

Design and Build a City

If you travel through any city, you're sure to notice the hustle and bustle. Cities are full of activity with people entering buildings, stores, parks, museums, and theaters. Children will be traveling to school or playdates, and there are sure to be some construction projects underway. Challenge your learner to design and build a city of their own in this creative engineering activity. Geared toward third, fourth, and fifth graders, this activity allows budding city planners the flexibility to create whatever they desire with gentle prompting questions that will guide them in their design process.



What You Need:

- Various materials around the house, like:
 - Empty cereal boxes or small boxes
 - Tape
 - Paper
 - Any other artistic materials to decorate the city (optional)
- Space to spread out the city

What You Do:

1. Ask your child, "Can you build a city?" Discuss the design, purpose, and outlines of typical cities. Tell your learner their challenge is to create a city worth living in and define what that means to them.
2. Encourage your child to make a **plan**. Help inspire their thinking by asking:
 - What are some things you like in your town and neighborhood that you would like to include in your design?
 - What are some buildings, services, recreational places, or activities you would like to include in your community?
 - What is the geographical terrain of the city?
 - Is there freshwater located in or near the city?
3. Let your child take their time as they **create** their own city. Have your child use their chosen resources to build components of their city. They may take a few days, depending on how detailed they would like to be with their buildings, signs, streets, etc.
4. Tell your budding city planner to **play** with their new design. They can pretend to be a student in the city traveling to school. Ask, "What are some things you would see on the way to school? What would the traffic be like? Would you use public transportation?"
5. After testing out the design, ask your learner to think about ways they can **adjust** their design. For example, "What do you think will make your community even better? How would you help people feel welcome and safe?"
6. Challenge designers to **share** and describe their new designs. Some presentation options include recording a video or writing a blog about their design. Make sure they include pictures! As your learner creates their presentation, ask them some of the following questions:
 - What do you want people to understand about your city?
 - Why would people like to live in the city?
 - Which part of your city are you most excited about or makes you the proudest?

Amplify this challenge! Choose one or more of the following questions to add a new level of difficulty to the challenge:

- Can you create different communities within the city?
- Can you make the community look similar to one you have visited in the past?
- How is your community different from one located in another country?
- How would moving buildings around change the feel or purpose of the community?
- Can you adjust your city so that electricity is powered by renewable energy?
- Can you make a big tourist attraction in your city to promote tourism and strengthen the economy?

The opportunities for learning are endless with this fun and engaging design experience. This is a project that can take a day or weeks.