### Scalemail

This is a regular leather armour suit with metal scales riveted to them. It is extremely light and flexible

Scalemail is your average light metal armour. It has a reasonable, but low protection and still weighs nothing. A full suit costs 8 ingots and 24 leather



Assembly is identical for every design



[Back to top](#)



### 8.3: Medium Armour

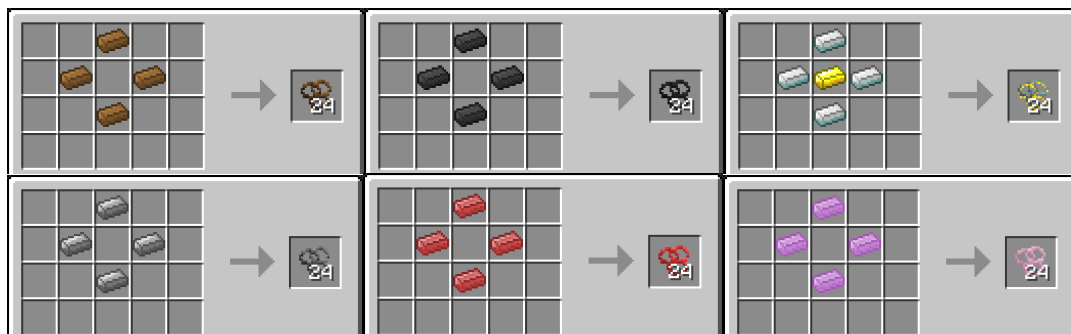
Medium armour is your average combat armour. This can handle most mobs, but still needs some wits to fight stronger ones.

#### *Chainmail*

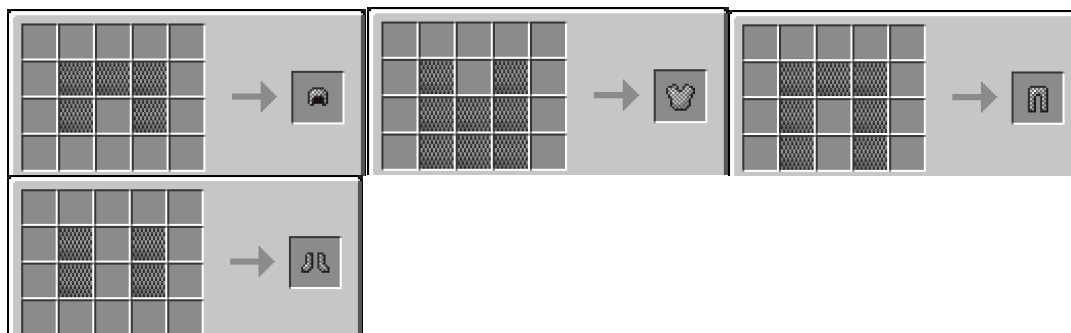
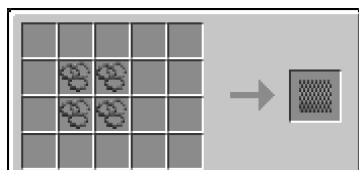
This is a suit of metal rings linked together to create a flexible metal suit.

Chainmail is lighter and weaker than splint but has a larger projectile resistance. Chainmail is good for basic mob hunting, but strong melee enemies are tough to fend off.

A full suit costs 16 ingots. Used to make chain links



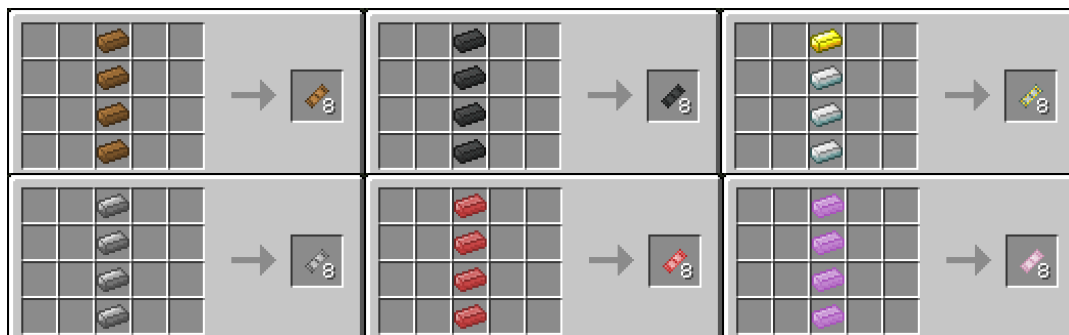
These go together to make chain sheets (you should use the actual gui on anvils for this) All assemblies are identical each tier.



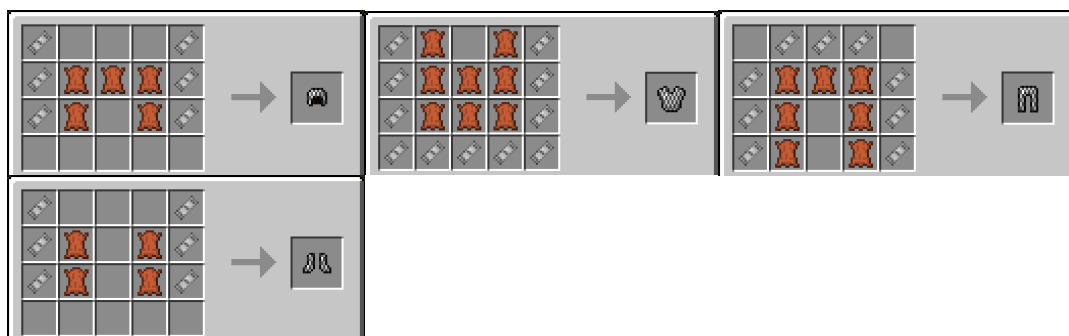
#### *Splintmail*

This is a suit of leather armour with sturdy splints riveted on.

Splintmail is average armour; it has reasonable protection across the board. Splintmail costs 16 ingots and 24 leather to make.



Assembly is identical for all armours



[Back to top](#)

## 8.4: Heavy Armour

Heavy Armour is the strongest armour, it is the best for combat, but due to its weight is best only worn when it's needed, this means you need to suit up in advance before combat.

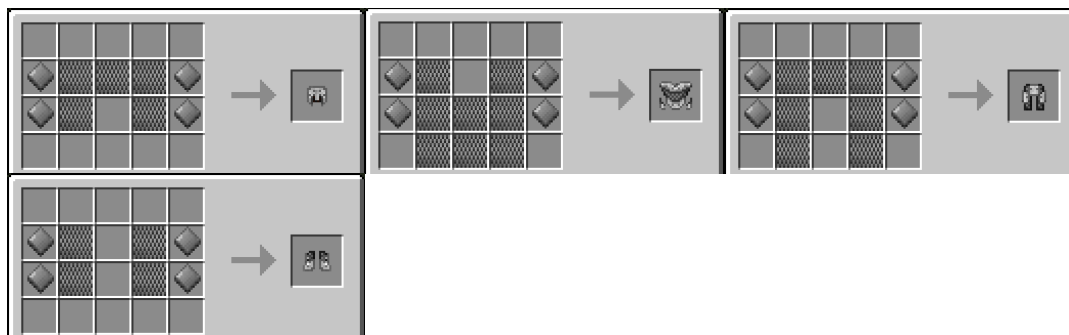
### Heavy Chainmail

This is a suit of chainmail with plating riveted over.

Heavy chainmail is effective heavy armour. It has a very high projectile resistance as well as it high protection for basic damage. Heavy chainmail costs 24 ingots to make a full suit, exactly as much as vanilla armour.

"Chainmail" Shows recipes for chain sheets and "Plate" shows recipe for plates

Assembly is identical for all tiers.



## Plate

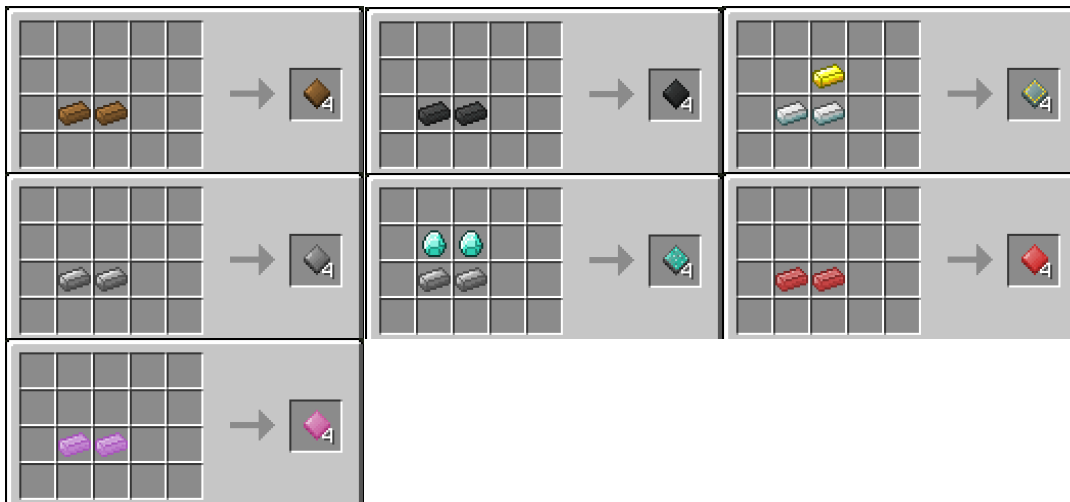
This is a suit of heavy plates riveted to a thick layer of padding.

Plate armour is the most protective armour on the market. All of its armour values are superior (but heavy chain has a better projectile resistance). Plate armour is the heaviest armour, but is well worth the slowed movement. This armour is ideal for dungeon raids, PvP combat and fighting tough mobs. When hunting, you may be exposed to creepers a bit more, but you don't need to think tactics as much. Dragonforge plate gives fire immunity (full suit)

There are 3 plate components and padding that goes to making plate armour. A full suit costs 24 ingots, 24 leather, 12 feathers and 6 wool.

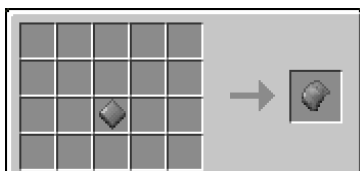
## Plate

All the metal in construction will make these, so first thing is make 48 plates from your 24 ingots.

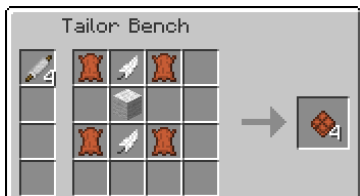


You will also need to make “Curved Plates” make 8 of these

Curving is identical for all tiers



Now you need padding; plates are attached to this. Make 24 of these (6 lots) it will cost 24 total twine to make them

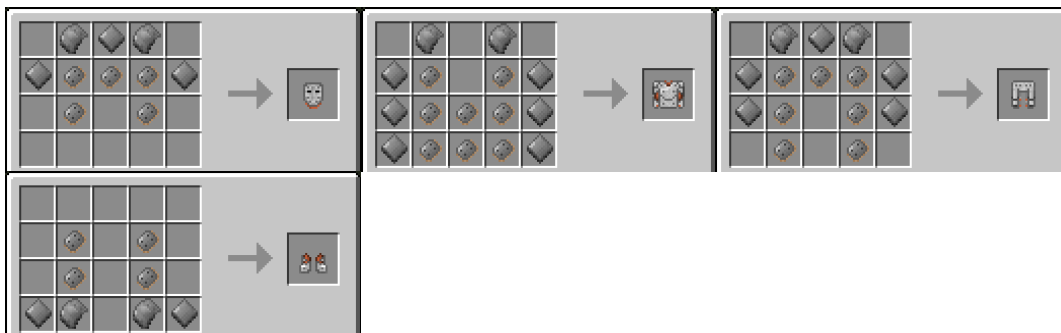


Now attach 24 of your plates to the 24 padding (identical recipe for all plates)



Now you should have 24 small plates, 8 curved plates and 16 plates. It's time to assemble

Assembly is identical for all tiers



[Back to top](#)

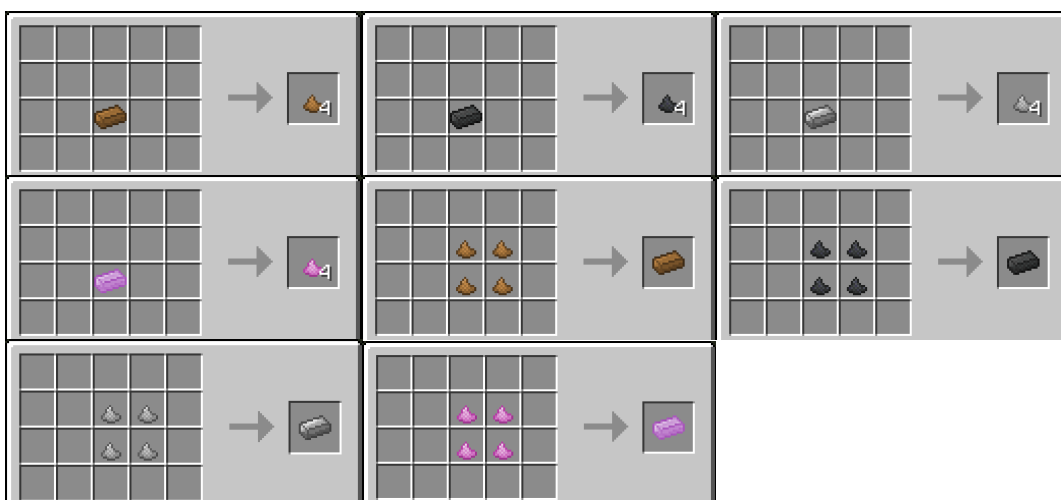
## 9.0: MISC ITEMS

There is a bunch of misc items in MineFantasy, some of them are used as components, while others are useful for their own reasons.

### 9.1: Misc Components

#### Metal hunks

These are used for making more precise items. Hunks must be re-heated before use, as they are very small and tedious to work with.



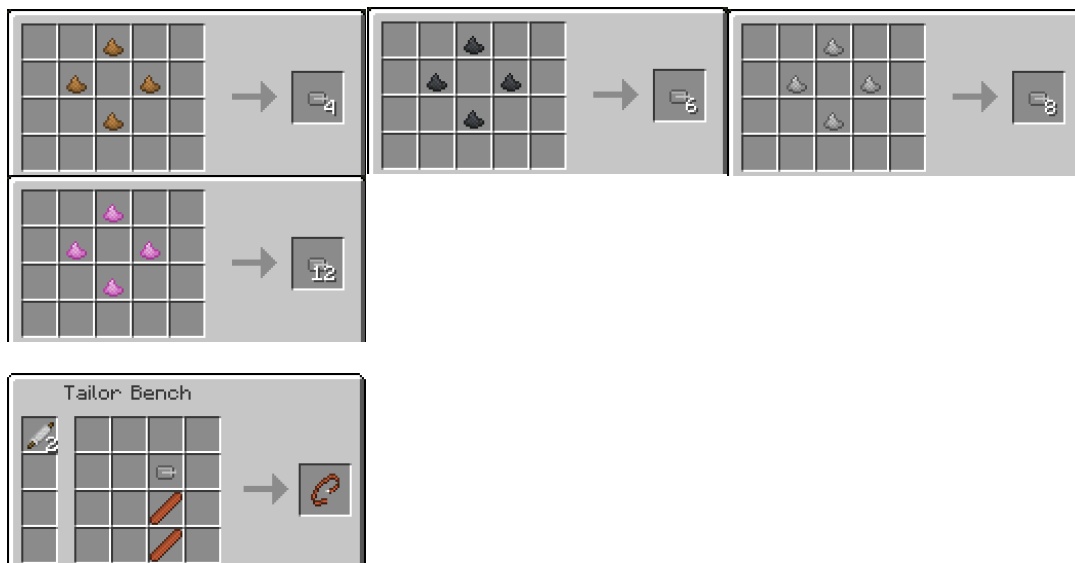
## Padding

Padding is used for plate armours, but can also make beds (the old bed recipe can be disabled)



## Buckle and Belt

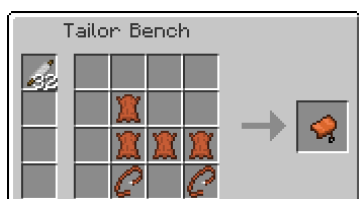
Buckles and belts have limited uses, but make things like saddles and feedbags. Stronger materials make more buckles



[Back to top](#)

## 9.2: Other stuff that couldn't be made

Yeh it seems someone forgot to make these craftable (either that or they like being annoying) They cost a fair bit



And name tags- the thing you need lots of that they didn't give you.



[Back to top](#)

### 9.3: Bandages

Bandages allow you to heal health easily. A bandage does not work instantly, it gives regeneration over time. This means they're not as effective in combat but are able to recover a decent amount of health.

To apply a bandage: right-click it, and shift right click it to apply it to a target. A bandage cannot be applied if the target already has regeneration active (from either a bandage or potion). Bandages can neither be placed on burning targets. A target must be hurt to apply one. There are 3 tiers of bandage- each lasting 10 seconds, with tiers of regeneration increasing.

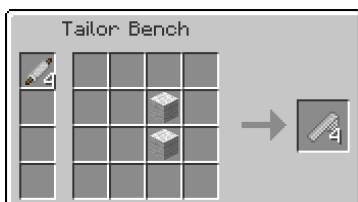
#### Crude Bandage

This is a bloody, messy strap of dead flesh. This bandage probably isn't the cleanest option but it would do for early adventures. This bandage is made from raw leather (from the tanning rack) and binds (hardcore crafting mostly). This restores 4 health (2h) over 10 seconds



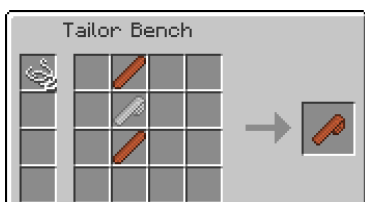
#### Woollen Bandage

This is your average bandage; effective and cost efficient. The wool bandage should be the bulk of your uses. This bandage heals 8 health (4h) over 10 seconds



#### Tough Bandage

This is an upgrade to the woollen bandage. By reinforcing leather into a woollen bandage you get an upgraded Tough bandage. This bandage heals 16 health (8h) over 10 seconds



[Back to top](#)

## 10.0: MISC BLOCKS

Misc blocks are pretty much for aesthetical purposes. However some may help with minor tasks as well as cleaning things up a bit.

#### Basic blocks

Basic blocks are aesthetic and their made to spruce up your builds a bit more. MineFantasy has a limited amount of aesthetics, and steers slightly away from that, as they don't do anything.

### Mud Brick

Mud bricks are simple use for surplus dirt. They don't look very good, but make a decent building material in copper-tiered construction. Their simple recipe is designed for an easy dirt use. Mud bricks drop dirt.



### Granite Brick

Granite bricks are the only decorative sub-block made from granite (unlike slate) Granite bricks are strong and decorative materials.



### Cobblestone brick

For those building out of humble cobblestone and need something with a bit more depth- these are your answer. Cobblestone bricks are ideal easily made blocks for nearly any project and are one of the most popular materials.



### Reinforced Planks

For use in walls, edges, or other misc needs: Reinforced planks add a sturdy look to wooden surfaces



### Clay Walling

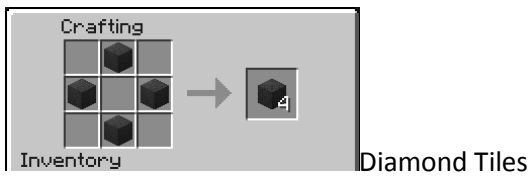
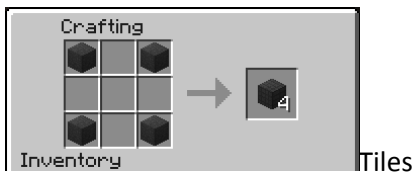
For second floors and gable roofing faces: Clay walls are a common material for wooden buildings of all sorts



### Slate

Slate is a versatile building material; it can make bricks tile, and diagonal tiles. Slate is able to make any shape and designs can be changed with ease.





## Useful Blocks

These blocks have a small purpose and can be used for decoration, and utility

### Lantern

The lantern is the first block added to MineFantasy. It adds a bright light and can be placed anywhere.



### Reinforced Door

The reinforced door is sturdy and decorative. With MineFantasy Doors: Zombies and villagers can't use them, they're really stupid (as the coding for them is stubborn beyond comprehension)



### Ironbark Door

Similar to reinforced door: This door is strong and the local idiots cannot use them.



### Steel Door

You know iron doors?, steel door is kinda the same





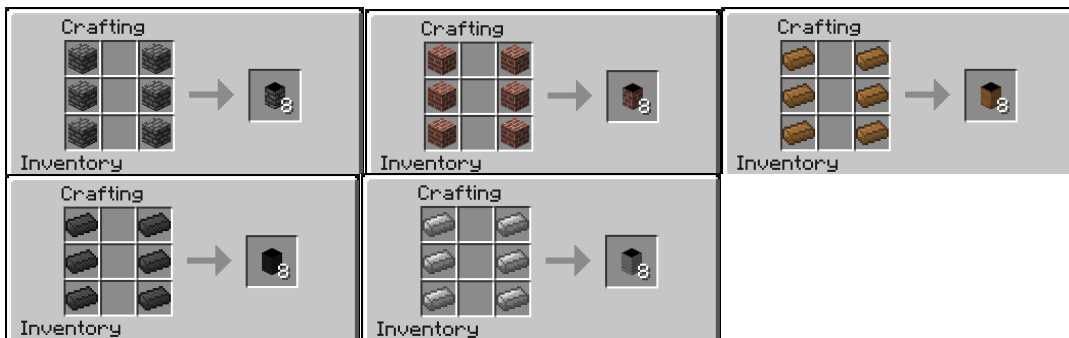
## Rack

This block can hang items, Right click it's face with an item to place it, right click with bare hands to take them, right click the side to access it's GUI screen, the GUI will also open if placement attempts fail. This renders items as if they were held, but has problems with other mod items. They can either use the API or their Ids added in config: this is because some item renders don't like the fact it renders with nothing holding them. So some things won't work.



## Chimney

Refining stuff makes a lot of smoke. Quite a mess really, placing chimneys on top of supported blocks allows them to channel the smoke upwards (since no one uses the api, this only works between MF chimneys, and MF blocks).



## Benchtop

Benchtops are both an extremely decorative surface, a basic storage area, and a process. Benchtops have multiple purposes.



When it comes to storage: Benchtops stack only to 1. You can interact with some items by right-clicking certain tools on them. Right now benchtop processes aren't used; apart from hardcore leather tanning. Knives and Mallets are the only tools used on bench tops, though knives do nothing right now. You can use benchtops to store single items like tools.

A benchtop surface can be changed: Place a solid cube block on it and hit it with a mallet (The block will not be consumed, meaning you can make any amount of tops).

[Back to top](#)

## 11.0: EXTENDED INFORMATION

### 11.1: Hound Information

Now hounds are rather complex mobs. They are a player's best friend and shouldn't be treated as merely just a minion. Hounds have a levelling system, hunger, equipment and a basic command system. They will increase in strength as you go, and there is a huge variety of breeds that you can obtain.

Firstly is how to tame them. Hounds (like wolves) can be tamed by giving them bones that randomly make them loyal. But they require to be domesticated first. Hound domestication is a process of getting them used to humans; this also restricts hound taming to avoid players having lots of hounds.

#### Domestication

To start off: find a wild hound. Give the hound 1 bone and it will start the process. The hounds tail angle will represent its domestication when it reaches 100% (aligned with the back) the hound can be tamed with bones. Hound domestication will only increase when there are no wild hounds nearby (the range is small). So you need find a lone hound and isolate it. Hound domestication increases slowly when humans are very close, (villages or players). This increases faster the more players there are. The trick with this is to hang around the hound, or just check in every day to increase its domestication. You can alternatively: give hounds bones, this will speed up the domestication process, but only to 25%.

When the hound reaches 25% domestication it will follow you when holding meat or bones, and you can attach leashes to the hound. At this point you should lead your hound home, or in a pen. With this: the hound will be domesticated as you do your things at home.

So there are 2 ways you can domesticate a hound: Either you can give the hound 1 bone, and just wait for the process to take place and hope other hounds stay away, or you can give the hound as many bones as it can eat, than lead it home for the rest of the process. Do not attack wild hounds, this will cause all wilds to gang up (including the one you're trying to tame). Easy hound taming eliminates the need to domesticate.

When fully domesticated you can tame the hound by giving them a bone (1 in 5 chance) they will be tamed. Wolves have a 1 in 3 chance

#### Hunger

Hounds will get hungry. When their hunger runs out, they will starve. You can configure if they get hungry, and if so: if it kills them. If you choose to turn starve killing off, their hunger will fall to 5 at min, (1 for puppies).

Right-click hounds with meat to feed them (they will breed if full). You can also toss items on the ground for them to eat. Hounds will eat anything when hungry. Hounds should not get hungry when their owner is offline. But be careful on servers, as chunks may stay loaded and hounds will lose hunger. Feedbags and dog bowls are recommended.

#### Levelling up

Hounds have an experience metre: this will fill as they fight mobs it increases depending on their experience value. Hounds do not use orbs, so you can still use them. When a hound levels up, it gains attribute points (2 each level, 5 each 5 levels).

#### Attributes

There are 3 attributes: Strength (or attack), Stamina and Endurance (or defence). You can spend attribute points on them. The GUI is a bit shabby and slow (it's just a drawback with connections and can't really be fixed). Each attribute increases the hound's variables. Strength increases damage, Stamina makes hunger decay slower and Endurance increases health.

## Commands

There are 3 movement commands and 4 attack commands that hounds can have. Click the book icon to toggle them.

The 3 movement commands are idle, follow and stay. Follow tells the hound to follow its owner, Stay tells the hound to remain seated, and idle tells the hound to wander if asked. Hounds will still fight, defend and eat food under any command. When in “Stay” Hounds will walk back and sit where initially told if they moved, this means a staying hound can still guard, and feed from bowls.

## Abilities

Hound abilities are simple (and they will stay that way). Their system follows a basic ability system: When hounds level up they will unlock these abilities. There are 5 abilities to be unlocked. Each ability can be useful in some ways.

### Mixing abilities with commands

Hounds can follow a command and ability at the same time. For example: You can set a hound to both follow you and defend you, meaning it will follow you and fight mobs you fight. Or you can make a hound stay and pick fights so it will stay seated, fight a mob, and return to its sitting position when finished. Some commands are toggled meaning you can issue multiple commands at once (for example: a hound can pick fights with mobs, animals and players, while still following you and defending you). Only one movement command can be active though.

### Other Commands

The left contains 2 small buttons, disengage and disable PvP. Disengage stops the hound in combat (though it will just pick another fight) the best use for this button is after telling a hound to stop picking fights, and tell it to return. The disable PvP command stops hounds from attacking players under any circumstance. This means if a player hits you or your hound, if you attack a player, or even if the attack players command is active; the hound will not do a thing. Activating attack players also enables PvP.

## Equipment

Hounds have a variety of equipment to aid for their needs:

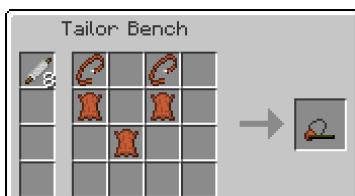
### Dog Bowl

The dog bowl is used to feed hounds; hounds will eat from this when hungry, staying hounds will then return to where told to stay. Higher tier means it can carry more food. You can only place meat in bowls (things defined as dog food). Breaking this does not recover food. Hounds will gain lots of saturation from this.



### Feed bag

Equipping a feed bag onto the “Head” slot will allow the hound to carry food. The feedbag is a portable dog bowl and is filled by right-clicking a hound when the hound is full; so all surplus food fills the bag.



As you see it's made of leather belts see misc components.

## Pack

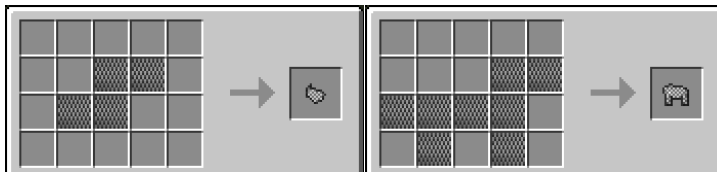
Hounds can carry your goods! Packs are used to give your hound a nice little inventory for storage how nice of them.



## Mail armour

Mail armour is decent in protecting hounds and doesn't slow them down. [See chainmail recipe for sheets](#)

Assembly is identical for all tiers made with the same tiers as normal chainmail



## Plate armour

Plate armour gives hounds even more protection, but it does slow them down a bit. [See plate recipe for sheets](#)

Assembly is identical for all tiers made with the same tiers as normal plate



## Forged teeth

Forged hound teeth increase damage done by bites.



## Trading hounds

Yes, Hounds can be traded. The process of trading is done via items. To trade a hound you need these



These are hound trading papers. This is loyalty as an item. To use these, simply right-click a hound and that will bind it to the papers. You need to own the hound of course. It is highly recommended you name your hounds so you don't get the papers mixed up.

With a hound on the paper, give it to the player you want to give the hound to, than they right-click the papers on the hound and it's theirs! You can either register all the hounds for sale and give them later(need to name them to make it easier to tell apart) or you can use the papers there and then, where names don't matter as much since you know what hound your trading.

[Back to top](#)

## **11.2: Extended progression guide**

COMING SOON, Didn't want to take more time update due to this

[Back to top](#)

## 12.0: MOD SUPPORT

### 12.1: Battlegear2

#### Quivers

All bows and arrows have quiver support. Quivers do not work with crossbows. However crossbows are for the basic marksman, so it's not a concern.

#### Shields

MineFantasy shields for battlegear2 use their own mechanics. There are 3 metal shield designs as well as a wooden shield design. Shield held time depends on the weight of the material and the size of the design. Each shield has a "Damage Threshold" This limits the max damage it can absorb from an attack, any more than this: the additional damage goes through. Guilded shields use pure gold

[Back to top](#)

#### Wooden shield

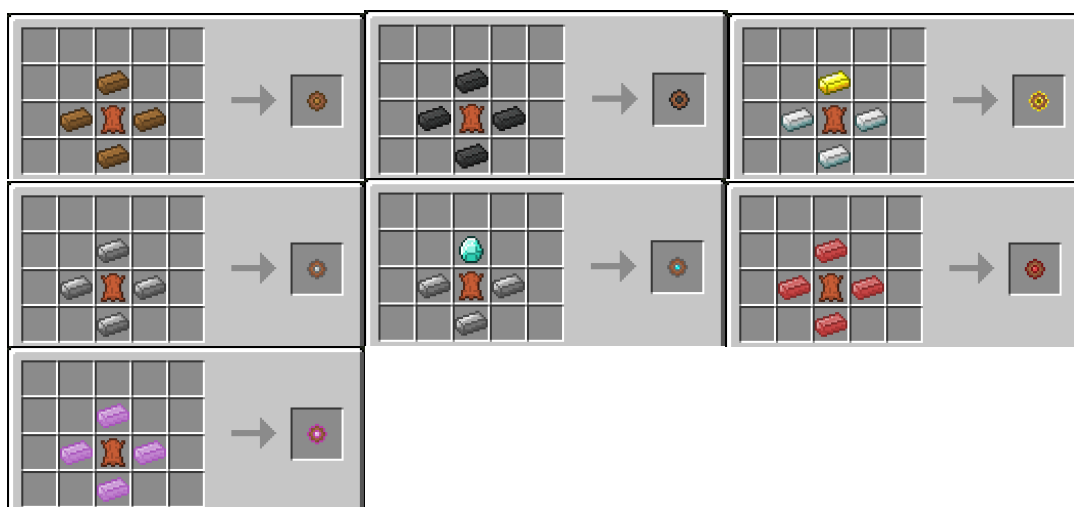
Wooden shields are simple round shields. They have a 7.5s hold time, and moderate thresholds and a 60degree blocking arc and a damage threshold modifier of 0.8.



[Back to top](#)

#### Buckler

The buckler is the smallest, least effective metal shield. It has a hold time of 10s and a 15degree blocking arc and a damage threshold of modifier of 0.35. Blocking with these is hard, and you need to pretty much point at the target.



[Back to top](#)

#### Kite Shield

The kite shield is your average metal shield. It has a hold time of 6.5s and a 90degree arc. Kite shields have a damage threshold modifier of 0.7. Shields use wood planks, mithril uses ironbark, guilded uses ebony



[Back to top](#)

### *Tower Shield*

The tower shield is the heaviest shield available. It's block time is low at 5s with a 120degree blocking arc. Tower shields can block armour piercing (from MF blunt weapons) at 25% their power, take no additional decay from damage and have a threshold modifier of 1.1. Shields use wood planks, mithril uses ironbark, guilded uses ebony



[Back to top](#)