PARENT LETTER

COMMANDING MINECRAFT: INFRO TO GAME AND LEVEL DESIGN

Thank you for signing your child up for our Commanding Minecraft camp! We would like to fill you in on what your child will be learning this week at camp.

We aren't just playing Minecraft here! These are the three main goals for this week of camp:

- 1. Learn the fundamental properties of redstone in Minecraft
- 2. Learn how to use Command Blocks in Minecraft (using basic coding)
- 3. Learn the basics of game and level design while building and playing games that we create!

I think it is worth mentioning here that an important part of this camp is playing the games the children create. This is the best way to figure out what works and what doesn't, and gives us the opportunity to fix coding problems within their games. We will also encourage students to expand upon their games and think of ways to make it more difficult or more playable for others.

Please keep in mind that we have to go at the pace of the class, so this is a basic breakdown of what we expect to get through each week. The order of activities may vary.

DAY 1

On our first day, we will start with learning the basics of Redstone. Redstone is an item that, when powered, acts as electricity in the game. No additional downloads or Mods are required to use redstone in Minecraft.

Students will learn how to use redstone dust, torches, levers, buttons, pressure plates, and repeaters. At the end of each redstone portion there will be an ultimate challenge. Understanding how to use redstone is key in the game development portion of this camp.

Next we will start on Command Blocks! In order to use command blocks at home, your child will have to be in creative mode or in survival mode with cheats enabled. The easiest way to give themselves a command block (since it does not show up in the creative inventory) is to use the command below. I don't expect them to remember this when camp is over, so I want to make sure you have it here!

/give <player> Minecraft:command_block <amount>

Command blocks can execute commands when powered by redstone. We will learn the commands for changing the weather, time of day, difficulty level, and effects. We will also create security systems for our houses, and awesome elevators using teleportation! By the end

of today, the students should have a firm understanding of how to use the command blocks, which are essential for game development in Minecraft.

DAY 2

On the second day of camp, we will begin to explore some of the more advanced features of command blocks to do things like keeping track of scores for the games we build. We will also design and build two different arcade-style games. We will learn about platforming games and a head-to-head game concept unique to Minecraft called Spleef. We will build, playtest, and improve designs for both types of games.

DAY 3

On the third day we will be designing and building a battle-arena-like game. We will also begin to learn some more advanced redstone logic to start building control points. Control points will be an integral part of the more complex games we will be building later on. We will start today with King Of the Hill, a well-known game where players compete to stand on a central point for the longest amount of time. We will come up with our own creative variations on this game, and will design and build areas for the game to be played, using an iterative design process to improve our games until they are the best they can be!

DAY 4

On the fourth day we will expand greatly on the concept of control points, using them to make attack/defend and capture the flag type games. These games are much bigger and more complex, and so will require a great deal of creativity and teamwork to pull together. As with our other games, we will use an iterative design process to brainstorm, build, test, and rebuild until everything works the way we want it to.

DAY 5

We will spend our final day pulling everything we've learned together to make an adventure game. We will make a story, create a game world, build challenges and puzzles, and add rewards for the player at the end. This will be the biggest and most creative project we will undertake, and the students will be encouraged to add fun and unique aspects based on his or her interests in the subjects covered earlier in the week.

We hope your child has as much fun as we do in this camp! Please let us know if you have any questions or feedback! We hope to see you again soon!