We will learn two basic principles of building construction to help you start creating your city!

**Definitions:**
- **Base:** the bottom part of a structure like a building
- **Pivot:** rotation around a fixed point, like how your upper and lower leg rotate around your knee joint

**Equipment:** Lego plates, beams, bricks, axles, and connectors

**Procedure:**
1. **Make a plan:** work as a team to write or sketch a design for your building. How many floors will it have? How will the people travel between the floors? Will it stay standing if someone pushes it near the bottom or the top?

2. **Make it!** Work as a team to build your building. Modify your design as needed.

**Analysis:**
1. How is the building you made similar to or different from your sketch? If there are differences, why did you make them?

2. Can you further improve your design?