

THE ULTIMATE PLAYER'S GUIDE TO

MINECRAFT™

XBOX® EDITION

COVERS

Xbox 360
and One



The most in-depth, full-color Minecraft for Xbox guide available!



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STEPHEN O'BRIEN

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The Ultimate Player's Guide to

MINECRAFT™

XBOX® EDITION

Stephen O'Brien

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800 East 96th Street,
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The Ultimate Player's Guide to Minecraft™: Xbox® Edition

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Contents at a Glance

	Introduction	1
CHAPTER 1	Getting Started	5
CHAPTER 2	First-Night Survival	23
CHAPTER 3	Gathering Resources	43
CHAPTER 4	Mining	65
CHAPTER 5	Combat School	81
CHAPTER 6	Crop Farming	103
CHAPTER 7	Farming and Taming Mobs	127
CHAPTER 8	Creative Construction	137
CHAPTER 9	Redstone, Rails, and More	159
CHAPTER 10	Enchanting, Anvils, and Brewing	187
CHAPTER 11	Villages and Other Structures	209
CHAPTER 12	Playing Through: The Nether and The End	223
	Index	245

Table of Contents

	Introduction	1
	What's in This Book	1
	How to Use This Book	3
	Crafting Recipes	3
Chapter 1	Getting Started	5
	Starting a New Game	6
	More Options	11
	Single-player Game Modes	13
	Hosting and Controlling Multiplayer Games	14
	Understanding World Seeds	18
	Controls	19
	The Bottom Line	20
Chapter 2	First-Night Survival	23
	Surviving and Thriving	23
	Heading for the Trees	25
	Using Your Inventory	26
	Building a Crafting Table	29
	Let's Build Some Tools	30
	Creating a Shelter	32
	The Furnace Is Your Friend	36
	Let There Be Light	36
	Slumbering with Lumber	38
	The Bottom Line	41
Chapter 3	Gathering Resources	43
	Introducing the HUD	43
	Avoiding Getting Lost	46
	Improving Your Tools	47
	Chests: Safely Stashing Your Stuff	50
	Avoiding Monsters	51
	Hunger Management	54

Your Mission: Food, Resources, and Reconnaissance	55
Food on the Run	57
Finding a Building Site	58
A Resourceful Guide to the Creative Mode Inventory	61
The Bottom Line	64

Chapter 4 Mining 65

Dig Deep, My Friend	65
The Mining Layer Cake Guide	67
Lava Lakes and Other Pitfalls	69
Descending to Layer 11	70
The 2×1 Ladder Descent	70
The Straight Staircase	72
The Spiral Staircase	73
Layouts for Fast, Efficient Mining	75
Staying Safe While You Mine	77
The Bottom Line	78

Chapter 5 Combat School 81

Introducing the Menagerie	81
Zombies	82
Spiders	84
Skeletons	85
Cave Spiders	86
Spider Jockeys	87
Creepers	88
Slimes	89
Endermen	90
Zombie Pigmen	90
Defensive Mobs	91
Snow Golems	91
Iron Golems	92
Weapons and Armor	93
Swordcraft	94
Bows and Arrows	94

Armor-All 97
Color-Coordinate Your Leather 100
The Bottom Line 101

Chapter 6 Crop Farming 103

Choosing a Crop 103
Finding Seeds in Elysium 106
Establishing a Wheat Farm 108
Automated Farms 114
Creating a Piston Harvester 118
Sticky Piston Harvesting 120
Creating a Water Harvester 121
Harvesting Other Crops 124
The Bottom Line 125

Chapter 7 Farming and Taming Mobs 127

Farming and Working with Friendly Mobs 127
Breeding Animals 130
Riding Pigs 133
Fishing 134
The Bottom Line 134

Chapter 8 Creative Construction 137

Leaving the Cave 137
Unleashing Your Interior Decorator 140
Building Underwater 147
Protecting Your Perimeter 153
Becoming a Ditch Witch 153
Mob Pitfalls 155
Thick as a Brick 157
The Bottom Line 157

Chapter 9 Redstone, Rails, and More 159

Seeing Red: A Beginner's Guide 160
Power Sources 160
Redstone Wiring 163

- Powered Blocks 164
- Repeaters 166
- Output Devices 168
- Automatic Doors 170**
 - Vertical Currents 176
- Advanced Circuits 177**
 - NOT Gates, aka Inverters 177
 - OR Gates, or Any Input Will Do 178
 - AND Gates, Two True 179
 - Repeater Loops 180
- Rail Transport 181**
 - Have Minecart, Will Travel 181
 - Rolling on Rails 183
 - Making Tracks and Stations 184
 - Halfway Stations 185
- The Bottom Line 186**

Chapter 10 Enchanting, Anvils, and Brewing 187

- Enchanting Wiles 187**
 - Creating and Mining Obsidian 189
 - Crafting Books 192
 - Casting Enchantments 192
 - Improving Enchantment Chances with Bookshelves 194
 - Earning and Managing Experience 195
 - Sprucing Up Your Weapons 196
 - Enhancing Your Armor 197
 - Improving Your Tools 197
- Hammer It Out with the Anvil 198**
- Brewing Potions 200**
 - Brewing Up a Storm 203
 - Enhancing Potions 205
- The Bottom Line 207**

Chapter 11 Villages and Other Structures 209

- Village Life 209
- Emerald City: Your Ticket to Trade 212
- Other Structures 214
 - Desert Temples 215
 - Jungle Temples 216
 - Dungeons 217
 - Abandoned Mineshafts 218
 - Strongholds 218
 - Nether Fortresses 219
- Mapping, or There and Back Again 219
- Crafting a Clock 220
- The Bottom Line 221

Chapter 12 Playing Through: The Nether and The End 223

- Alternate Dimensions 223
- Getting to The Nether 226
 - Portal Magic 227
- Surviving the Nether Fortress 231
- Nether Mobs 232
- The End Game 234
 - Finding a Stronghold 236
 - Defeating the Ender Dragon 239
- The Bottom Line 243

Index 245

About the Author

Stephen O'Brien is an Australian-born writer and entrepreneur currently residing in Sydney after too many years in Silicon Valley. He has previously written 27 books across multiple editions with publishers such as Prentice Hall and Que, including several best-selling titles. He also founded Typefi, the world's leading automated publishing system, and in his spare time he invented a new type of espresso machine called mypressi. He has been using Minecraft since its alpha release and remains astounded at the unparalleled creativity it engenders.

Dedication

To Amy, who has never played a video game in her life and always makes me want to set down the controller when she is near. Some things should never change.

Acknowledgments

I've been mighty lucky to work yet again with the great team at Que. They make it easy for me to do my small part while they take care of the big picture. Then a book auto-magically springs to life. Of course, behind the scenes there's a host of people working far harder than I.

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Introduction

When Minecraft launched as a downloadable on the Xbox 360, it broke all kinds of records. For very good reason.

Having already become gaming's largest indie success on the PC and Mac, there was something, to say the least, of a pent-up demand to see it on console.

We saw something similar with the release of *The Ultimate Player's Guide to Minecraft*. There are numerous subtle and not-so-subtle differences between the game in its Java form on PC and Mac and the edition released for the Xbox, and many readers clamored for more specific guidance.

With that in mind, we completely overhauled the book from top to tail, producing the first Xbox-specific Minecraft title, with in-depth tutorials and detailed information on every mob, crop, enchantment, and potion.

If you've played through the in-game tutorial, you'll have learned some of the game's basic mechanics, but this book goes far beyond. From survival tips and tricks to the best places to find key resources. From redstone to railways, combat and defense, automated farming, brewing potions, casting enchantments, and a lot more besides, you'll find yourself getting more out of Minecraft than you ever thought possible.

Use this book to guide you through your own generated world, or create one with the included seed to play alongside me as we find villages and natural resources, create a crop farm, travel far to the North to gather cocoa beans, build up our armory, then go to The Nether and back again, find a stronghold, enter The End region, and defeat its formidable boss: the Ender Dragon.

It's going to be quite a journey, and one that's perfect for all ages.

What's in This Book

Survive and thrive in Minecraft with 12 chapters of detailed step-by-step guides, tips, tricks, and strategies. Each chapter in this book focuses on a key aspect of the game, from initial survival to building an empire. Make the most of your Minecraft world today:

- Chapter 1, "Getting Started," walks you through the various new game settings and options including texture packs and multiplayer. You also learn how seeds control world generation, including the one used throughout this book, so you can learn Minecraft in the same environment.

- Chapter 2, “First-Night Survival,” is an essential strategy guide to one of the most challenging times in Minecraft. You learn to craft essential tools, create torches, build your first mob-proof shelter, and reset your spawn point, all in less than 10 minutes of gameplay.
- Chapter 3, “Gathering Resources,” teaches you everything you need to know about the heads-up display and how to fill out the skills you need to build a permanent base of operations, craft better tools, store resources, and find food to stave off hunger. I also show you how to use the built-in GPS so you can always find your way home, even after extended forays into the wilds, and give you a complete guide to the Creative inventory.
- Chapter 4, “Mining,” unlocks some of Minecraft’s deepest secrets. I show you the best tunneling plan to uncover the most resources in the shortest possible time, the essential tools required, and the layers you should dig to uncover everything from basic iron ore to diamonds.
- Chapter 5, “Combat School,” gets you ready to tackle any mob, including the creeper. From sword-fighting techniques to armor, this chapter has you covered. Slice and dice your way through Minecraft. You also learn essential perimeter protection strategies for your home and how to build snow and iron golems for additional defense.
- Chapter 6, “Crop Farming,” helps you become completely self-sufficient, ensuring the hunger bar stays full, constantly boosting your health. Learn to hydrate 80 blocks of farmland with a single water block and automate your harvests at the touch of a button.
- Chapter 7, “Farming and Taming Mobs,” is all about Minecraft’s passive animals: the chickens, pigs, cows, and more that populate its world and provide you with instant BBQ. Learn to breed animals, tame ocelots to scare off creepers, and get a wolf pack on your side.
- Chapter 8, “Creative Construction,” helps you unleash your inner architect. From grand constructions to inventive interiors, learn about the decorative ways you can use Minecraft’s blocks and items to build the perfect abode. Then knock it all down and build something better!
- Chapter 9, “Redstone, Rails, and More,” empowers your world with a host of automated devices. Control redstone power and automated doors; send minecarts on missions; and build stations, stopovers, and more. Soon you’ll be able to zoom across the plains, careen through underground tunnels, and scare the heck out of guests on a knife-edged rollercoaster ride.
- Chapter 10, “Enchanting, Anvils, and Brewing,” gets you brewing up a storm. Cast spells, improve and repair your weapons and armor, and fall from great heights with grace. Believe me, you’ll need this in The End region.

- Chapter 11, “Villages and Other Structures,” gets you rampaging around the nonplaying characters, trade your way to better goods, and introduces you to dungeons, temples, strongholds, and nether fortresses.
- Chapter 12, “Playing Through: The Nether and The End,” is the strategy guide you’ll need to get through these tricky sections of the game. Find a fortress fast, get what you need, and then prepare for the Ender Dragon. It’s easy when you know how.

How to Use This Book

Throughout this book, you’ll see that I have called out some items as Notes, Tips, and Cautions—all of which are explained here.

NOTE

Notes point out ancillary bits of information that are helpful but not crucial. They often make for an interesting meander.

TIP

Tips point out a useful bit of information to help you solve a problem. They’re useful in a tight spot.

CAUTION

Cautions alert you to potential disasters and pitfalls. Don’t ignore these!

Crafting Recipes

You’ll also see that I’ve included crafting recipes throughout this book. I’ve included the actual ingredients in the text, so you can ensure you have what you need before making a trip to the crafting table.



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Gathering Resources

In This Chapter

- Learn the secrets of the HUD.
- Improve your tools with more durable materials.
- Safely store your hard-earned resources.
- Learn the easy way to manage hunger.
- Build your first outdoor shelter and enjoy the view.
- Access the full Creative mode inventory.

Minecraft is filled to the brim with all manner of resources, and gathering them is the first step toward getting the most out of the game. In Chapter 2, “First-Night Survival,” you put together a pack of essentials sufficient to last the first night, but this is really just the smallest prequel to the real game, and describing how to find, create, and use other types of resources forms much of this book. This chapter is about building the foundation you can use to launch into the rest of the game. Your focus is on a few key points: build an outdoor shelter, find food to stave off hunger, improve your collection of tools, and build a chest to safely store items. This solidifies your position (making your base more impervious to attack), allows you to do all sorts of Minecrafty things more efficiently, and sets you up for longer excursions both above and below ground.

The good news is that you already have a base, so you can explore during the day, try not to lose your way, and head back at night. However, you still need to avoid at least some of the hostile mobs that persist during the day.

Introducing the HUD

Before we start, let’s take a look at the Heads-Up Display (HUD)—that collection of icons and status bars at the bottom of the screen. Figure 3.1 shows the HUD as it appears in Survival mode with all possible indicators displayed. (The Creative mode HUD shows only the Inventory bar.)



FIGURE 3.1 The HUD provides key status indications. Health is all important, but low hunger also leads to low health, so keep a close eye on both.

- | | |
|-------------------|---------------|
| 1. Armor bar | 4. Oxygen bar |
| 2. Health bar | 5. Hunger bar |
| 3. Experience bar | 6. Hotbar |

Each section of the HUD provides a key nugget of information about the health or status of your avatar:

- **Armor bar**—The armor bar appears when you’ve equipped your avatar with any type of armor and shows the current damage absorption level. Each armor icon represents an 8% reduction in the damage you’ll take, so a 10/10 suit of armor reduces the damage you take by 80%, whereas a 1/10 suit absorbs only 8%. Armor becomes less effective the more damage it has also taken, although the rate at which it deteriorates also depends on its material—leather being the weakest and diamond the strongest. In the case shown in Figure 3.1, a set of leather boots really doesn’t provide much protection.
- **Health bar**—You have up to 20 points of health available, represented by the 10 hearts shown. Each heart disappears in two ticks. Health and hunger have a complicated relationship. You can read more about them starting in the section “Hunger Management.”
- **Experience bar**—The experience bar increases the more you mine, smelt, cook, kill, and fish. Your current level is shown in the middle of the bar. When it’s full, you move to the next experience level. Experience isn’t generally important until you start enchanting and giving additional powers to items such as swords (see Chapter 10, “Enchanting, Anvils, and Brewing”). Unlike other role-playing games, experience in Minecraft is more like a currency that you spend on enchantments, so it waxes and wanes. But all experience gained counts toward the final score shown on the screen when you die. Killing a mob drops experience orbs that either fly directly toward you or float to the ground waiting to be collected. You can also gain experience by smelting certain items in the furnace and carrying out other activities such as finding rare ores. Dying causes a substantial drop in your current experience level, so if you start to gain substantial experience points (for example, a level that’s up in the 20s), it might be time to think about spending them on an enchantment or two.

- **Oxygen bar**—The oxygen bar appears whenever you go underwater, and it quickly starts to drop. You can probably hold your own breath for longer! As soon as your oxygen level hits zero, your health starts taking a two-point hit every second, but it resets if you resurface for just an instant. You can do this by holding down the jump key until you breach the water. Diving isn't that big of a deal in Minecraft, at least not for completing the core game, but you can use the ability to do interesting things like building an underwater base. An example is shown in Figure 3.2, and I'll show you how to build your own in Chapter 8, “Creative Construction”, as well as sharing with you some other underwater breathing techniques.



FIGURE 3.2 Underwater bases are impervious to mob attacks, even when built from glass, but you'll need to watch your oxygen bar carefully to ensure you don't run out of air while building this type of structure. By the way, the only mob that spawns underwater is the friendly, curious squid. Can you make out the one shown here? Say hello to Ceph.

- **Hunger bar**—You also have 20 points of hunger available, as well as a hidden value called Saturation. Like health, each hunger bar icon holds 2 points and can reduce by half an icon (that icon is, incidentally, a “shank,” or the lower part of a leg of meat) at a time.
- **Hotbar**—These nine slots represent items you can select and use. Press **Y** to access your full inventory and to change the items in these slots. The white number next to some shows that slot's count of stacked identical items. A durability bar also appears under each tool's icon in green, gradually reducing as you use them until the tool breaks and disappears from your inventory. You'll have some warning of this because the bar turns red when it's close to zero. See “Improving Your Tools” later in the chapter to learn more about the durability of various materials.

NOTE

Hiding the HUD

If you want to hide the HUD, press  to open the **Help & Options** menu. Scroll down to **Settings**→**User Interface** and deselect **Display HUD**. Unfortunately, there isn't a quicker way to do this at present.

Avoiding Getting Lost

It's easy to become lost in Minecraft. Run helter-skelter from your base, chase a herd of livestock, discover a natural cave system, or take a shot across the sea like that famed Norseman, Leif Eriksson. It's all part of the Minecraft charm. But don't become Columbus in the process.

You'll find a map in your inventory that can help you always return to your home base or other locations in the world (see Figure 3.3). The map can display the entire world but only updates while you have it active in the Hotbar, so it will take some time for it to build up the big picture. However, it does provide coordinates. Take note of those displayed for your home base.

The coordinates are based on the world's center where X and Z equal 0. (Y shows your current level above bedrock.) Jot down the current values. If you become lost, you can always find your way back to your original spawn and, presumably, your first shelter by traveling in a direction that will bring both X and Z back to those noted values.

When you need to return—and I should warn you that this *can* take some experimentation and a little practice—turn and take a few steps while tracking the change in your current coordinates. Your goal is to shift those X and Z values back toward those you originally recorded. You'll probably wander around a bit, but eventually you'll get there and the map will help you get your orientation and to head off in the right general direction.

When you are able, craft a compass. It takes some redstone and iron, and both are relatively easy to obtain with some assiduous mining. The only problem with a compass is that it always points to your original world spawn point. Think of that point as the magnetic north pole—it's not a GPS. Sleeping in a bed resets your spawn point but not your compass, so this method falls out of date as soon as you move to new dwellings and update your spawn point.

A compass is actually more useful when transformed into a map, see p. xxx (“Mapping, or There and Back Again” CH 11). You may need to do that if you lose the original map.



FIGURE 3.3 Point your RS down to view the map. In this screenshot I've also turned off the HUD for a better view.

Improving Your Tools

Wooden tools wear out fast, so it's best to upgrade your kit as quickly as possible.

Each type of material has a different level of *durability*. Think of durability as the number of useful actions the tool can perform before it wears out completely, disappearing in a sudden splintering of wood. I've included the durability in parentheses after each material's description:

- **Gold (33)**—Although this is the least durable material, a gold pickaxe can break blocks out of most softer materials in the blink of an eye, and it happens to be the most enchantable material, so you can imbue it with superpowers. But given that gold is about five times as rare as iron, and gold can be used to craft many other useful items, I wouldn't recommend using it for tools.

- **Wood (60)**—It's easy to obtain, especially in an emergency aboveground, but think of wood as just a means of getting to cobblestone because, unlike the latter, wooden tools can't mine the more valuable ores such as iron, gold, diamond, and redstone. You will at least need a wooden pickaxe to mine stone because doing so with your bare hands will just break the stone into unusable dust, but after that, swap them out for something tougher.
- **Stone (132)**—With just a touch over twice the longevity of wood, stone makes a great starting point for more serious mining and other activities such as slaying mobs. Stone tools are built from cobblestone blocks, which in turn come from stone. That may seem a little confusing, but it will seem natural enough after a while.
- **Iron (251)**—Iron will become your go-to material. It is found most commonly all the way from bedrock, the lowest layer of the Minecraft world, up to about 20 levels below sea level. Iron is used for building all kinds of tools, implements, and devices including armor, buckets (for carrying water, lava, and milk), compasses, minecarts, and minecart tracks. All these require at least iron ingots obtained by smelting the ore in a furnace, with each block of ore producing one ingot. Ingots and many other items are found scattered throughout the world in village chests, mine shafts, dungeons, and strongholds. You might also find them as drops from slain zombies and iron golems—although I definitely don't recommend tackling the latter.
- **Diamond (1562)**—It's the strongest material of all but also the most expensive given that diamonds are relatively rare. (You will enjoy the moment you do find your first diamond, but it's found only in the first 16 layers above bedrock, the lowest layer in the Minecraft world, and even then it's about 25 times as scarce as iron.) A diamond pickaxe is the only material that can successfully mine obsidian, a material required for creating the portal to reach The Nether region. Given that diamond is much scarcer than iron but only six times as durable, you should use iron pickaxes as much as possible and only switch to diamond when you need to mine obsidian to reach The Nether. You're better off saving any diamonds you find for weapons (a diamond sword does more damage, and that combined with its increased durability will ensure it lasts much longer than any other material while doing more damage where it counts), armor, and enchantment tables.

NOTE

Different Materials for Different Items

Durability applies to all tools, weapons, and armor, although there are differences in the materials that can be used in each case. For example, you can craft leather armor and make stone tools, but not vice versa.

The recipes for crafting tools from all materials are identical, save for the replacement of the head of the implement with the material of choice. As long as you have the right materials, that version of the tool appears selectable in the crafting interface:

- To make a stone pick, you need two wooden sticks for the handle and three cobblestone blocks.



- Replace in the same way for the axe and the sword.



- You might also want to add a shovel to your collection because it's about four times faster than using hands to harvest softer materials such as dirt, gravel, sand, clay, and snow, and it helps some of those blocks deliver resources rather than just breaking down. For example, only a shovel can gather snow balls from snow.



As you craft more items, you need to find somewhere to store those you don't need to use right away. You should also store other resources and food you find on your travels so they're not lost if you come to an unfortunate end. That comes next.

Chests: Safely Stashing Your Stuff

Whenever you head away from your secure shelter, there is always a reasonably high risk of death. Creepers, lava pits, long falls—they can all do you in. Respawning is only a moment away, but the real danger here is that any items you've collected and carry in your character's inventory drop at the location of your untimely death and may prove impossible to retrieve in the 5 minutes you have to get back to them before they disappear forever.

Chests act as an insurance policy. Put everything you don't need in a chest before you embark on a mission, and those things will be there when you get back or after you respawn.

The natural place to leave chests is in your shelter, but you can also leave them elsewhere, perhaps at a staging point as you work away in a mine or even outside. Mobs will leave them alone, and the only real risk you face is leaving them out in the open in a multiplayer game, or getting blown up from behind by a creeper in Single-player mode while you're rummaging around inside.

Chests come in two sizes: single and double. A single chest can store 27 stacks of items. Create a double chest by placing two single chests side by side. The double chest stores up to 54 stacks of items. Given that a stack can be up to 64 items high, that's an astonishing potential total of 3,510 blocks in a crate that takes just 2×1 blocks of floor space. If you've ever followed the *Doctor Who* TV series, consider chests the Tardis of storage!

Create a chest at your crafting table with eight blocks of wooden planks.



Place and then use **[LT]** to open it. You can then move items back and forth between your inventory and the chest. In Figure 3.4, I've transferred all the items I don't need for the next expedition.

Before you head out, there are two other things you should know: how to avoid monsters and how to deal with hunger. Read on.



FIGURE 3.4 Chests act as an insurance policy for your items so they aren't lost if you die. Use the inventory shortcuts you learned earlier to quickly move items between your active inventory and the chest's storage slots.

Avoiding Monsters

There's a key difference between the Minecraft world on the first and second days. In a word, *mobs*: hostile ones to be specific. Mobs only spawn in dark areas, and some only during the night, so if you are outside during your first day and stay in well-lit areas, you'll be reasonably—although not entirely—safe. By the second day, however, mobs have had a chance to build their numbers and wander about. It's not that likely you'll encounter them on day 2, but it's best to be prepared.

There are 14 types of hostile mobs. These are the ones you might meet on your second day outside:

- **Zombies**—Zombies burn up in sunlight but can still survive in shadows or rain, when wearing a helmet, and of course in caves all hours of the day or night. They are relatively easy to defeat, and if too many come after you from out of the shadows, just head to a well-lit area and keep your distance while they burn up in the sun.

- **Skeletons**—Skeletons also burn up in sunlight unless they are wearing a helmet, and they can survive at any time in lower light conditions. They're quite deadly with a bow and arrow and best avoided for now.
- **Spiders**—Spiders come in two variants: large or blue. You'll probably only see the larger spiders at this stage. They are passive during the day but become hostile in shadow and can attack at any time if provoked. They'll climb, they'll jump, and they are pretty darn fast. Fortunately, they're also easy to kill with some swift sword attacks. The blue spiders are a smaller, poisonous variant called cave spiders. They live only in abandoned mine shafts underground, but in substantial numbers. If you suffer from arachnophobia, I don't have much good news for you, except that with a little time you'll get used to them and they won't seem quite so nasty.
- **Creepers**—Creepers have a well-earned reputation as the Minecraft bad guys. They are packed to their green gills with gunpowder, and they'll start their very short 1.5-second fuse as soon as they are within three blocks of you. Their explosions can cause a lot of real damage to you, nearby structures, and the environment in general. If you hear a creeper's fuse—a soft hissing noise—but can't see it, run like heck in the direction you're facing. Remember to sprint by pushing your **(LS)** forward twice in quick succession. With a little luck, you'll get three blocks away and the creeper's fuse will reset. Creepers are usually best dealt with using a ranged attack from a bow and arrow, but if you sprint at them with an iron or diamond sword and take a swipe at just the right moment, mid-leap, when you're past the apex of the arc and descending in a wild fury, you can send them flying back out of their suicidal detonation range, causing the fuse to reset. Most creepers despawn (that is, disappear) around noon, leaving the afternoon generally free of their particular brand of terror.
- **Slimes**—Slimes spawn in the swamp biome and in some places underground. Their initial appearance is that of a quite large Jello-like green block, but they won't sit there gently shaking: they are more than capable of causing real damage. Attacking eventually breaks them up into 2–4 new medium-sized slimes. These can still attack but are relatively easily killed, only to spawn a further 2–4 tiny slimes each! These last don't cause any attack damage, but may still push you into peril if you're unlucky.

If you come across a lone spider, a zombie, or even a slime, now is as good a time as any to get in some sword practice. Just point your crosshairs at the creature and strike repeatedly with **(RT)**. Timed well, you can also block their attacks with **(LT)**. Keep clicking as fast as you can, and you've got a very good chance of killing the mob and picking up any items it drops before it lands too many blows. Try to avoid the other mobs for now.

TIP

Switch to Peaceful Mode to Get a Break

Getting mobbed by mobs? Remember that you can always exit the game and reenter it, changing the Difficulty setting to Peaceful as you open the game once more. Peaceful mode despawns all hostile mobs and allows your health to regenerate. But do try to switch the level back to Normal as soon as you can.

So how do you avoid mobs? Use these tips to survive:

- Stay in the open as much as you can, avoiding heavily wooded areas if possible.
- Most mobs have a 16-block detection radar. If they can also draw a line of sight to your position, they will enter *pursuit* mode. (Spiders can always detect you, even through other blocks.) At that point they'll relentlessly plot and follow a path to your position, tracking you through other blocks without requiring a line of sight. Pursuit mode stays engaged much farther than 16 blocks.
- Keep your sound turned up because you'll also hear mobs within 16 blocks, although creepers, befitting their name, are creepily quiet.
- Avoid skirting along the edges of hilly terrain. Creepers can drop on you from above with their fuses already ticking. Try to head directly up and down hills so you have a good view of the terrain ahead.
- Mobs are quite slow, so you can easily put some distance between them and yourself by keeping up a steady pace and circling around to get back to your shelter. Sprint mode will leave them far behind.

CAUTION

Sprinting Makes You Hungry

Sprint mode burns up hunger points, so try to use it only in emergencies. Unfortunately, in a real emergency, making a dash from a creeper when your health is low, you'll find it impossible to sprint. Remember, always keep your hunger topped up so your health continually regenerates and you'll avoid getting caught in this leaden-footed nightmare.

Hunger Management

Hunger plays a permanent role in Minecraft, much as in real life. While it's only possible to starve to death on Hard difficulty, hunger does affect your character in other ways, so it's always important to ensure you have the equivalent of a couple of sandwiches packed before heading deep into a mine or on a long trek.

Hunger is a combination of two values: the one shown in the HUD's hunger bar, as well as a hidden value called *saturation*. The latter provides a buffer to the hunger bar, decreasing first. In fact, your hunger bar doesn't decrease at all until saturation reaches 0. At that point, you see the hunger bar start to jitter, and after a short while it takes its first hit. Saturation cannot exceed the value of the hunger bar, so with a fully satiated bar of 20 points, it's possible to have up to 20 points of saturation. However, a hunger level of 6 points also only provides a maximum of 6 points of saturation, and that makes you vulnerable.

You'll find some key information about the hunger system here:

- On Easy and Normal Survival modes, your character won't drop dead from hunger, although it can still pose a danger because your health won't regenerate if hunger has dropped more than 2 points from its maximum. If you're close to home and pottering around in your farm or constructing some building extensions, you're fairly safe, but your health *will* start to drop. Eat something as soon as you can to rebuild your hunger bar and therefore your health.
- Sprinting and jumping up blocks both cost hunger points. Also, sprinting becomes impossible when the hunger bar drops below 6 hunger points, or 3 shanks, as shown in the HUD.
- Keeping a relatively full stomach at 18 hunger points (9 shanks in the HUD) allows health to regenerate at 1 point (half a heart) every 4 seconds.
- Health depletes if the hunger bar drops to 0, increasing the risk of dying from one of the many imaginative ways on offer in Minecraft's deadly smorgasbord (see Figure 3.5).
- There are some limits to the amount health can drop that vary according to the difficulty level. On Easy, health cannot deplete from hunger further than 10 points, or half the full quotient. On Normal, it drops to 1 point, which is an extreme level of vulnerability. On Hard, there are no limits; don't ignore the hunger bar, or death from starvation could be just moments away. See "Food on the Run" later in this chapter to avoid this unfortunate fate.



FIGURE 3.5 The effects of extreme hunger on Normal difficulty: health depletes to just one point, or half a heart.

Your Mission: Food, Resources, and Reconnaissance

Your second day is the perfect opportunity to gather food and other resources and to take a quick survey of the landscape surrounding your first shelter, in particular to find somewhere suitable for your first outdoor abode. Keep an eye out for any of the following:

- **Passive mobs**—Chickens, pigs, and cows all provide a ready source of food, or at least raw protein that can be cooked on the furnace and made more nutritious. Cows also drop leather that you can use for your first armor and can be milked, giving you an instant cure for food poisoning. Chickens also lay eggs, which are used to make cake, so gather any that you find. You can also obtain feathers from killed chickens—useful for later crafting arrows.
- **Natural harvest**—The harvest includes cocoa pods, apples, sugar cane, carrots, potatoes, and seeds. Knock down tall grass to find seeds; then use a hoe to till some ground next to water. Seeds mature into wheat within 5–8 day/night cycles, although wheat is also grown by villagers, as you can see with the wheat crop shown in Figure 3.6. From wheat, it's easy to bake bread, one of the simplest but most effective sources of food, especially if there are no passive mobs nearby. When combined with cocoa pods, bread will make cookies, which are always useful for a quick hunger bar top-up. See Chapter 6, “Crop Farming,” for more on agricultural techniques.

- **Construction resources**—You can mine plenty of cobblestone quite safely by expanding your original shelter, digging into the terrain. But some other resources will definitely come in handy. Wood is always useful. If you see any sand, mine it so you can smelt it into glass blocks to let light into your shelter and provide a view. (There’s no point moving from your first cave into the outdoor equivalent of another!) Also keep an eye out for coal. You can often see it in veins on the surface of the walls of small caves or on the sides of cliffs. If you can safely get to it, make like a miner and dig it out. Use the coal to make torches and to smelt other ores.



FIGURE 3.6 Wheat is an easy crop to farm and then to turn into bread—a handy food if you’re stuck with no other options.

TIP

Making Use of Bones

The morning sun burns up skeletons, leaving behind bones that you can craft into bone meal. Bone meal acts as a fertilizer, helping your crops grow faster. You can also use bone to tame wolves, providing you with an extra level of protection. Chapter 7, “Farming and Taming Mobs,” has a lot more information on breeding and taming mobs in Minecraft.

Start early, heading out with a stone sword at the ready, just in case. If you are low on wood, swing an axe at a few nearby trees.

Move carefully so you don't lose your bearings. The sun rises in the east and sets in the west, and the clouds also travel from east to west, so you can always at least get your bearings. Following a compass cardinal point (north, south, east, or west) using the sun and clouds as a reference can lead you away and reasonably accurately back home again.

Food on the Run

If you are getting dangerously hungry, head to the nearest equivalent of a fast food outlet—a passive mob—sword at the ready. Your best bet is to look for cows and pigs because they each can drop up to three pieces of raw meat, with each restoring 3 hunger units and 1.8 in saturation. They're an excellent target of opportunity. You can also eat raw chicken, although with a 30% chance of developing food poisoning, or you can try rotten meat harvested from zombies, which is guaranteed to give you a taste of the stomach aches. But after you have mined three pieces of iron and crafted a bucket, you can also cure any type of food poisoning by drinking milk obtained with that bucket from a cow. You can also eat any amount of poisoned meat, gaining the restorative benefits, and curing the whole lot with one serving of milk. So keep that rotten flesh the zombies drop around! And the bucket o' milk.

That said, unless you are desperate, it is actually much better to take the time to cook all your meat first. In fact, the secondary processing of foods makes them all healthier, restoring more hunger and saturation points. If you are far from home you could choose to always carry a furnace in your inventory, along with fuel. Place it, cook, and break it up to use again. Or you could, if you don't mind seeming like a crazed pyromaniac, both kill and cook pigs, chickens, and cows in one blazing swoop by setting the ground beneath them on fire with a flint and steel (click on the ground next to the animal) or, a little more chaotically, by pouring lava from a bucket. Just take caution that you don't do this anywhere it could pose a risk such as near that fantastic wood cabin you just spent the last three weeks building; there's no undo in Minecraft.

NOTE

Fishing in the Sea of Plenty

Mobs such as chickens, cows, and pigs spawn quite rarely compared to hostile mobs, so consider them a nonrenewable resource if you kill them in the wild. You're better off breeding them in a farm so they can be readily replaced. Fish, on the other hand, are unlimited in quantity and very plentiful, and fishing from a boat works very well. Your hunger bar won't decrease, and you'll be relatively safe from hostile mobs. Even better, you can eat on the go as you won't ever get food poisoning from raw fish. Sushi anyone? See Chapter 7 for more information.

TIP

Let Them Eat Cake

What's the quickest way to fill your hunger bar? Eat cake. Unlike another well-known game, Minecraft's cake is not a lie. Cake has a quite complicated recipe, but each full cake provides up to 6 slices, each worth 1.5 hunger points, or 9 in total, and it's less resource intensive than creating golden apples. Minecraft rewards calories, so eat as much as you like without penalty, quickly building back your full hunger bar but, as in the real world, the nutrients are lacking, so cake doesn't provide any saturation benefit. Make sure you eat some more nutritional foods such as protein as your hunger bar starts to top out to ensure you also get that extra boost. Personally speaking, if there was a choice between cake and pizza, I'm going for the latter!

Finally, if you simply cannot find mobs, your hunger bar has dropped to starvation, and your health has plummeted to half a point, consider at least planting a wheat field and waiting it out in your shelter for a few days so that at least three blocks of wheat can grow and be baked into bread.

If all is lost, even then, consider one final alternative—a pretty neat if somewhat dramatic trick. Assuming you have reset your spawn point to a bed or are still near origin, head to your shelter, place everything you carry in a chest, and then head outside and either jump off a cliff, drown in a lake, or wait for a mob to kill you. You respawn back in your shelter with full health, a full hunger bar, and all your possessions waiting for you in the chest. The only downside is that you'll lose some experience points in the process, which impacts enchanting, but I'm sure you can build those up again quick enough. It's a good last resort, and will let you quickly head out again, fully equipped, to live another day.

Finding a Building Site

As you scout around, keep in mind that you are also looking for a new building site. This doesn't have to be fancy or even particularly large. A 6×5 space manages just fine, and even 6×4 can squeeze in the basics. You can also level ground and break down a few trees to clear space. I did this in Figure 3.7.

I usually prefer space that's a little elevated because it provides a better view of the surroundings, but it's perfectly possible to create a protected space just about anywhere. You may even decide to go a little hybrid, building a house that's both tunneled into a hill and extending outside.



FIGURE 3.7 A nice, flat, elevated building site created on a nearby hill after filling out the platform with dirt.

TIP

Light Those Caves

Check for any caves or tunnels close to your site's location. If they aren't too big, light them up with torches to prevent mobs spawning inside and wandering out during the day, or just block their entrances for now.

So what can we build on this site? Let me show you a basic structure. It takes 34 cobblestone blocks dug out of the first shelter and 12 wood blocks for the roof obtained by cutting down 3 trees. This is about as minimalistic as it gets.

You can build the roof from almost any handy material, including dirt, cobblestone, and wood. Avoid blocks that fall down, such as gravel and sand. A two-block-high wall keeps out all mobs except for spiders because they can climb walls. An overhang on the wall keeps spiders out because they can't climb upside-down, but it's easier to just add a roof, and this will protect you if there are any trees nearby the spiders can climb and use as an arachnid's springboard to jump straight into your dwelling. (Yes, it's happened to me. Sent shivers up my spine.) Figure 3.9 shows the finished hut with a few torches on the outside to keep things well lit.



FIGURE 3.8 The layout for a small cobblestone cabin using a total of 46 blocks, roof not shown. The sharp-eyed will notice it can be reduced in width one space further, but for the sake of four blocks, that would feel just a little too claustrophobic.



FIGURE 3.9 The finished hut—basic but serviceable. And it’s spider proof. Although there is a large gap above the door, in Minecraft’s geometry the door fills the entire space. Spiders are two blocks wide, so they can’t fit through a one-block-wide gap. You could actually leave the door wide open, and spiders will just gather outside and make horrible noises, but don’t do that because it’s an invitation for other mobs to enter.

TIP**No Housing Codes in Minecraft**

The roof in Figure 3.9 rests right on the lip of the inner wall. You can't directly build a roof like this from scratch. First, place a block on top of the wall, and then attach the inner block for the roof. Remove the first block, and the inner block floats. Attach new blocks to that to build out the roof structure. It won't pass a building inspection, but it certainly works in Minecraft.

Building a wall even two blocks high can take a little bit of fancy footwork. Some basic techniques help:

- Place your walls one layer at time. Put down the first layer, and then jump on top to place the second.
- If you fall off, place a temporary block on the inside of your structure against the wall, and use this to climb back up. You can remove it when you're finished.
- Use pillar jumping if you need to go higher. While looking directly down, press **A** to jump and then use **RT** to place a block underneath you. You land on that block instead of the one below. Repeat as often as necessary. Dig the blocks out from directly underneath you to go back down.
- Click  to activate Sneak mode as you work around the top of tall walls so you don't fall off. You can even use this technique to place blocks on the side of your current layer that are normally beyond sight.

See Chapter 8 for more building techniques and ideas.

A Resourceful Guide to the Creative Mode Inventory

Minecraft resources fall into several primary categories. Some of them are a natural early focus as you improve your position from those gathered for first-night survival; others come into more focus as you get further through the game, gear up for your exploration of The Nether and The End regions, and start to become more creative with all that Minecraft has to offer. Here's a quick summary of the categories. You can view all the possible tools and resources by opening a game in Creative mode and pressing **X**, as shown in Figure 3.10. The categories that follow correspond to the tabs running across the upper and lower sections of the Creative mode inventory. Scroll the inventory with .



FIGURE 3.10 Creative mode inventory provides access to the full set of resources and tools.

- **Building Blocks**—Building blocks are used, as you might expect, for construction, including housing and almost anything else. Build a bridge for your redstone rail. Construct a dam. Elevate a farm above a level that won't get trampled by mobs, or put up a fence. Build a skyscraper or reconstruct a monument. Minecraft provides a large number of primary blocks—cobblestone, gravel, wood, and dirt, etc.—that can be harvested directly, but things definitely become more interesting once you start creating secondary types of blocks from primary materials. You can store many items more efficiently (for example, by converting nine gold ingots into a single gold block) and climb more efficiently by crafting stairs instead of jumping up and down blocks on well-travelled routes. These blocks are, without being too punny, the building blocks of creativity.
- **Decorations**—Decorations are something of a catchall category. Generally, they are things you can use to make your constructions more interesting. Some of those are just visual, such as the various mob heads, whereas others, such as item frames and bookcases, also serve functional purposes.

- **Redstone and Transportation**—Redstone is an almost magical resource. You can use it to build powered circuits, quite complex ones, and then activate pistons to automatically harvest a farm plot, set up traps, open and close doors, and a huge amount more. The limits are set only by your imagination. Redstone is also used to craft powered rail tracks and a range of other useful items such as a compass and clock. This category also includes other items used for transportation such as the various types of minecarts and boats. See Chapter 9, “Redstone, Rails and More,” for more information. There are enough options here to enable you to build everything from massive transportation systems to incredible rollercoasters.
- **Materials**—Materials is a catchall category, composed of items derived from another action. For example, killing a chicken can drop feathers, and you’ll need those for the fletching on arrows unless you gather arrows directly from slain skeletons.
- **Food**—Food contains the full range of edibles, including the enchanted form of the golden apple, the rarest edible in the game. Take a few of these with you the next time you think you’ll be in a tight spot, and you might just be able to make it through that moaning zombie horde.
- **Tools, Weapons, and Armor**—Tools can be wielded as weapons, but not very effectively. They are, however, great at digging, chopping, hoeing, and setting a Nether Portal on fire with the flint and steel. You’ll also find shears for stripping the wool from sheep, a fishing rod, and the full set of armor and tools.
- **Brewing**—The Brewing tab contains all possible potions and a number of the rarer ingredients required that don’t fit into other categories. Potions are incredibly handy, delivering such useful effects as protection from fire—something of an advantage when traveling to The Nether. You can learn more about brewing in Chapter 10. Use  in this tab to cycle through the potions of different strengths.
- **Miscellaneous**—Miscellaneous contains a range of useful and obscure items. You’ll find the buckets quite handy for setting up new water and lava sources, and you can use the eggs to spawn most of the mobs, populating a farm and more.

Use  to take individual items, or  to take the full permissible stack. Get rid of a single stack from your Hotbar by picking it up, dragging it off the side of the inventory screen, and pressing  once more to drop them. You can also replace items by dropping the new one on top of the old.

The Bottom Line

Congratulations! You've now learned everything you need to know to understand how your character is doing, improve your tools for better longevity, hopefully not get lost on your travels, and create your first mob-proof outdoor shelter.

These are the keys to Minecraft. Just remember to head back to your chest often to store the valuables you've gathered or to build other chests further afield.

You might also want to consider building a pillar and platform on top of your new shelter. It can help you survey your terrain and act as an easy-to-see landmark when you're out and about. Put some torches on top because mobs can spawn on any platform, no matter how small, and you don't want to poke your head up through the platform only to discover a creeper on a short fuse. It will also help you spot home from a distance.

The next chapter is all downhill, but in a good way. You'll be delving deep into your first mine.

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INDEX

Numerics

2x1 ladder descent, mining and, 13, 70-71

A

adjusting Gamma, 229

airlocks, crafting, 34

Allow Friends of Friends option (More Options button), 11

anchor blocks, 165

AND gates, 179-180

animals, 127

breeding, 128-130

cats, 129

chickens, 129

crafting arrows, 96

fences, 128

cooking, 57

cows, 129

establishing farms, 127-129

fences, 128

fishing, 134

food poisoning, 57

herding, 129

hostile mobs and safety, 130

leading, 129

mooshrooms, 129

ocelots, 129

pigs, 129, 133

raw, eating, 57

resources, animals as, 55-57

riding, 133

sheep, 129-130

squid, 135

taming, 129

wolves, 129

anvils

combining two items with, 200

crafting, 198

enchancements, 200

placement of, 199

renaming items, 200

repairing items, 200

Aqua Affinity enchantment, 197

architectural plans, finding, 140

armor, 93

crafting

recipes, 99

requirements, 97-98

critical hits, 93

damage absorption, 98

dying, 101

enchancements, 197

The End survival checklist, 235

The Nether survival checklist, 226

armor bar (HUD), 44

Armor slots (inventory), 27

arrows and bows

- crafting, 95-96
- The End survival checklist, 235
- fighting, 97
- The Nether survival checklist, 226
- skeletons, 86, 95

arrow slits, building, 157

attacking, fighting with swords, 52

automated farms, 114-115, 118

- crop selection, 117
- harvesting, 116
- piston harvesters, 118-119
- sticky piston harvesters, 120
- sugar cane, 124
- water harvesters, 121-123

automatic doors, building, 170-173

avoiding mobs, 53

awkward potions, 203-204

axes, crafting, 30

B

Bane of Arthropods enchantment, 196

barbeques, building, 145

barricades, building, 231

bases

- mining bases, setting up, 77-78
- underwater bases, mob attacks, 45

basins, 214

BBQ, building, 145

beds

- crafting, 38-41
- The End, 234-235
- The Nether, 234
- taking with you, 41
- villages and, 211
- wool, crafting, 39-40

bedside tables, building, 142

Beijing, China, 138

biomes

- Far Lands or Bust, 11
- trees
 - first-night survival*, 25
 - lumberjacking*, 25-26

Blast Protection enchantment, 197

blaze rods, The Nether, 232

blaze rods, brewing potions, 201

blazes, The Nether, 233

blaze spawners, 232

blocking attacks, 94

blocking off areas (mining), 69

blocks

- anchor blocks, 165
- cobblestone, The Nether survival checklist, 226
- floating blocks, 140
- netherbrick, 230
- Nether quartz, 230
- The Nether survival checklist, 226
- building barricades, 231
- note blocks as output devices, 170
- obsidian
 - The End survival checklist*, 235
 - Nether Portals, building*, 227
 - The Nether survival checklist*, 227
- powered blocks, 164
 - buttons*, 165
 - levers*, 165
 - two block rule*, 166
- scale of, 138
- signs, placement of, 141

- snow blocks, The Nether survival checklist, 226
- soft blocks, building underwater, 148, 151
- wood blocks, The Nether survival checklist, 227
- bobbers (fishing), 134
- bones
 - as resources, 56
 - farming, benefits in, 112
- books
 - crafting, 192
 - enchantment tables, 192
 - storing enchantments, 194
- bookshelves, casting enchantments, 194
- bookshelves, building, 145
- bottles, crafting, 203
- bow and arrows
 - crafting, 95-96
 - The End survival checklist, 235
 - fighting, 97
 - The Nether survival checklist, 226
- bowls, crafting, 126
- branch mines, 75-77
- bread, crafting, 58
- breaking your fall while mining, 71-72
- breeding animals, 128-130
- brewing
 - bottles, crafting, 203
 - brewing stands, building, 203
 - Creative mode inventory, 63
 - potions, 200
 - blaze rods*, 201
 - Nether wart*, 201-204
 - soul sand*, 201-202
 - testing potions*, 202
- brightness, adjusting, 229
- buckets, mining and, 66
- building, 137
 - arrow slits, 157
 - automatic doors, 170-173
 - barricades, The Nether, 231
 - BBQ, 145
 - beds, 141
 - bedside tables, 142
 - bookshelves, 145
 - casting enchantments*, 194
 - brewing stands, 203
 - chairs, 141
 - clocks (wall), 143
 - dining tables, 141
 - enchantment tables, 188
 - books*, 192
 - casting enchantments*, 192-193
 - obsidian*, 189-191
 - examples of, 137-138
 - fantasy trees, growing, 143
 - fireplaces, 145
 - floors (raised/lowered), 145
 - fountains, 144
 - frames (item), 143
 - hedges, growing, 142
 - indoor plants, growing, 142
 - interior design
 - BBQ*, 145
 - beds*, 141
 - bedside tables*, 142
 - bookshelves*, 145
 - chairs*, 141
 - clocks (wall)*, 143
 - dining tables*, 141
 - fireplaces*, 145

- floors (raised/lowered)*, 145
- frames (item)*, 143
- indoor plants*, 142
- item frames*, 143
- netting*, 145
- paintings*, 144
- signs*, 141
- wall clocks*, 143
- wall maps*, 143
- item frames, 143
- location, determining, 139, 149
- maps (wall), 143
- Nether Portals, 227
- netting, 145
- perimeters, 153
 - arrow slits*, 157
 - ditches*, 153-154
 - lighting*, 155
 - mobs*, 155-157
 - towers*, 155
 - walls*, 157
- pits
 - mobs*, 155-157
 - pressure plates*, 156
- plans, finding, 140
- planter boxes, 143
- ponds, 144
- pools, 144
- resource packs, 138
- scale of, 138
- security
 - arrow slits*, 157
 - ditches*, 153-154
 - lighting*, 155
 - mobs*, 155-157
 - perimeters*, 153-157
 - pits*, 155-157
 - pressure plates*, 156
 - towers*, 155
 - walls*, 157
- signs, placement of, 141
- sliding doors, 174-176
- tables
 - bedside tables*, 142
 - dining tables*, 141
- tennis courts, 145
- tool enchantments, 197-198
- tracks
 - halfway stations*, 185
 - mobs, protecting tracks from*, 186
 - powered rails*, 184
 - zig zags*, 184
- trees (fantasy), growing, 143
- underwater, 147, 151-152
 - Creative mode*, 147
 - doors*, 150
 - enchantments*, 153
 - flooding*, 151
 - island spawn points*, 149
 - ladders*, 150
 - lighting*, 148-150
 - location*, 149
 - oxygen*, 150
 - required equipment*, 148-149
 - security*, 153
 - signs*, 150
 - soft blocks*, 148, 151
 - Survival mode*, 147
- villages, building next to, 139
- wall clocks, 143
- wall maps, 143

- walls, 157
- water, building on/under, 139-140
- buildings
 - building blocks, 62
 - decoration blocks, 62
 - housing codes, 61
 - huts, building, 59-60
 - lighting, 59
 - overhangs, spiders and, 59
 - redstone, 63
 - sites, finding, 58
 - walls, building, 61
- built-in tutorial, 8
- buttons, 162. *See also* pressure plates
 - automatic doors, 170
 - powered blocks, 165

C

- cake, 58
- carts, 181
 - destroying/reusing, 182
 - powered minecarts, 181-182
 - rails, 159
 - detector rails, 162, 184*
 - normal rails, 183*
 - powered rails, 183-184*
 - storage minecarts, 182
 - tracks, building
 - halfway stations, 185*
 - mobs, protecting tracks from, 186*
 - powered rails, 184*
 - zig zags, 184*
 - trains, minecarts as, 182
 - underground rails, 183
- cats (ocelots), 129
- caverns, 214
- caves
 - crafting shelter from, 32
 - doors, importance of, 83
 - lighting, 59
 - mining caves, 65-66
- cave spiders, fighting, 86-87
- chairs, building, 141
- charcoal
 - crafting, 35
 - furnaces, fueling, 37
- cheats, seeding, 19
- chests, 50
 - crafting, 50
 - Ender chests, 224, 227
 - mining and, 78
 - The Nether survival checklist, 227
 - opening, 50
 - sizes of, 50
 - storage minecarts, 182
- chickens, 129
 - arrows, crafting, 96
 - fences, 128
- children in villages, 210-212
- China, city of Beijing, 138
- chopping trees. *See* lumberjacking
- chunks (mining), 78
- circuits
 - AND gates, 179-180
 - NOR gates, 179
 - NOT gates (inverters), 177
 - OR gates, 178
 - repeater loops, 180
- cliffs
 - crafting shelter from, 32
 - The Nether, 230

- clocks, crafting, 220-221
- clocks (wall), building, 143
- closing doors, 34
- clothing, dyeing wool, 130
- coal
 - charcoal, crafting, 35
 - furnaces, fueling, 37
- cobblestone, 56
 - furnaces, crafting, 36
 - huts, building, 60
 - The Nether survival checklist, 226
 - powered blocks, 165
- cobwebs, netting, 145
- cocoa beans, 104-105
- color, dyeing and, 131
- combat
 - armor, 93
 - crafting*, 97-99
 - critical hits*, 93
 - damage absorption*, 98
 - bows and arrows, 97
 - crafting*, 95-96
 - target practice*, 97
 - creepers, 88-89, 101
 - critical hits, 93
 - enchancements, 196
 - Ender Dragon, defeating, 239, 242
 - Endermen, 90
 - hostile mobs, 82
 - iron golems, 92-93
 - skeletons, 85-87
 - snow golems, 91-92
 - spiders, 84-85
 - cave spiders*, 86-87
 - spider jockeys*, 87
 - sprinting and, 94
 - swords
 - blocking attacks*, 94
 - crafting*, 94
 - damage*, 94
 - fighting with*, 52
 - weapons, 93
 - arrows and bows*, 95-97
 - bows and arrows*, 95-97
 - critical hits*, 93
 - swords*, 94
 - zombies, 82-83, 90-91
- combining items with an anvil, 200
- compasses, crafting, 46, 219
- construction, 137
 - arrow slits, 157
 - automatic doors, 170-173
 - barricades, The Nether, 231
 - BBQ, 145
 - beds, 141
 - bedside tables, 142
 - bookshelves, 145
 - casting enchantments*, 194
 - brewing stands, 203
 - chairs, 141
 - clocks (wall), 143
 - dining tables, 141
 - enchantment tables, 188
 - books*, 192
 - casting enchantments*, 192-193
 - obsidian*, 189-191
 - examples of, 137-138
 - fantasy trees, growing, 143
 - fireplaces, 145
 - floors (raised/lowered), 145
 - fountains, 144
 - frames (item), 143

- hedges growing, 142
- huts, 59-60
- indoor plants, growing, 142
- interior design
 - BBQ*, 145
 - beds*, 141
 - bedside tables*, 142
 - bookshelves*, 145
 - chairs*, 141
 - dining tables*, 141
 - fireplaces*, 145
 - floors (raised/lowered)*, 145
 - frames (item)*, 143
 - indoor plants*, 142
 - item frames*, 143
 - maps (wall)*, 143
 - netting*, 145
 - paintings*, 144
 - signs*, 141
 - wall clocks*, 143
 - wall maps*, 143
- item frames, 143
- location, determining, 139-149
- maps (wall), 143
- Nether Portals, 227
- netting, 145
- lighting, 59
- overhangs, spiders and, 59
- perimeters, 153
 - arrow slits*, 157
 - ditches*, 153-154
 - lighting*, 155
 - mobs*, 155-157
 - towers*, 155
 - walls*, 157
- pits
 - mobs*, 155-157
 - pressure plates*, 156
- plans, finding, 140
- planter boxes, 143
- ponds, 144
- pools, 144
- resource packs, 138
- scale of, 138
- security
 - arrow slits*, 157
 - ditches*, 153-154
 - lighting*, 155
 - mobs*, 155-157
 - perimeters*, 153-157
 - pits*, 155-157
 - pressure plates*, 156
 - towers*, 155
 - walls*, 157
- signs, placement of, 141
- sites, finding, 58
- sliding doors, 174-176
- tennis courts, 145
- tracks
 - halfway stations*, 185
 - mobs, protecting tracks from*, 186
 - powered rails*, 184
 - zig zags*, 184
- trees (fantasy), growing, 143
- underwater, 147, 151-152
 - Creative mode*, 147
 - doors*, 150
 - enchancements*, 153
 - flooding*, 151
 - island spawn points*, 149
 - ladders*, 150

- lighting*, 148-150
- location*, 149
- oxygen*, 150
- required equipment*, 148-149
- security*, 153
- signs*, 150
- soft blocks*, 148, 151
- Survival mode*, 147
- villages, building next to, 139
- wall clocks, 143
- wall maps, 143
- walls, 157
- water, building on/under, 139-140
- controlling multiplayer games
 - Host Options, 16-17
 - Host Privileges Options, 17-18
- controls, 19-20
 - E key, opening inventory, 27
 - Esc key, 24
 - Shift key
 - pausing on ladders*, 71
 - sneaking around hazards*, 77
- cooking, 57
- cows, 129
- crafting
 - airlocks, 34
 - anvils, 198
 - armor
 - recipes*, 99
 - requirements*, 97-98
 - arrows and bows, 95-96
 - beds, 38-40
 - books, 192
 - bottles, 203
 - bowls, 126
 - bows and arrows, 95-96
 - bread, 58
 - charcoal, 35
 - chests, 50
 - clocks, 220-221
 - compasses, 46, 219
 - crafting table, 33
 - doors, 33
 - emergency shelters, 35
 - furnaces, 36
 - heat sources, 35-36
 - light sources, 35-38
 - pillar jumping, 35
 - shelter, 32-33
 - doors*, 33-35
 - emergency shelters*, 35
 - heat sources*, 35-36
 - light sources*, 35-38
 - swords, 94
 - tools
 - axes*, 30
 - durability*, 49
 - handles*, 30
 - pickaxes*, 30
 - torches, 36-38
 - weapons
 - arrows and bows*, 95-96
 - bows and arrows*, 95-96
 - swords*, 94
 - wool, 39-40
- crafting tables, 33
- Create New World screen, selecting game mode, 10
- Creative mode, 13
 - inventory, 61
 - brewing*, 63
 - building blocks*, 62

- decoration blocks*, 62
- foodstuffs*, 63
- materials*, 63
- miscellaneous*, 63
- redstone*, 63
- tools*, 63
- underwater, building, 147
- creepers, 52
 - defending against, 101
 - fighting, 88-89
 - gunpowder and, 89
 - swimming and, 89
- critical hits (combat), 93
- crop farming, 103
 - automated farms, 114-115, 118
 - crop selection*, 117
 - harvesting*, 116
 - piston harvesters*, 118-119
 - sticky piston harvesters*, 120
 - sugar cane*, 124
 - water harvesters*, 121-123
 - pumpkins, 105
 - raised beds, 104, 113-114
 - saving crops, 113
 - seeds, 104, 110
 - self-sufficiency, 104
 - sneaking and, 113
 - soil, 104
 - sugar cane, 105-106
 - automated farms*, 124
 - piston farms*, 124
 - tending farms, 104
 - underground farms, 104, 124
 - wheat, 103, 106
 - growth cycles*, 111
 - harvesting*, 112-114
- crosshairs (bows and arrows), targeting with, 97
- current, vertical current, 176-177
- custom world, creating, 9

D

- damage
 - absorption, 98
 - swords, 94
- dandelions, dyeing and, 131
- Dante
 - The End, Dante's influence on, 234
 - The Nether, Dantess influence on, 234
- decoration blocks, 62
- defense
 - barricades, building, 231
 - cave doors, 83
 - Creeper attacks, 101
 - doors, importance of, 83
 - Ender Dragon, defeating, 239, 242
 - spiders, walls, 84
 - tunnels, 83
- defensive enchantments, 197
- defensive mobs
 - iron golems, fighting, 92-93
 - snow golems, fighting, 91-92
- desert temples, 215-216
- destroying/reusing minecarts, 182
- detection systems
 - detector rails, 162, 184
 - tripwires, 162
- detector rails, 162, 184
- diamond (material type), 48
- difficulty levels, 10
- digging permanent watering holes, 111
- dimensions
 - The End, 24
 - The Nether, 24
 - Overworld, 24
- dining tables, building, 141
- Disable Autosaving option (More Options button), 12
- dispensers as output devices, 169
- ditches, building, 153-154
- doors
 - airlocks, crafting, 34
 - as output devices, 169
 - automatic doors, building, 170-173
 - caves and tunnels, 83
 - crafting, 33
 - installing, 35
 - iron doors, 34, 227
 - opening/closing, 34
 - sliding doors, building, 174-176
 - trapdoors as output devices, 169
 - underwater, building, 150
- dungeons, 217
- durability
 - defining, 47-48
 - diamond, 48
 - gold, 47
 - iron, 48
 - stone, 48
 - tools, improving, 47-49
 - wood, 48
- dyeing
 - armor, 101
 - color, choosing, 131
 - dandelions and, 131
 - Lapis Lazuli ore and, 131
 - squid ink and, 135
 - wool, 130

E

earning XP, 195-196

Easy option (Survival mode), 14

Efficiency enchantment, 198

E key, opening inventory, 27

emeralds, farming, 213

emergency shelters

crafting, 35

pillar jumping, 35

enchantments, 187

anvils, 198-200

armor, 197

benefits of, 187

books, 192-194

bookshelves, casting enchantments, 194

casting, 192-194

enchantment tables, 188

books, 192

casting enchantments, 192-193

obsidian, 189-191

methods of gaining, 188

respiration, building underwater, 153

storing with books, 194

tools, 197-198

underwater, building, 153

water affinity, building underwater, 153

weapons, 196

Ender chests, 224, 227

Ender crystals, Ender Dragon and, 239

Ender Dragon, 225, 238

defeating, 239, 242

egg, collecting, 243

Endermen, 239, 242

ender pearls, 90

Eyes of Ender, 90

fighting, 90

The End, 24, 223

Dante's influence on, 234

Ender chests, 224

Ender crystals, 239

Ender Dragon, 225, 238

defeating, 239, 242

egg, collecting, 243

Endermen, 90, 239, 242

End Poem, 243

End Portals, 238

Eyes of Ender, 90, 235-238

navigating, 225

silverfish spawners, 237

sleeping in, 234-235

strongholds, finding, 238

survival checklist, 235-236

enemies

avoiding, 53

creepers, 52

defending against, 101

fighting, 88-89

gunpowder and, 89

swimming and, 89

Endermen

ender pearls, 90

Eyes of Ender, 90

fighting, 90

fighting, 52

iron golems, fighting, 92-93

pursuit mode, 53

- skeletons, 52
 - arrows and*, 86, 95
 - fighting*, 85-86
 - spider jockeys*, 87
 - slimes, 52
 - snow golems, fighting, 91-92
 - spiders, 52
 - cave spiders*, 86-87
 - defending against*, 84
 - fighting*, 84-85
 - overhangs and*, 59
 - spider jockeys*, 87
 - string*, 84
 - uses for*, 84
 - walls as defense*, 84
 - zombies, 51
 - crafting arrows*, 95
 - fighting*, 82-83
 - rotten meat*, 83
 - zombie pigmen*, 90-91
 - equipment
 - The End survival checklist, 235
 - The Nether survival checklist, 226-227
 - Esc key, 24
 - experience bar (HUD), 44
 - experience points (XP)
 - earning, 195-196
 - enchancements, 187, 192
 - managing, 195-196
 - Eyes of Ender, 90, 235-238
- ## F
-
- falling while mining, 69-72
 - fantasy trees, growing, 143
 - Far Lands or Bust, 11
 - farming, 103
 - animals, 127
 - breeding*, 128-130
 - cats*, 129
 - chickens*, 128-129
 - cows*, 129
 - establishing farms*, 127-129
 - fences*, 128
 - fishing*, 134
 - herding*, 129
 - hostile mobs and safety*, 130
 - leading*, 129
 - mooshrooms*, 129
 - ocelots*, 129
 - pigs*, 129, 133
 - riding*, 133
 - sheep*, 129-130
 - taming*, 129
 - wolves*, 129
 - automated farms, 114-115, 118
 - crop selection*, 117
 - harvesting*, 116
 - piston harvesters*, 118-119
 - sticky piston harvesters*, 120
 - sugar cane*, 124
 - water harvesters*, 121-123
 - bones and, 112
 - choosing crops, 103-106
 - cocoa beans, 104-105
 - emeralds, 213
 - establishing farms, 108
 - animals*, 127-129
 - block to crop ratios*, 109
 - bone meal*, 112
 - difficult terrain*, 107-108
 - fences*, 111, 114

- growth cycles*, 111
- harvesting*, 114
- lighting*, 111
- location*, 107-108
- planting*, 110
- raised beds*, 113-114
- saving crops*, 113
- water*, 109, 113
- fences, 104, 111, 114
 - animals, 128
 - farming, 104, 111, 114
 - gates as output devices, 169
- fermented spider eye, potions, 206
- fighting
 - armor, 93
 - crafting*, 97-99
 - critical hits*, 93
 - damage absorption*, 98
 - blocking attacks, 94
 - bows and arrows, 97
 - crafting*, 95-96
 - target practice*, 97
 - combat enchantments, 196
 - creepers, 88-89
 - critical hits, 93
 - defensive enchantments, 197
 - Endermen, 90
 - hostile mobs, 82
 - iron golems, 92-93
 - skeletons, 85-87
 - snow golems, 91-92
 - spiders, 84-85
 - cave spiders*, 86-87
 - spider jockeys*, 87
 - sprinting and, 94
 - swords, 52
 - blocking attacks*, 94
 - crafting*, 94
 - damage*, 94
 - weapons, 93
 - bows and arrows*, 95-97
 - critical hits*, 93
 - swords*, 94
 - zombies, 82-83, 90-91
- Feather Falling enchantment, 197
- growth cycles*, 111
- harvesting*, 112-116
- lighting and, 104, 111
- Minecraft updates and, 108
- piston farms, 114-115, 118
 - crop selection*, 117
 - harvesting*, 116
 - piston harvesters*, 118-119
 - sticky piston harvesters*, 120
 - sugar cane*, 124
 - water harvesters*, 121-123
- pumpkins, 105
- raised beds, 104, 113-114
- saving crops, 113
- seeds, 104, 110
- self-sufficiency, 104
- sneaking and, 113
- soil, 104
- sugar cane, 104-106
 - automated farms*, 124
 - piston farms*, 124
- tending farms, 104
- underground farms, 104, 124
- wheat, 103, 106
 - growth farming*, 111
 - harvesting*, 112-114

- finding
 - building sites, 58
 - The End strongholds, 238
 - Nether fortresses, 230-231
- Fire Aspect enchantment, 196
- fireplaces, building, 145
- Fire Protection enchantment, 197
- Fire Resistance potion, 204
- Fire Spreads option (Host Options), 16
- Fire Spreads option (More Options button), 12
- first night, surviving
 - crafting
 - axes*, 30
 - beds*, 38-40
 - crafting table*, 33
 - furnaces*, 36
 - heat sources*, 35-36
 - light sources*, 35-38
 - pickaxes*, 30
 - shelter*, 32-35
 - tool handles*, 30
 - torches*, 36-38
 - first-day tasks, 23-24
 - inventory, checking, 26-28
 - perimeter structures as protection, 34
 - trees, 25-26
 - wood, gathering, 25
- fishing, 134
- Flame enchantment, 196
- flash drives, storing saved games, 7
- flint and steel, 96
 - Nether Portals, 228
 - The Nether survival checklist, 227
- floating blocks, 140
- flooding, building underwater, 151
- floors (raised/lowered), building, 145
- food
 - animals, 55-57
 - bowls, crafting, 126
 - bread, crafting, 58
 - brewing, Creative mode inventory, 63
 - cake, 58
 - cooking, 57
 - The End survival checklist, 235
 - foodstuffs category (Creative mode inventory), 63
 - harvesting, 55, 58
 - health and, 54
 - hunger
 - hunger bar (HUD)*, 45
 - saturation*, 54
 - meat, rotten meat and zombies, 83
 - mining and, 66
 - mushroom stew, creating, 126
 - The Nether survival checklist, 227
 - poisoning, 57
 - raw, eating, 57
 - vegetables, 55
- fortresses, Nether fortresses
 - finding, 230-231
 - survival tips, 231-232
- Fortune enchantment, 198
- fountains, building, 144
- frames (item), building, 143
- fueling furnaces, 37
- furnaces
 - crafting, 36
 - fueling, 37
 - minecarts with furnaces (powered minecarts), 181-182

G

game modes, 10
 Creative mode, 13
 Survival mode, 13-14

Game Mode selector (Create New World screen), 10

Game of Thrones, 138

Gamma, adjusting, 229

gates

- AND gates, 179-180
- as output devices, 169
- NOR gates, 179
- NOT gates (inverters), 177
- OR gates, 178

generations, changing, 9-10

ghosts, The Nether, 230-233

glowstone

- The Nether, 230
- underwater, building, 148-150

glowstones, 205

gold (material type), 47

golems

- iron golems, fighting, 92-93
- snow golems, fighting, 91-92
- villages and, 211

gravel

- arrows, crafting, 96
- mining, 96
- The Nether survival checklist, 226

griefing, 12

growing

- hedges, 142
- indoor plants, 142
- trees (fantasy), 143

growth cycles (farming), 111

gunpowder

- creepers and, 89
- potions, 205

H

halfway stations, building tracks, 185

handles (tool), crafting, 30

Hard option (Survival mode), 14

Harming potions, 206

harvesting, 55, 112-114

- piston farms, 116
- wheat, 58

Healing potion, 204

health

- food and, 54
- hunger and, 54

health bar (HUD), 44

heat sources, crafting, 35-36

hedges, growing, 142

herding animals, 129

hills, crafting shelter from, 32

horizontal split-screen, switching to vertical, 16

hostile mobs

- creepers
 - defending against*, 101
 - fighting*, 88-89
 - gunpowder and*, 89
 - swimming and*, 89
- Endermen
 - ender pearls*, 90
 - Eyes of Ender*, 90
 - fighting*, 90
- farming and animals, 130
- fighting, 82

- skeletons
 - arrows and*, 86, 95
 - fighting*, 85-86
 - spider jockeys*, 87
 - spiders
 - cave spiders*, 86-87
 - defending against*, 84
 - fighting*, 84-85
 - spider jockeys*, 87
 - string*, 84
 - uses for*, 84
 - walls as defense*, 84
 - zombies
 - crafting arrows*, 95
 - fighting*, 82-83
 - rotten meat*, 83
 - zombie pigmen*, 90-91
 - hosting multiplayer games, 14-15
 - Host Options, 16
 - Host Privileges options, 17-18
 - inviting friends, 16
 - Host Privileges option (More Options button), 12, 17-18
 - houses
 - building blocks, 62
 - decoration blocks, 62
 - housing codes, 61
 - huts, building, 59-60
 - overhangs, spiders and, 59
 - redstone, 63
 - HUD (Head Up Display), 43
 - armor bar, 44
 - experience bar, 44
 - health bar, 44
 - hunger bar, 45, 54
 - inventory quick access, 45
 - oxygen bar, 45
 - hunger
 - dying from, 58
 - food
 - bread*, 58
 - cake*, 58
 - cooking*, 57
 - food poisoning, 57
 - health and, 54
 - hunger bar (HUD), 45, 54
 - Normal difficulty and, 54
 - raw meat, eating, 57
 - saturation, 54
 - sprinting and, 53-54
 - huts
 - building, 59-60
 - overhangs, spiders and, 59
 - hydration
 - establishing farms, 109, 113
 - permanent watering holes, digging, 111
 - water harvesters, 121-123
-
- Indiana Jones, 216
 - indoor plants, growing, 142
 - Infinity enchantment, 196
 - ink, squid ink, 135
 - installing doors, 35
 - interior design
 - BBQ, 145
 - beds, 141
 - bedside tables, 142
 - bookshelves, 145
 - chairs, 141

clocks (wall), 143
 dining tables, 141
 fireplaces, 145
 floors (raised/lowered), 145
 frames (item), 143
 indoor plants, 142
 item frames, 143
 maps (wall), 143
 netting, 145
 paintings, 144
 signs, placement of, 141
 wall clocks, 143
 wall maps, 143
 inventory, 26
 Armor slots, 27
 Creative mode, 61
 brewing, 63
 building blocks, 62
 decoration blocks, 62
 foodstuffs, 63
 materials, 63
 miscellaneous, 63
 redstone, 63
 tools, 63
 first-night survival, 26-28
 inventory quick access (HUD), 45
 Inventory slots, 28
 opening, 27, 30
 quick access grid, 28
 stacking items, 28
 storage area, 28
 inverters (NOT gates), 177
 invisibility potion, 204
 Invite Only (More Options button), 11
 inviting friends to multiplayer games, 16
 iron bars, 48

anvils, crafting, 198
 The Nether survival checklist, 227
 iron doors, 34
 iron golems
 fighting, 92-93
 villages and, 211
 islands, building spawn points underwater, 149
 item frames, building, 143

J-K

jack-o-lanterns, 227, 230
 jockeys (spider), fighting, 87
 jungle temples, 216

Knockback enchantments, 196

L

ladders
 2x1 ladder descent, mining and, 70-71
 pausing on, 71
 underwater, building, 150
 lamps
 bedside tables and, 142
 one lamps, 168
 lanterns
 The Nether survival checklist, 227
 The Nether, 230
 perimeters, 155
 underwater, building, 150
 Lapis Lazuli, dyeing and, 131
 lava, fueling furnaces, 37
 lava lakes
 mining and, 69, 75
 The Nether, 230

lava pools, mining obsidian, 189-191

leading animals, 129

levers, 162, 165

lighting

bedside tables and, 142

caves and tunnels, 59

farming and, 104, 111

mines, 69

The Nether survival checklist, 227

The Nether, 230-231

perimeters, 155

torches, mining, 66

underwater, building, 148-150

light sources, crafting, 35-38

loading saved games on other consoles, 7

locating

portal room, 237

strongholds, 236

loops, repeater loops, 180

Looting enchantment, 196

lowered floors, building, 145

M

magma cubes, The Nether, 233

managing XP, 195-196

maps (wall), building, 143

materials category (Creative mode inventory), 63

material strength. *See* durability

meat, rotten meat, 83

Middle Earth, 138

minecarts, 181

destroying/reusing, 182

powered minecarts, 181-182

rails, 159

detector rails, 162, 184

normal rails, 183

powered rails, 169, 183-184

pressure plates, 162

storage minecarts, 182

tracks, building

halfway stations, 185

mobs, protecting tracks from, 186

powered rails, 184

zig zags, 184

trains, minecarts as, 182

underground rails, 183

mines

abandoned mineshafts, 218

blocking off areas, 69

cave spiders, fighting, 86-87

torches, 69

unlit areas, 69

mining

2x1 ladder descent, 70-71

bases, setting up, 77-78

branch mines, 75-77

breaking your fall, 71-72

buckets, 66

caves

creating caves, 66

existing caves, 65

chests, placing in mines, 78

chunks, 78

cobblestone, 56

falling, 69-72

farming underground, 104, 124

flint, quick mining tips, 96

food, 66

gravel, quick mining tips, 96

- ladders
 - 2x1 ladder descent*, 70-71
 - pausing*, 71
- lava lakes, 69, 75
- lighting, 69
- mobs and, 77
- netherrack, 229
- obsidian, 67, 189-191
- ore layers, 67, 68
- pickaxes, 66
- quick access bar, keeping blocks in, 69
- safety and, 77-78
- sleep, 77
- sneaking around hazards, 77
- staging points, 77
- staircases
 - spiral staircases*, 73-74
 - straight staircases*, 72-73
- strategies for starting, 65-66
- tools, required equipment list, 66
- torches, 66
- way out, knowing, 69
- wood blocks and, 66
- miscellaneous category (Creative mode inventory), 63
- mobs
 - avoiding, 53
 - character vulnerability and inventory checks, 30
 - creepers, 52
 - defending against*, 101
 - fighting*, 88-89
 - gunpowder and*, 89
 - swimming and*, 89
 - defining, 14
 - ditches, crossing, 153
 - employing, 155-157
 - Endermen
 - ender pearls*, 90
 - Eyes of Ender*, 90
 - fighting*, 90
 - fighting, 52, 82
 - hostile mobs, farming and animals, 130
 - inventory checks and character vulnerability, 30
 - iron golems, fighting, 92-93
 - mining, 77
 - The Nether, 228-233
 - passive mobs
 - animals as*, 55-57
 - squid*, 135
 - passive mobs. *See* animals
 - pursuit mode, 53
 - security
 - pits*, 155-157
 - water*, 154
 - skeletons, 52
 - arrows and*, 86, 95
 - fighting*, 85-86
 - spider jockeys*, 87
 - sleep, 77
 - slimes, 52
 - snow golems, fighting, 91-92
 - spawners, disabling, 214
 - spiders, 52
 - cave spiders*, 86-87
 - defending against*, 84
 - fighting*, 84-85
 - spider jockeys*, 87
 - string*, 84

- uses for*, 84
- walls as defense*, 84
- tracks, protecting from attack, 186
- types of, 14
- underwater bases, 45
- water, 154
- zombies, 51
 - arrows, crafting*, 95
 - fighting*, 82-83
 - rotten meat*, 83
 - zombie pigmen*, 90-91
- monsters
 - avoiding, 53
 - creepers, 52
 - fighting, 52
 - pursuit mode, 53
 - skeletons, 52
 - slimes, 52
 - spiders, 52, 59
 - zombies, 51
- mooshrooms, 129
- More Options button, 11-12
- multiplayer games
 - hosting, 14
 - Host Options*, 16
 - Host Privileges options*, 17-18
 - inviting friends*, 16
 - using XBLA*, 15
 - split-screen, switching orientation, 15-16
 - teleporting to players, 17
- mushrooms, The Nether, 230
- mushroom stew, creating, 126
- music, note blocks, 170

N

- navigating
 - crafting compasses, 46
 - The End, 225
 - The Nether, 225
- negative effect potions, 205-206
- negative structures, 214
- netherbrick, 230
- Nether fortresses, 219
- Nether quartz, 230
- netherrack, mining, 229
- Netherrack, 145
- The Nether, 24, 223
 - barricades, building, 231
 - blaze rods, 232
 - blazes, 233
 - blaze spawners, 232
 - cliffs, 230
 - Dante's influence on, 234
 - Ender chests, 224
 - fortresses
 - finding*, 230-231
 - survival tips*, 231-232
 - ghasts, 230-233
 - glowstone, 230
 - jack-o-lanterns, 230
 - lanterns, 230
 - lava lakes, 230
 - lighting, 230-231
 - magma cubes, 233
 - mobs, 228-233
 - mushrooms, 230
 - navigating, 225
 - netherbrick, 230

Nether Portal, 227-228
 Nether quartz, 230
 nether wart, 231
 Overworld size comparison to, 234
 sleeping in, 234
 Sneak key (Left Shift), 230
 soul sand, 230
 stairs, 229
 survival checklist, 226-227
 torches, 230-231
 tunnels, 229
 water, 226
 Nether wart, brewing potions, 201-204
 netting, 145
 new games, selecting game mode, 10
 night vision potion, 204
 NOR gates, 179
 Normal difficulty, hunger and, 54
 Normal option (Survival mode), 14
 note blocks as output devices, 170
 NOT gates (inverters), 177

O

obsidian
 enchantment tables, 189-191
 The End survival checklist, 235
 mining, 67, 189-191
 Nether Portals, building, 227
 ocelots, 129
 Online Game option (More Options
 button), 11
 online resources, Far Lands or Bust, 11
 opening
 doors, 34
 inventory, 27, 30
 ore, layers, 67-68

OR gates, 178
 orientation of split-screen, switching, 16
 output devices, 168-170
 dispensers, 169
 doors, 169
 fence gates, 169
 note blocks, 170
 pistons, 169, 175
 powered rails, 169
 redstone lamps, 168
 redstone torches, vertical current,
 176-177
 TNT, 170
 trapdoors, 169
 overhangs, spiders and, 59
 Overworld, 24
 The Nether size comparison to, 234
 portal room, locating, 237
 strongholds, locating, 236
 oxygen bar (HUD), 45
 oxygen, building underwater, 150

P

paintings, interior design and, 144
 passive mobs
 animals as, 55-57
 squid, 135
 pausing games, 24, 71
 Peaceful option (Survival mode), 14
 pearls (ender), 90
 perimeters, 153
 arrow slits, 157
 ditches, 153-154
 lighting, 155
 mobs, 155-157
 structures as protection, 34

- towers, 155
- walls, 157
- pickaxes
 - crafting, 30
 - mining and, 66
 - The Nether survival checklist, 226
- pigs, 129, 133
- pillar jumping, 35, 61
- piston farms, 114-115, 118
 - crop selection, 117
 - harvesting, 116
 - piston harvesters, 118-119
 - sticky piston harvesters, 120
 - sugar cane, 124
 - water harvesters, 121-123
- pistons
 - as output devices, 169
 - sliding doors, 175
- pits, building
 - mobs, 155-157
 - pressure plates, 156
- planter boxes, building, 143
- plants, growing
 - establishing farms, 110
 - fantasy trees, 143
 - hedges, 142
 - indoor plants, 142
- poison
 - food poisoning, 57
 - potions, 206
 - rotting meat, zombies and, 83
- ponds, 144
- pools, 144
- portal room, locating, 237
- portals
 - End Portals, 238
 - Nether Portal, 227-228
- positive effect potions, 204-206
- potions
 - awkward potion, 203-204
 - brewing, 200
 - blaze rods, 201*
 - building brewing stands, 203*
 - crafting bottles, 203*
 - Nether wart, 201-204*
 - soul sand, 201-202*
 - testing potions, 202*
 - The End survival checklist, 235
 - enhancing, 205-206
 - fermented spider eye, 206
 - glowstone dust, 205
 - gunpowder, 205
 - negative effect potions, 206
 - positive effect potions, 204-206
 - redstone dust, 205
 - skeletons, 206
 - splash potions, 205
 - zombies, 206
- powered blocks, 164
 - buttons, 165
 - levers, 165
 - two block rule, 166
- powered minecarts, 181-182
- powered rails, 183-184, 169
- Power enchantment, 196
- power sources, 160-161
 - powered blocks, 164
 - buttons, 165*
 - levers, 165*
 - two block rule, 166*

redstone, 161
 powered blocks, 165
 powered rails, 183-184
 redstone wire, properties of, 163-164
 repeaters, 166
repeaters, 166
pressure plates, 162. *See also* buttons
 automatic doors, 173
 detector rails, 184
 minecart rails, 162
 pits, 156
protection enchantments, 197
pumpkins, 105
Punch enchantment, 196
pursuit mode, mobs and, 53

Q

quick access bar, 69
quick access grid (inventory), 28
quick access slots, 227

R

Raiders of the Lost Ark, 216
rails, 159
 detector rails, 162, 184
 minecarts, 181
 destroying/reusing, 182
 powered minecarts, 181-182
 storage minecarts, 182
 trains, 182
 normal rails, 183
 powered rails, 169, 183-184
 pressure plates, 162

tracks, building
 halfway stations, 185
 mobs, protecting tracks from, 186
 powered rails, 184
 zig zags, 184
trains, minecarts as, 182
 underground rails, 183
rain, fishing in, 134
raised beds (farming), 104, 113-114
raised floors, building, 145
ravines, 214
recipes, crafting armor, 99
redstone, 63, 159-160
 automated farms, building, 117
 lamps, 168
 piston farms, creating, 117
 potions, 205
 powered rails, 183-184
 redstone torches, 161, 165, 176-177
 redstone wire, properties of, 163-164
 repeaters, 166, 172
 sticky piston harvesters, building, 120
Regeneration potion, 204
renaming items, anvils and, 200
repairing, anvils and, 200
repeater loops, 180
repeaters, 166, 172
Reset Nether option (More Options button), 12
resource packs, 138
resources
 animals, 55-57
 bones as, 56
 cobblestone, 56
 gathering, 56
 harvesting, 55

- skeletons as, 56
- vegetables, 55
- resources (online), Far Lands or Bust, 11
- respawns
 - defining, 14
 - dying from hunger, 58
- Respiration enchantment, 153, 197
- reusing destroyed minecarts, 182
- rotten meat, zombies and, 83
- running, effects of, 53-54

S

- safety, mining and, 77-78
- saturation, hunger and, 54
- saving crops, 113
- security
 - arrow slits, building, 157
 - ditches, building, 153-154
 - perimeters, building, 153
 - arrow slits, 157*
 - ditches, 153-154*
 - lighting, 155*
 - mobs, 155-157*
 - towers, 155*
 - walls, 157*
 - pits, building
 - mobs, 155-157*
 - pressure plates, 156*
 - towers, building, 155
 - underwater, building, 153
 - walls, building, 157
 - water, 154
- seeding, 18
- seeds
 - changing generations, 9-10
 - planting, 104, 110
 - sharing, 19
- settings, More Options button, 11-12
- sharing seeds, 19
- Sharpness enchantment, 196
- sheep, 129
 - dyeing wool, 130
 - crafting wool, 39-40
- shelter
 - caves, 32
 - cliffs, 32
 - crafting, 32-33
 - doors
 - crafting, 33*
 - installing, 35*
 - heat sources, crafting, 35-36
 - hills, 32
 - light sources, crafting, 35-38
 - tunneling, 32
- shelters
 - building blocks, 62
 - decoration blocks, 62
 - emergency shelters, crafting, 35
 - housing codes, 61
 - huts, building, 59-60
 - overhangs, spiders and, 59
 - pillar jumping, 35
 - redstone, 63
- Shift key
 - ladders, pausing on, 71
 - sneaking around hazards, 77
- shovels, The Nether survival checklist, 226

- signals, 160-161
 - buttons, 162
 - automatic doors*, 170
 - powered blocks*, 165
 - detector rails, 162, 184
 - levers, 162, 165
 - pressure plates, 162
 - automatic doors*, 173
 - detector rails*, 184
 - minecart rails*, 162
 - redstone torches, 161, 165
 - tripwires, 162
- signs
 - building underwater, 150
 - placement of, 141
- Silk Touch enchantment, 198
- silverfish spawners, 237
- single-player games
 - Creative mode, 13
 - Survival mode, 13-14
- skeletons, 52
 - arrows and, 86-95
 - as resources, 56
 - bones, farming benefits, 112
 - fighting, 85-86
 - potions, 206
 - spider jockeys, fighting, 87
- sleep
 - mining and, 77
 - mobs and, 77
- sleeping
 - beds
 - crafting*, 38-40
 - taking with you*, 41
 - The End, 234-235
 - The Nether, 234
 - time and, 39
 - villages and, 211
- sliding doors, building, 174-176
- slimes, 52
- slots, quick access slots, 227
- Slowness potions, 206
- Smite enchantment, 196
- sneaking around hazards, 77
- Sneak key (Left Shift), 230
- snow blocks, The Nether survival checklist, 226
- snow golems, fighting, 91-92
- soft blocks, building underwater, 148, 151
- soil, 104
- soul sand
 - brewing potions, 201-202
 - The Nether, 230
- spawners
 - blaze spawners, 232
 - disabling, 214
 - silverfish spawners, 237
- spawn points, 13-14, 149
- spiders, 52
 - cave spiders, fighting, 86-87
 - defending against, 84
 - ditches, crossing, 153
 - fermented spider eye, potions and, 206
 - fighting, 84-85
 - overhangs and, 59
 - spider jockeys, fighting, 87
 - string, 84
 - uses for, 84
- spiral staircases, mining and, 73-74
- splash potions, 205

- split-screen
 - multiplayer games, 15
 - orientaton, switching, 16
- sprinting
 - combat and, 94
 - effects of, 53-54
- squid, 135
- stacking inventory items, 28
- staging points, mining and, 77
- staircases
 - The Nether, 229
 - spiral staircases, 73-74
 - straight staircases, 72-73
- starting a new game, 7-9
- Star Trek, 138
- stations (halfway), building tracks, 185
- steel and flint
 - Nether Portals, 228
 - The Nether survival checklist, 227
- stew, creating, 126
- sticky piston harvesters, 120
- stone buttons, 162
 - automatic doors, 170
 - powered blocks, 165
- stone (material type), 48
- storage
 - chests, 50
 - crafting*, 50
 - opening*, 50
 - sizes of*, 50
 - minecarts, 182
- storage area (inventory), 28
- storage devices, loading saved games on other consoles, 7
- storing enchantments with books, 194
- straight staircases, mining and, 72-73
- Strength potion, 204
- string (spiders), 84
- strongholds, 218
 - The End strongholds, finding, 238
 - finding, 236
- structures
 - abandoned mineshafts, 218
 - basins, 214
 - caverns, 214
 - desert temples, 215-216
 - dungeons, 217
 - The End strongholds, finding, 238
 - jungle temples, 216
 - negative structures, 214
 - Nether fortresses
 - finding*, 230-231
 - survival tips*, 231-232
 - ravines, 214
 - spawners, disabling, 214
 - strongholds, 218
 - villages, 209
 - appearances of*, 210
 - beds*, 211
 - children*, 210-212
 - commonality of*, 209
 - interacting with inhabitants*, 210-212
 - iron golems and*, 211
 - sleeping in*, 211
 - trading with inhabitants*, 211-212
 - uses of*, 210
 - zombies and*, 210-213
- sugar cane, 106
 - automated farms, 124
 - growing, 104
 - piston farms, 124
- superflat worlds, 13

- Survival mode, 13-14, 147
 - surviving the first night
 - checking inventory, 26-28
 - crafting table, crafting, 33
 - beds, crafting, 38-40
 - furnaces, crafting, 36
 - heat sources, crafting, 35-36
 - light sources, crafting, 35-38
 - shelter, crafting, 32-35
 - tool handles, crafting, 30
 - tools, crafting, 30
 - torches, crafting, 36-38
 - first-day tasks, 23-24
 - gathering wood, 25
 - perimeter structures, 34
 - trees, 25-26
 - Swiftress potion, 204
 - swimming, creepers and, 89
 - swimming pools, 144
 - switches. *See* levers
 - swords
 - blocking attacks, 94
 - crafting, 94
 - damage, dealing, 94
 - The End survival checklist, 235
 - fighting with, 52
 - The Nether survival checklist, 226
-
- T**
- tables
 - bedside tables, 142
 - dining tables, 141
 - enchantment tables, 188
 - books*, 192
 - casting enchantments*, 192-193
 - obsidian*, 189-191
 - taming animals, 129
 - teleporting to players, 17
 - temples
 - desert temples, 215-216
 - jungle temples, 216
 - tending farms, 104
 - tennis courts, building, 145
 - testing potions, 202
 - texture packs, 10
 - Thorns enchantment, 197
 - time, sleeping and, 39
 - TNT as output devices, 170
 - TNT Explodes option (More Options button), 12
 - Tolkien, J.R.R., 138
 - tools
 - crafting
 - axes*, 30
 - handles*, 30
 - pickaxes*, 30
 - durability, 49
 - enchantments, 197-198
 - The End survival checklist, 235
 - improving, 47-48
 - mining, required equipment list, 66
 - The Nether survival checklist, 226
 - pickaxes, mining and, 66
 - tools category (Creative mode inventory), 63
 - torches
 - bedside tables and, 142
 - crafting, 36-38
 - farming and lighting, 104, 111
 - mines, 66, 69
 - The Nether survival checklist, 227
 - The Nether, 230-231

- perimeters, 155
- redstone torches, 161
 - powered blocks*, 165
 - vertical current*, 176-177
- underwater, building, 148-150
- towers, building, 155
- tracks, building
 - halfway stations, 185
 - mobs, protecting tracks from, 186
 - powered rails, 184
 - zig zags, 184
- tracks. *See* rails
- trading with villages, 211-212
- trains
 - minecarts as trains, 182
 - rails, 159
 - detector rails*, 162, 184
 - normal rails*, 183
 - powered rails*, 169, 183-184
 - tracks, building
 - halfway stations*, 185
 - mobs, protecting tracks from*, 186
 - powered rails*, 184
 - zig zags*, 184
 - underground rails, 183
- trapdoors as output devices, 169
- travel, sprinting, 53-54
- treasure
 - abandoned mineshafts, 218
 - desert temples, 215-216
 - dungeons, 217
 - jungle temples, 216
 - spawners, disabling, 214
 - strongholds, 218

- trees
 - biomes, 25
 - chopping. *See* lumberjacking, 25
 - fantasy trees, growing, 143
 - first-night survival, 25
 - lumberjacking, 25-26
- tripwires, 162
- Trust Players option (More Options button), 11
- tunnels, 32
 - doors, importance of, 83
 - lighting, 59
 - mineshafts, abandoned mineshafts, 218
 - The Nether, 229
 - underground rails, 183
- Tutorial, 8

U

- Unbreaking enchantment, 198
- underground
 - abandoned mineshafts, 218
 - dungeons, 217
 - strongholds, 218
- underground rails, 183
- underwater, building, 147, 151-152
 - Creative mode, 147
 - doors, 150
 - enchantments, 153
 - flooding, 151
 - island spawn points, 149
 - ladders, 150
 - lighting, 148-150
 - location, 149
 - oxygen, 150
 - required equipment, 148-149
 - security, 153

- signs, 150
- soft blocks, 148-151
- Survival mode, 147
- updates, farming and, 108
- up, digging straight down, 69

V

- vegetables, harvesting, 55
- vertical current, 176-177
- vertical split-screen, switching to horizontal, 16
- villages, 209
 - appearances of, 210
 - beds, 211
 - commonality of, 209
 - inhabitants
 - children, 210-212*
 - interacting with, 210-212*
 - trading with, 211-212*
 - iron golems and, 211
 - sleeping in, 211
 - uses of, 210
 - wells, 214
 - zombies and, 210-213
- villages, building next to, 139
- fountains, 144
- The Nether, 226
- obsidian, mining, 189-191
- permanent watering holes, digging, 111
- ponds, 144
- pools, 144
- security, 154
- underwater, building, 139, 147-152
 - Creative mode, 147*
 - doors, 150*
 - enchancements, 153*
 - floating blocks, 140*
 - flooding, 151*
 - island spawn points, 149*
 - ladders, 150*
 - lighting, 148-150*
 - location, 149*
 - oxygen, 150*
 - required equipment, 148-149*
 - security, 153*
 - signs, 150*
 - soft blocks, 148-151*
 - Survival mode, 147*
- water harvesters, 121-123
- water affinity, building underwater, 153
- Weakness potions, 206

W

- wall clocks, building, 143
- wall maps, building, 143
- walls, 157
 - building, 61
 - spider-proof walls, 84
- water
 - farming, 109, 113
 - fishing, 134
 - bows and arrows, 97
 - crafting, 95-96*
 - target practice, 97*
 - critical hits, 93
 - enchancements, 196
 - Ender Dragon, defeating, 239, 242
 - The End survival checklist, 235
 - The Nether survival checklist, 226

- swords
 - blocking attacks*, 94
 - crafting*, 94
 - damage*, 94
 - fighting with*, 52
- web resources, Far Lands or Bust, 11
- wells, villages and, 214
- wheat, 106
 - farming, 103
 - growth cycles, 111
 - harvesting, 58, 112-114
- wolves, 129
- wood buttons, 162
 - automatic doors, 170
 - powered blocks, 165
- wood, 25, 48, 66
- wool
 - crafting, 39-40
 - dyeing, 130
- worlds
 - biomes, 11
 - Create New World screen, 10
 - Overworld, 24

X

- XBLA, multiplayer games
 - hosting, 15
 - Host Options, 16
 - Host Privileges options, 17-18
 - inviting friends, 16
 - teleporting to players, 17
- XP (experience points)
 - earning, 195-196
 - enchancements, 187, 192
 - managing, 195-196

Y-Z

- YouTube, finding architectural plans, 140
- zig-zag tracks, building, 184
- zombie pigmen, 90-91, 228-232
- zombies, 51
 - arrows, crafting, 95
 - fighting, 82-83
 - potions, 206
 - rotten meat, 83
 - villages and, 210-213
 - wells, 214