

## Minecraft Play: Target Practice

Before you begin this part of the lab, find a location in Minecraft that meets the following criteria so you can build out the three games in this quest:

- A relatively flat area to host your archery tournament with good line of sight
- An open area where you can build steps high into the sky
- A sloping area or mountain nearby, to be used in creating a boat race through the rapids

The mini archery game you build as a team should have at least three different types of challenges based on the experience levels of the participants. For example, one or more might involve redstone and a scoring system. Another might be a simple series of targets set up at different ranges. Yet another could involve shooting mobs in the wild, in a gallery, or in another enclosed area. See the list at right for tips on using a bow and arrow in-game.

### ONLINE RESOURCES

Mini games are one of the fastest growing areas for Minecraft builders, with new games coming out all the time. In the multiplayer Hot Potato, one player randomly receives a potato with a lit fuse and must pass it along to another player before it explodes. You can discover more and download a version by following this link: <http://goo.gl/FeTnBQ>

### GAME MODE

*Creative and Survival*

### APPROXIMATE TIME TO COMPLETE

*1–2 hours in Minecraft*

### PLATFORMS

*PC/Mac, Consoles, PE*

**1. It's time to determine the kind of targets you'll be shooting. Stationary objects such as blocks, moving targets attached to items like sticky pistons or minecarts, or even random mobs provide good sport. In the example for this lab, we've set up three stations.**

- **Activate the redstone lamp by hitting the wooden button with an arrow (fig. 1).**
- **Collect points by hitting the center of each target (fig. 2).**
- **Shoot at a redstone-powered chicken shooting gallery (fig. 3).**

### MINECRAFT ARCHERY

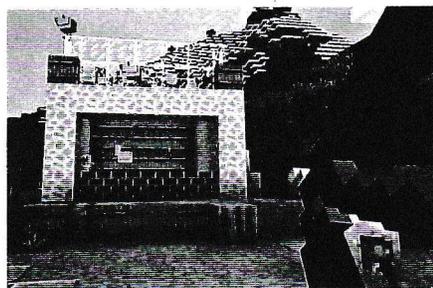
- To launch an arrow from your inventory or when in creative mode, pull the bow back by holding the right-click button down until the string is all the way back and then release.
- Gravity affects arrows, so aim high if your target is far away.
- The maximum distance covered by an arrow is 120 blocks.
- You can pick up and reuse arrows shot by other players, but not arrows shot by skeletons.
- Use the flame enchantment to create flaming arrows that can blow up TNT.
- Arrows released at maximum bow tension cause the most damage.
- You can only move around at sneak speed if you have the bowstring pulled back.
- If crafting arrows in survival mode, you'll need flint, a stick, and a feather.



**Fig. 1:** Place a wooden button on a redstone lamp. Striking the button with an arrow will turn the lamp on, indicating an accurate shot.



**Fig. 2:** Set up target blocks at various distances and heights to test competitors' skills.



**Fig. 3:** As an extra challenge, create a redstone-activated shooting gallery.

2. Determine how your game will end. What will players need to do to be successful? Consider the following:

- Can there be only one winner?
- Is your game better if played with partners or in larger teams?
- Will you limit the number of arrows each player shoots?
- Will you time the game?
- Will there be any bonus point opportunities?

3. Now build your mini game together and play test it along the way. Need a few ideas to help get you started? See the suggestions at right.

#### SHARE YOUR WORK

Save this as a world file and post it for download on your blog or website. Don't forget to provide a write-up with the directions and tips for winning. Credit everyone who helped create the game and use the hashtag *#minecrafterbook* when sharing online.

#### STARTER SUGGESTIONS

- Make players craft their materials or use dispensers to issue arrows.
- To make it more difficult, set one of your challenges atop a steep hill and require players to make high arcing shots.
- Build the world in creative mode and play in survival mode, where shooting mobs earn bonus points.
- Use paintings for targets—they'll disappear when hit.
- Challenge players to shoot while riding a horse or pig, or have them ride a minecart through each station.

#### MORE TO EXPLORE

More advanced players can research how to set up a scoreboard system and a clock for this quest to easily track each player's score.