BUILD IT Design Challenge

Pass the Duck

The Design Process is a tool architects and engineers use to organize information and ideas, make decisions, and share solutions with others. Pass the Duck is a fun warm-up activity for builders of all ages to learn about the Design Process and get familiar with designing with LEGO.

Audience

- At least two builders, all ages

Materials

- LEGO base plates (optional, 1 per builder, suggested size 8x8)
- Assorted LEGO pieces
- The Design Process illustration

Instructions

For this warm-up challenge, use the 8x8 LEGO base plate to get your build started. Think about the questions in each step before building to plan for your build. Notice how each step aligns with a step in the design process.

1. Build a duck
   a. What does a duck look like? What are some parts of the animal that tell us it is a duck (head, bill, wings, etc.)? Collect Information; Brainstorm and Analyze Ideas
   b. Use LEGO to build a duck in 2 minutes Develop Solutions; Build a Model

2. Improve a duck
   a. Pass your duck to your fellow builder and receive your partner’s duck. If working in groups, pass in a circle.
   b. What part of the duck could use improvement? How can you work with what’s already there to improve your new duck?
   c. Without REMOVING or MOVING any pieces, improve the new duck in 3 minutes Provide Feedback; Improve Design

3. Transform duck build into a store (retail building)
   a. Pass your duck one more time
   b. What is the overall shape of a typical building? What shapes do the duck and retail building have in common? What parts of the duck can also work for the store?
   c. Without REMOVING or MOVING any pieces, transform the duck into a store (retail building) in 5 minutes

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