

Objective

By the end of this lesson, the student will understand basic concepts of city planning, including geometry, resource management, and environmental science, while creatively building their own city in Minecraft.

Materials and Prep

- Minecraft (Java or Bedrock Edition)
- A computer or gaming console to play Minecraft
- A notebook or digital document for planning
- Pencil or digital drawing tool for sketches

Before the lesson, ensure Minecraft is installed and accessible. Familiarize yourself with the game mechanics, especially building and resource gathering.

Activities

• City Planning Sketch

The student will start by sketching a layout for their city on paper or digitally. They should include areas for residential, commercial, and recreational spaces. Discuss what makes a city functional and enjoyable.

• Building a Basic Structure

Using Minecraft, the student will create their first building based on their sketch. They can choose to build a house, a shop, or a park. Encourage them to think about the materials they use and how they fit into their city.

• Resource Management Game

Introduce a mini-game where the student has to gather resources to build their city. Set a timer and challenge them to collect enough materials to complete a specific building. Discuss the importance of resource management in real city planning.

• Environmental Impact Discussion

After building, have a discussion about how cities impact the environment. Ask the student to think about how they can make their Minecraft city more sustainable, such as using renewable resources or creating green spaces.

Talking Points

- "What do you think makes a city a great place to live?"
- "Can you think of different types of buildings we need in a city? Why are they important?"
- "How do you decide where to put your buildings? Is there a special order?"
- "Why is it important to gather resources before building? What happens if you run out?"
- "How can we make our city in Minecraft better for the environment? What are some ideas?"