

# Design a chair

**Goal:** To encourage students to gain confidence focusing on designs based on human needs, while working with different materials.

**Design Thinking Modes:** Empathy, Define, Prototype, Test

**Duration:** 45 minutes

**Group Size:** Groups of 3-4 working individually and in groups.

The 5 Chairs activity encourages students to design models of chairs based on design needs they get from user profiles. This activity also encourages students to iterate on their designs and practise using different materials.

## Materials:

- Client cards
- Sharpies
- Paper
- Scissors
- Corrugated Cardboard
- Pipe Cleaners
- Modelling Clay
- Tape
- Toothpicks

## Instructions:

### *EMPATHISE:*

- Get students into groups of 4
- Pass out client cards, one per group
- Have students highlight two needs they see in the description of their user.



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*DEFINE:*

- As a class discuss the types of functional and aesthetical criteria you may need to successfully complete this project.
- Each group comes up with functional and aesthetical criteria for success.
- Share your criteria with another group to gain feedback. Make any changes.

*IDEATE:*

- Students complete the following ideation activities.
  1. Draw a Chair (3 minutes)  
Using the provided Sharpies, draw three sketches of a chair on a piece of paper.
  2. Cut a Chair (5 minutes)  
Using ONLY your scissors and the sheet of corrugated cardboard, make a standing representation of your chair.
  3. Bend a Chair (4 minutes)  
Using as many or as few of the provided pipe cleaners, to make the structure of your chair.

*PROTOTYPE:*

- Mould a Chair (5 minutes)  
Using the provided clay, make a model of your chair.
- Assemble a chair (5 minutes)  
Using tape and toothpicks, build your chair.



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*TEST:*

Possible discussion questions to be completed as a class or in groups. (5 minutes)

- What was it like to build your chairs for the needs you identified?
- What was it like to create different iterations of your design?
- What did you change along the way? What did you learn from your prototypes?
- Did anyone get stuck at any point? What was that like? What did you do to get unstuck?
- Which material did you enjoy working with the most? Why?
- Which material did you like the least? Why?
- Which material best expresses the essence of the chair you drew?