

DESIGN & TECHNOLOGY WEEK

#MATHS

#RATIOS



FORTRESS DESIGN

Name:

Class:

Design Brief

You are to design a MINECRAFT fortress using cobblestone and wood. It should be large and secure to protect as many inhabitants as possible.

- Each block of stone and wood is 1 m³.
- The fortress must have a secure outer wall at least 2 metres high – any gaps or low parts will not stop Zombies, Creepers, Endermen or Skeletons from entering the fortress.
- You must use a mixture of wood and cobblestone.
- The fortress must also have an inner building for shelter.
- You will have 20 carts to transport materials to the construction site – choose your quantities of wood and cobblestone wisely!



Cart Info



Cobblestones are twice as heavy as Wood

1 cart can carry 10 Cobblestone OR 20 Blocks of Wood

Other ratios are possible

1 cart = 5 Cobblestones + 10 Blocks of Wood

Or

1 cart = 1 Cobblestones + 18 Blocks of Wood


Or


1 cart = 9 Cobblestone + 2 Blocks of Wood

Or any other ratio that does not exceed the maximum for each cart.





Write down your material orders here – Max 10 Cobblestone or 20 Blocks of Wood per cart.


	Number of Cobblestone
	Number of Wood

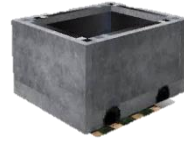
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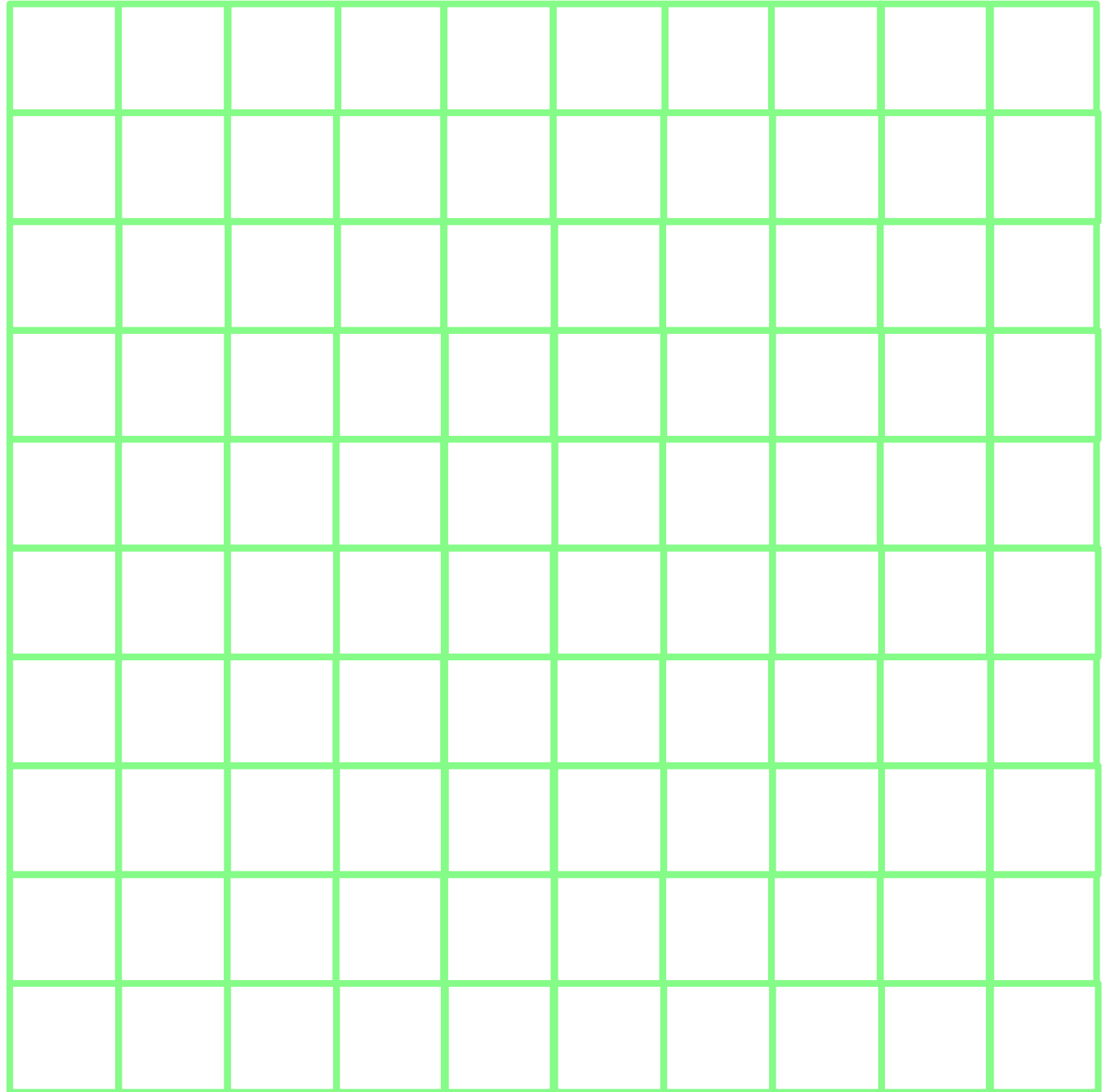
	Number of Cobblestone
	Number of Wood

	Number of Cobblestone
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Plan Your Fortress

On this page you
can plan the
footprint of your
fortress.

- It should be as large as possible
- Each wall needs at least 2 blocks high
- It must have an internal building / shelter



Draw Your 3D Fortress

- Draw your full fortress here – use colour or shading to indicate which blocks are **Cobblestone** and which are **Wood**.
- You can only use materials that you had delivered in the carts.

