



# Craft your Future - Learning Construction in Minecraft



Craft your Future is a lesson plan based on the computer game, Minecraft. In this custom built Minecraft world, students encounter a variety of problems that reflect construction challenges in cities today.

<b>Practical information</b>	
Subjects covered	Art and design, Design and technology, Geography
Year	5.-7. UK- Year's 7-9
Duration	4 chapters, 3 - 6 hrs each

## Chapter 1: Renovation

Before students enter the game, the teacher must divide students into groups, if possible with 3 in each group. Each group is assigned a number, which is to be used to navigate throughout the rest of the game. Upon entering the game, students arrive at an open spawn area where they can see four portal buildings. Since this is chapter 1, students go to the building with a big "1" at the entrance, and find the portal with their number above it.



## Aims

- To let beginners get accustomed to the Minecraft interface and control of the avatar.
- To introduce the concept of urbanization.
- To practice teamwork around a common production.

## Lesson Overview

Chapter one takes its beginning on a rooftop of a residential complex. Here, students must show that they can utilize a new area - the roof, to create a common space for the residents. The roof is to be made multifunctional and serve a variety of interests. Students must come up with ideas that demonstrate an optimal use of the space. Their small constructions must show that they have an eye for the interests of the community before those of individual groups.

Before going in game, students must be equipped with a background knowledge and understanding of the context they are building in, and why. In preparation, students investigate the concept of **urbanization**, to gain insight into the necessity of building multifunctional facilities on a roof.

## Before (2-3 hours)

1. The teacher divides the class into groups, preferably with 3 in each group.
2. Getting into character(optional): The groups agree on a name for their construction company and make a logo.
3. Investigating urbanization. Opening questions:
  - Why are urban populations growing? [See teacher / student resources](#)
  - What is a private, a common, and a public space?
  - Which purposes can a roof be used for in a residential building?
4. The teacher shows the [intro video](#) to the chapter and the groups preview the roof they will be building on. Their constructions must include:
  - An outdoor kitchen facility.
  - A table and bench area
  - Three trees
  - A greenhouse
  - A secure perimeter
5. Groups discuss how they wish to make a common space on the roof and sketch their idea on the template available in the [student menu](#).
6. Groups present their ideas to another group or the whole class, who provide feedback and suggestions for the build. If time permits, this phase can be framed as a public hearing, where different groups are assigned the role of a group of residents. This can be children, teenagers, families, and elderly residents.
7. The teacher establishes a codex for good in game behaviour together with the class. These can be:



- Keep a respectful tone in the chat. This means that you do not write ugly messages to or about others or use swearwords.
- Do not break or interfere with other player's constructions.
- Follow the teacher's in game and off game instructions.

### **In Game (1½-2 hours)**

1. Students enter the spawn area and find their way to their designated rooftop using the number assigned to their group.
2. Students build their ideas on to the rooftop.
3. The teacher pauses the game and lets students show their builds to each other. This can be organized as a group to group activity (1 and 2, 3 and 4 etc), or a class activity. The groups provide each other with feedback.
4. The groups go back to their build to make a second and final iteration.
5. The groups document their work using screenshots or video recordings.

### **After (2 - 2½ hours)**

1. Using their documentation material, the groups prepare their presentations. Here they must answer the following questions:
  - What have we built?
  - Why did we build it like this?
  - How do your constructions benefit the interests of the residents?
  - Did you follow your plan? Why? / Why not?
  - How did you perform together as a team?
2. The teacher summarizes the main points from the presentations and recaps the questions from the **Before** phase.
3. The groups are asked to reflect on the quality of their teamwork and suggest ways to optimize or improve this.

### **Evidence of learning**

- Students can demonstrate a basic understanding of urbanization through designing and building basic structures.
- Students can develop and improve a design through a cycle of iteration, feedback and reiteration.
- Students can reflect on their own ability to participate in a team.