

# 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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The Ultimate Player's Guide to  
**MINECRAFT™**  
**XBOX® EDITION**

Stephen O'Brien

**que®**

800 East 96th Street,  
Indianapolis, Indiana 46240 USA

## The Ultimate Player's Guide to Minecraft™: Xbox® Edition

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## 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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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  $\text{RS}$  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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