BUILD IT Design Challenge
Amusement Park

Use your imagination to work through the Design Process and draft an original plan for an amusement park. Collaborate with a partner to brainstorm ideas and provide feedback on final designs, then translate your design into a 3D model using LEGO! Be sure to check out our Pass the Duck Activity warm-up to get familiar with the Design Process prior to starting this challenge!

Audience
- Builders of all ages, for individual or team building

Materials
- Sketching paper
- Pencil
- LEGO baseplates
- Assorted LEGO
- Design Process

Vocabulary
- Amenities – a useful feature of a building or place
- Scale – the relative size or extent of something; the ratio of size in a map, model, drawing, or plan.
- Truss – an assembly of beams and other structural elements to create a rigid structure (train tracks, rollercoasters, etc.)

Guiding Questions
- What are some fun attractions at an amusement park, like Navy Pier? What is your favorite thing to do at an amusement park?
- Amusement parks typically take up a lot of space with smaller attractions, rides, and amenities spread throughout the space. It’s important to think about those individual attractions and how they are spaced out. When designing your amusement park, it might be useful to think of the park’s scale, as well as the scale of the things inside.
- What shapes might you find in an amusement park’s attractions? (Ferris Wheel, triangular trusses in rollercoasters, etc.) How might these shapes be simplified by building with LEGO?

Instructions
1. Define the problem, collect information: You are tasked to design and construct an amusement park using LEGO. Use the guiding questions above to brainstorm and analyze ideas, and sketch an initial design for your structure.
2. Build and test a model: using your sketch as a guide, translate your ideas to a 3D model using LEGO.
3. Present your ideas to others for feedback: After you’ve finished your build, share it with the rest of your team! Share three unique things about your underwater hotel and what makes it special. Ask for feedback from your team to figure out what part of your design you could improve and keep building!

Share
We’d love to see your work! Share your creation with the Chicago Architecture Center on Facebook or Instagram using the hashtag #Chiarchitecture

Extend
Many more challenges await. Visit our website to see a list of more LEGO challenges, and be sure to share your work with us! #Chiarchitecture