

Falling Down in Minecraft

3rd Grade

Testable Question:

How does the height a person in minecraft falls affect the amount of health lost?

Prediction:

I think as the height of drop increases the amount of health a minecraft person loses will increase as well. I think as the height increases by 5 blocks, the health will decrease by half a heart. This means there will be a linear relationship between height and health loss. This means as we change height the health will change by a constant amount

Procedure:

1. Create a minecraft world in creative mode
2. Make a flat surface for us to create a place for us to perform our experiment
3. Create two large chests and fill them with cooked chicken
4. Create a tall stair case one step stair case above the flat ground to walk off of

Background:

I chose this project because...

I wanted to know how many blocks it would take a minecraft person to fall from to die so I could avoid dying myself

In my research I found out that...

Minecraft was invented by Markus “Notch” Persson originally he had not planned to release it commercially. He was inspired by other games like Infiniminer. He wanted to create a game that combined the elements of exploration, creativity and survival. Now it is one of the most popular games ever.

This project is important because...

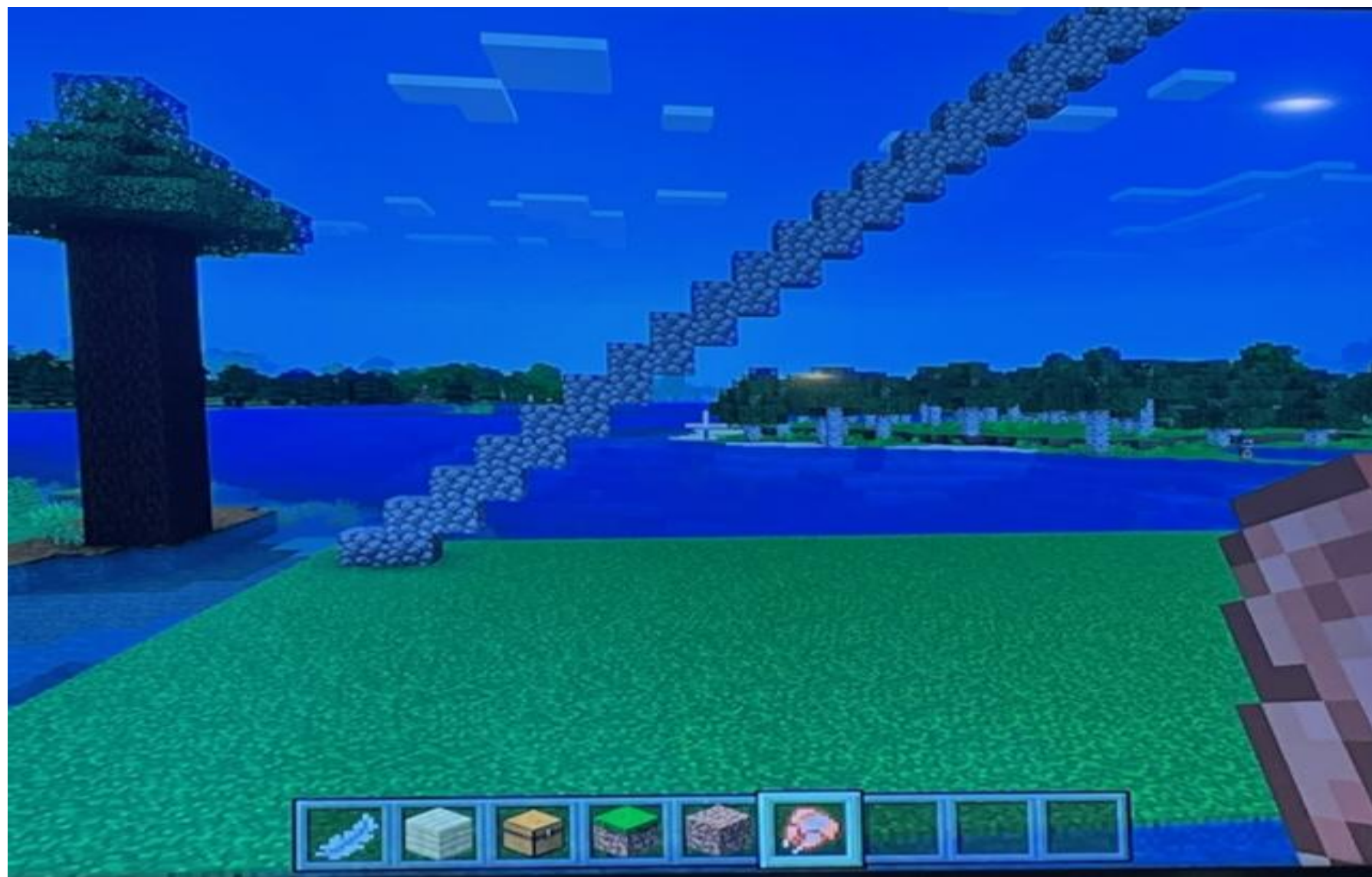
So many people play minecraft so this project will benefit all of them

Constant Conditions:

Independent Variable: The ONE thing you change
The height the minecraft person will fall.

Dependent Variable: What you are measuring or observing
The health of a minecraft person

Constant Conditions: What you are keeping the same every time
The amount of health that the minecraft person starts with.
The weather.
The thing we land on.





Data and Trials

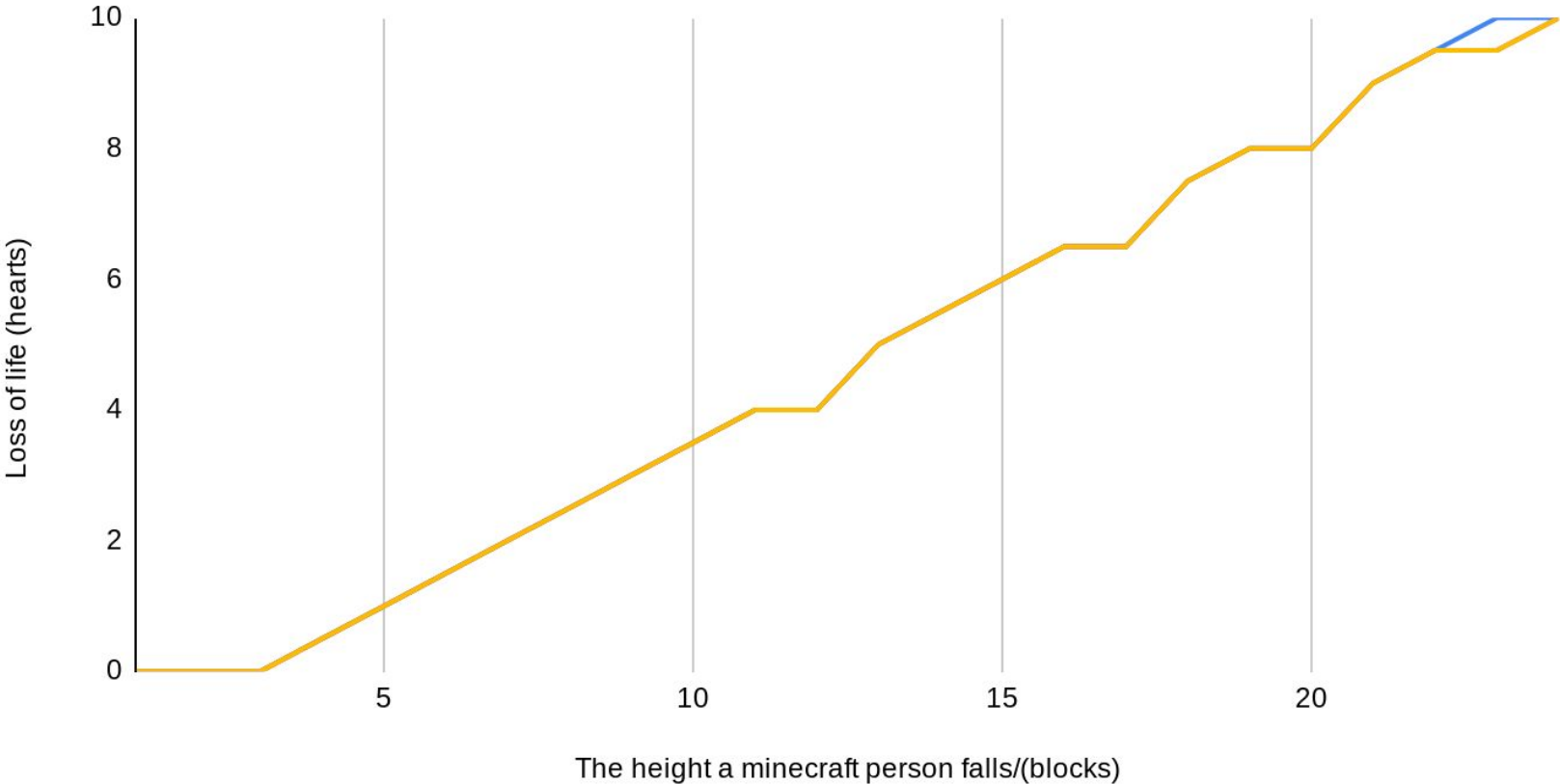
| The height a minecraft person falls (blocks) | The loss of health of a minecraft person (hearts) | | |
|---|--|---------|---------|
| | Trial 1 | Trial 2 | Trial 3 |
| 1 | 0 | 0 | 0 |
| 2 | 0 | 0 | 0 |
| 3 | 0 | 0 | 0 |
| 4 | 0.5 | 0.5 | 0.5 |
| 5 | 1 | 1 | 1 |
| 6 | 1.5 | 1.5 | 1.5 |
| 7 | 2 | 2 | 2 |
| 8 | 2.5 | 2.5 | 2.5 |
| 9 | 3 | 3 | 3 |
| 10 | 3.5 | 3.5 | 3.5 |

Data and Trials continued

| The height a minecraft person falls (blocks) | The loss of health of a minecraft person (hearts) | | |
|---|--|---------|---------|
| | Trial 1 | Trial 2 | Trial 3 |
| 11 | 4 | 4 | 4 |
| 12 | 4 | 4 | 4 |
| 13 | 5 | 5 | 5 |
| 14 | 5.5 | 5.5 | 5.5 |
| 15 | 6 | 6 | 6 |
| 16 | 6.5 | 6.5 | 6.5 |
| 17 | 6.5 | 6.5 | 6.5 |
| 18 | 7.5 | 7.5 | 7.5 |
| 19 | 8 | 8 | 8 |
| 20 | 8 | 8 | 8 |
| 21 | 9 | 9 | 9 |
| 22 | 9.5 | 9.5 | 9.5 |
| 23 | 10 | 9.5 | 9.5 |
| 24 | 10 | 10 | 10 |

Loss of Hearts vs Fall Height

Trial 1 Trial 2 Trial 3



Conclusion and Reflection:

I found out that...

The height that you will die from with all 10 hearts is 24 blocks above ground. The height in which you lose no hearts is 1-3 blocks above ground. I also found out that there is a linear relationship between the height and the number of hearts that are lost.

I was surprised that...

You die from 24 blocks above the ground because I thought that it would be higher than 24 blocks.

If I did this project again...

I would build the structures differently the way they would be different is they will be pillars instead of a staircase. I would also jump indeed of fall.