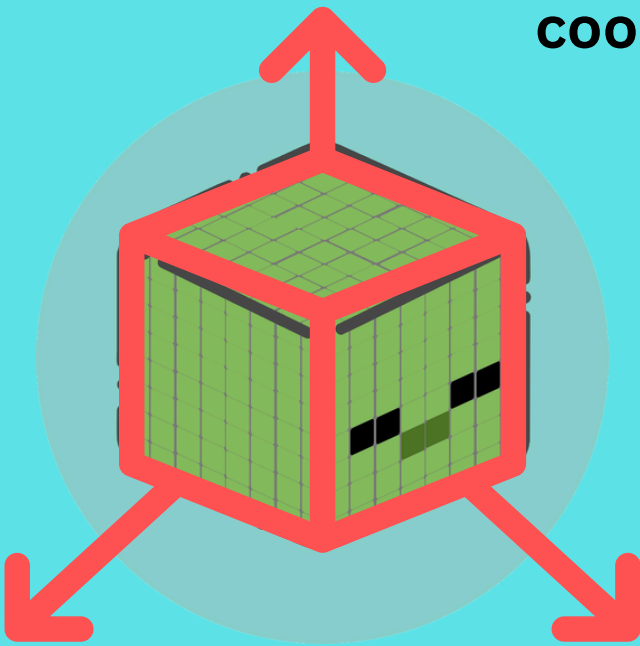


# Maths In Motion

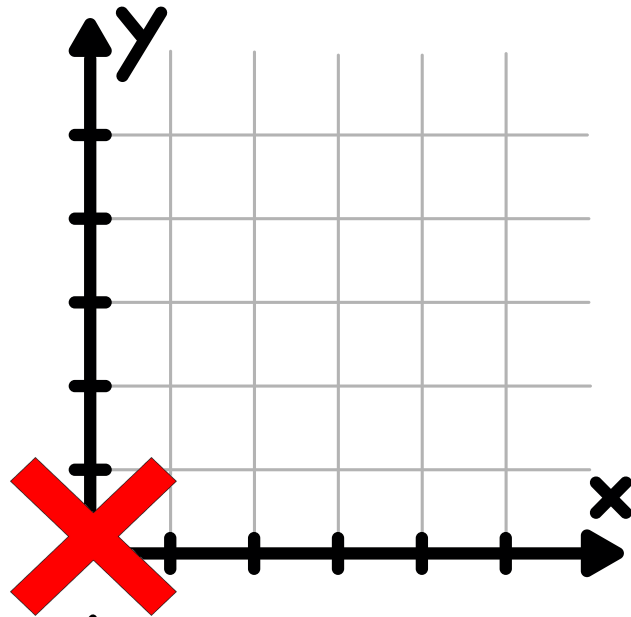
## MINECRAFT

# Workbook

Lesson 1: 3D  
coordinates



# Co-ordinates

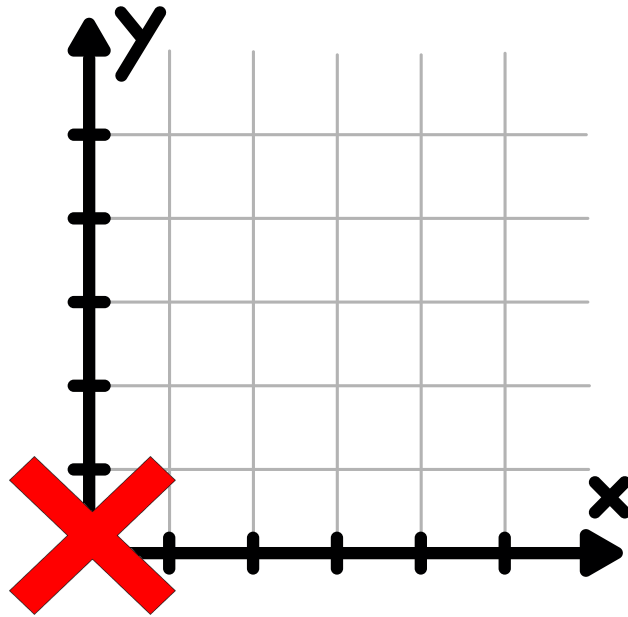


x - Right

y - Up

The origin  
(0, 0)

# Co-ordinates jump game



$(2, 1)$

$(3, 5)$

$(0, 3)$

$(4, 0)$

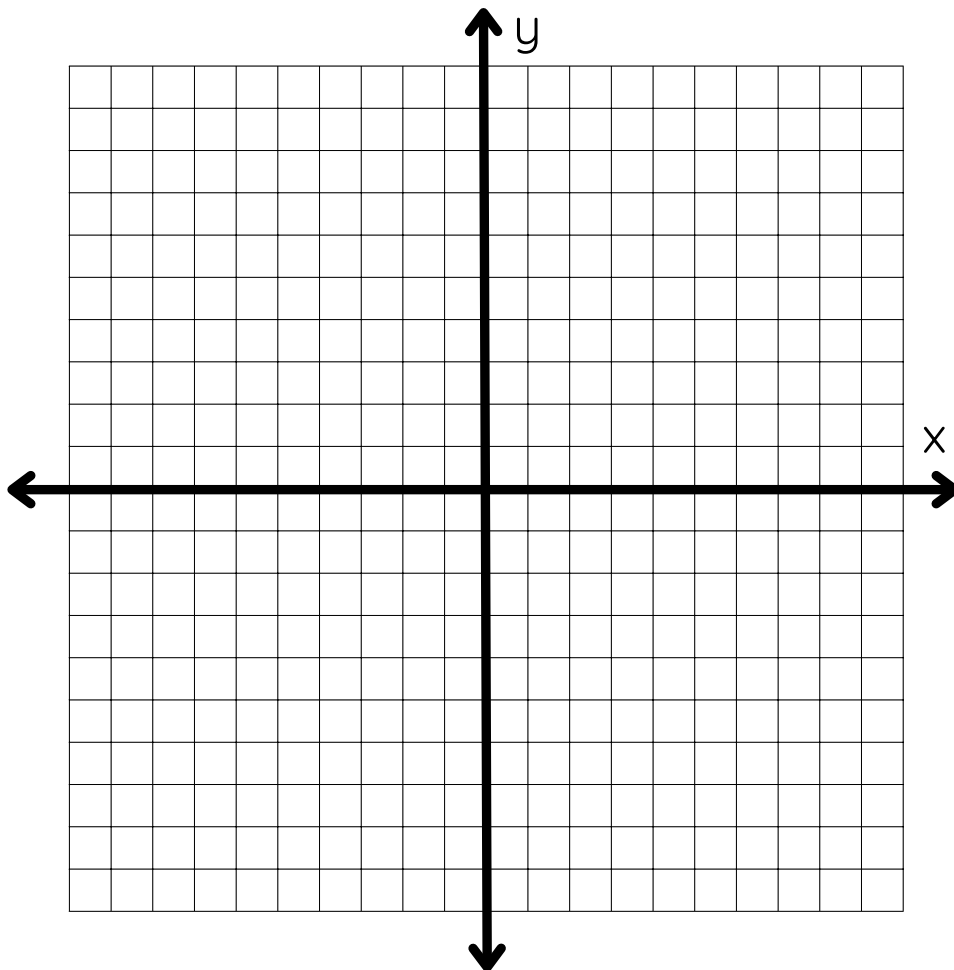
# Left and down?



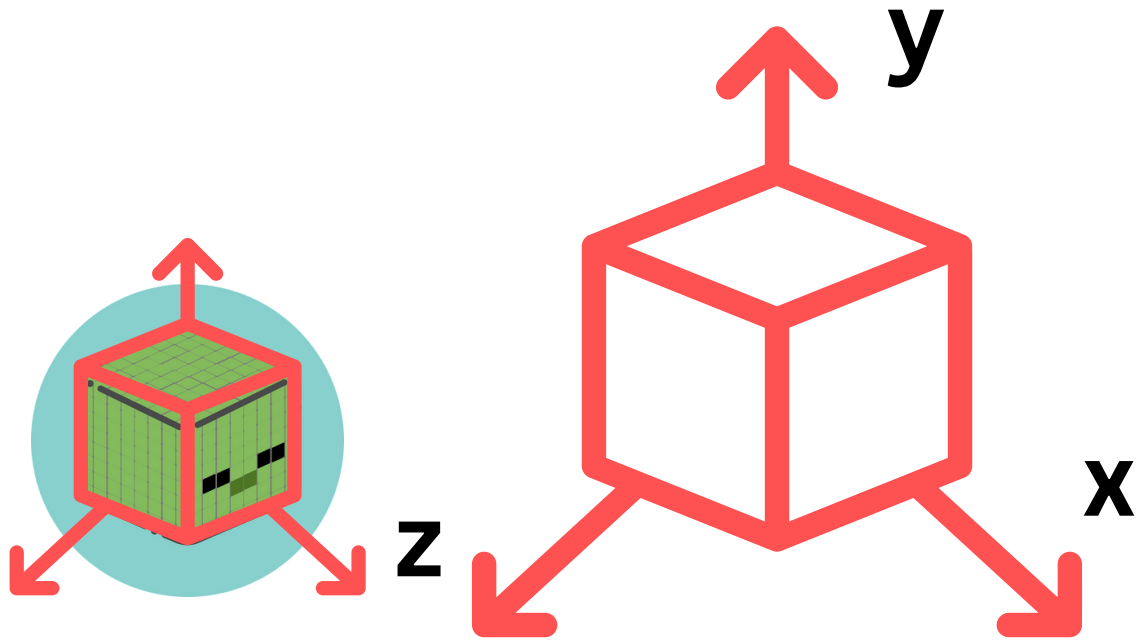
**(-2 , 3)**

**(4 , -1)**

**(-1 , -3)**



# Make it 3D



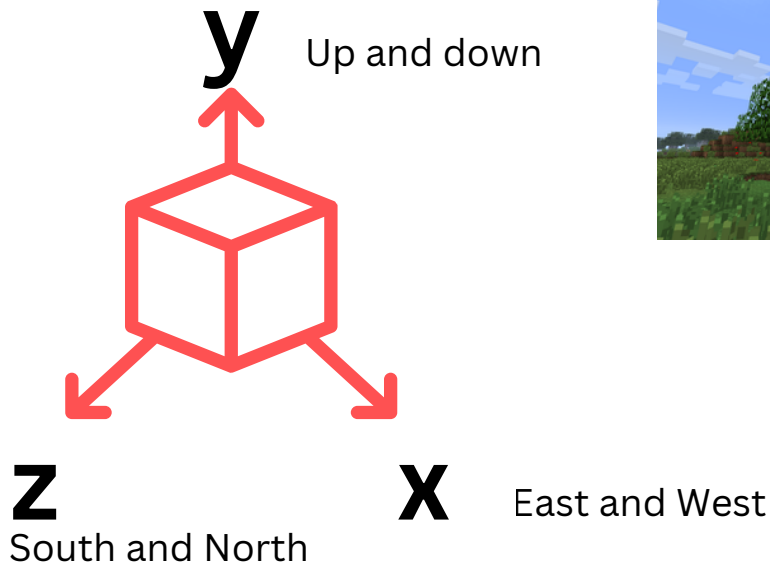
## Paper jump

**(1, 2, 3)**

**(2, 4, 1)**

**(3, 2, -2)**

# Coordinates on Minecraft



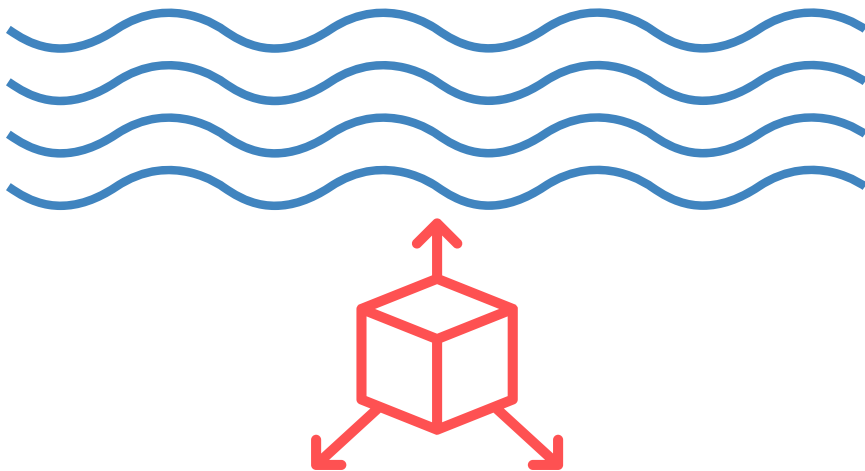
**Where is the origin?**  
**(0, 0, 0)**

# Coordinates on Minecraft

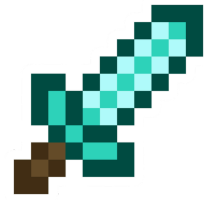
See level on  
Minecraft is 63



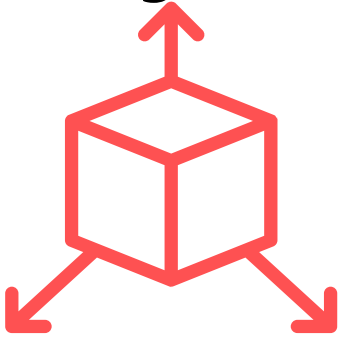
The origin (0,0,0)



# Quiz



**y** Up and down



**z**  
South and North

**x** East and West

1.

2.

3.

4.

# Minecraft challenge:

- Work out how to turn on the coordinates on the edition you use
- Can you find the origin? (0 , 0 , 0)
- Build a landmark like a little house, or place a chest, and take a note of the coordinates. Go off for a wander and see if you can use the coordinates to find your chest or house again.

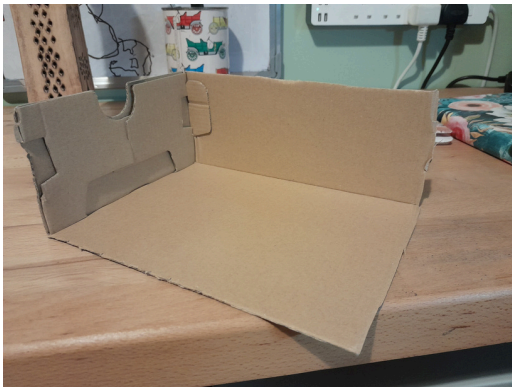
# Non Minecraft challenge

You are going to need

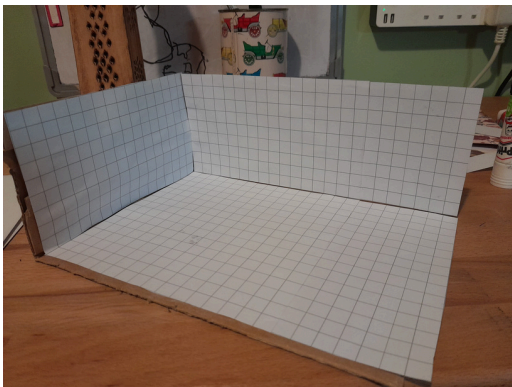
- A shoe or cereal box
- Scissors
- Square paper
- Glue
- A marker pen



Grab your box and scissors

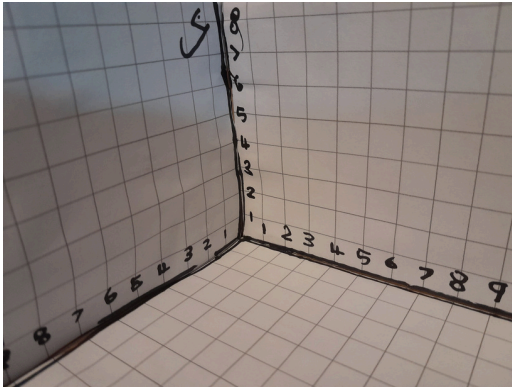


Cut off 2 sides that are touching, so that you are left with a base, back and side.

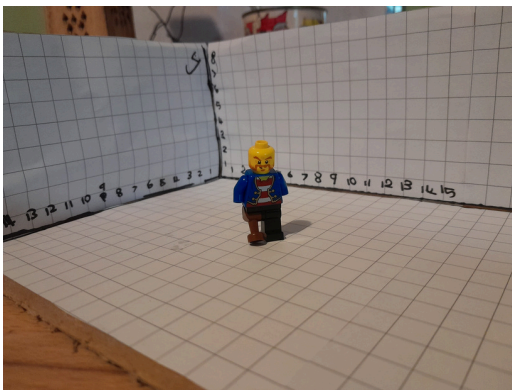


Stick your square paper to the sides (you will need to cut them so they fit)  
Be careful to line up the squares to they meet....squarely

# Non Minecraft challenge



Use a marker to draw in the x, y and z axes.  
Label them carefully with numbers (on the lines, not in the boxes)



Use a little figure or object to move around to different 3D coordinates.

Maybe even make a little stop motion animation?

**Then send me your pictures!!  
@joyfulmathswithruth on  
instagram, facebook or tiktok**

