

Liveable City

Activity Overview: In this activity, elementary students will create their own “Liveable City” using coloured Lego blocks, each representing different building and land use types. A steward will be there to assist high school students.

Objectives:

The students should learn:

- To identify different land uses and building types that make up a community
- To develop a basic understanding of community planning - how different land uses are designed to protect the environment, conserve water and to make a community more enjoyable to live in
- How each land use and building type uses water and sewage services

Materials:

- Liveable city base plan (Lego)
- Lego parcel- includes roads, rivers, railway tracks, trees, and crops
- Coloured blocks (see inventory sheet)

Setup: Review the instructions well in advance. Refer to Part 1 on how to set up the activity

Vocabulary:

Community - The place where you live. It includes the natural environment and areas that are built or constructed including houses, neighbourhoods, stores, shopping centres, offices, factories, roads, bridges and sidewalks. A community can be a city, town, village, or neighbourhood.

Community Planning – The process of laying out buildings, roads and using land in your neighbourhood that is suitable and protects the environment.

Land Use - The way in which land is used, such as residential land uses (houses and apartment buildings), commercial land uses (stores and shopping malls), and parks/natural areas.

Good Planning Guidelines - Rules that planners use to make sure cities and neighbourhoods are great places to live and to ensure that rivers, lakes and nature are protected.

What will I be doing? (Procedure):

Before you start your presentation check with the teacher or chaperone that the entire group is present and ready to start.

*Remember that **doing** an activity and **discovering** the answer is more powerful than watching and listening to someone, so try to involve as many children as possible.*

Part 1: Organizing and Explaining the Activity (1-2 minutes)

Organize equal piles of yellow, orange, grey, blue, red, and green pieces into two equal sized piles on both sides of the table. Organize two equally sized groups of students on both sides of the table.

Say: “Welcome to Liveable City! This activity will help us understand how land is used and communities are built. In Peel, tap water is clean and safe to drink because each land use and building type uses water and sewage services.”

Ask: “What do you think a “Liveable City” is?”

Answer: A “Liveable City” is a great place to live, work and play. It is a place where the natural environment is protected, and all people have a chance to be healthy and happy. There is a mixture of land uses located near each other so that people have easy access to work, schools, and transportation systems.

***OPTIONAL* Tell the students:** “Some smart planning guidelines for a “Liveable City” include:

- 1) Protecting trees and nature in the city.
- 2) Managing water wisely and thinking about where the rain goes.
- 3) Building the city with many different uses like stores, malls, apartments, townhouses, houses, factories, libraries, doctor’s offices, schools, and fire/police stations.
- 4) Building the city with buildings close together.
- 5) Building the city with many different uses mixed together.
- 6) Build parks and other fun places to play”

Building Instructions:

- Explain the premise of the activity by going through the legend (there will be a chart/poster at the activity station).
- Remind the students the following:
 - Build away from natural features (rivers, ponds, wooded areas)
 - Build different sized housing to show townhomes, detached homes, apartments, etc.
 - Build near major roads (there are many roads so this should not be challenging)
 - Build a mix of commercial, institutional, and industrial buildings
 - Build an adequate amount of park space
- Tell the students to begin building!

Part 2: Building the Liveable City (5-7 minutes)

- Now let the students take over from here by placing Lego blocks on the base map and building their very own “Liveable City”.
- Circulate around the table to help students. Try to help those who are less engaged in the activity and encourage them to build; do so by saying “good job” or “I like what you are building”.
- Ask students why they are building certain things to have them critically think about their Liveable City.
- Remind the groups working on the blocks that they must work together as a team. If needed, you can break up this group into pairs or smaller groups and have each of the groups build only one type of land use. For example, one group only builds homes, while another only builds stores or shopping malls.

Wrapping Up Part 2

- Give the students warnings at 1 minute, 30 seconds, and then count down from ten to end the activity. When time is up, tell the students to raise their hands and stop building (raise your hands as well to show the students that they must do the same).
- Look through their cities and say to them that you like certain buildings. Also acknowledge if they followed instructions, for example, let them know that they have a mix of housing or if they located industrial use along railroads and away from houses.

Part 3: Clean Up (1-2 min)

***OPTIONAL QUESTIONS IF YOU HAVE TIME (POSSIBLY ASK ONE OR TWO OF THE FOLLOWING*:**

- **“Why don’t we place buildings in natural areas?”** Answer: Buildings are kept away from natural areas to keep the forests and rivers clean and to give animals a place to live and move around.
- **“Why don’t we place factories next to houses?”** Answer: Factories are kept away from houses so that people don’t have to listen to the noise or smell the emissions coming from them.
- **“Where does the water in our houses come from?”** Answer: The water comes from lakes, wells or rivers and is transported through pipes to our houses.
- **“Why should buildings be placed close together?”** Answer: It saves space for natural areas and allows people to be located closer to their work, schools, stores, etc.

Explain to the students that there is one last game to be played:

- The first team to put all their Lego pieces back into their appropriate piles win. Tell them to disassemble all pieces and to pick up all dropped pieces.
- **Do not** touch/remove the ponds, trees, roads, crops, and railways.
- Help the students clean up as well (use the brick separator to take off the green pieces).
- Award the team that finishes cleaning first with a high five (be sure that the other team finishes cleaning up).
- Once both teams have finished cleaning, end the activity.

