

28. Cardboard Chair

Classroom Activity: Design and build a safe, comfortable and durable chair using only corrugated cardboard, string and an adhesive. The designs must be supported by data, analysis and drawings.

Grade (s): 9 to 12

Course(s) and Strand (s): Technological Education

Exploring Technologies, Grade 9 Open

- A. Technology Fundamentals
- B. Technological Skills

Technological Design, Grade 10 Open

- A. Technological Design Fundamentals
- B. Technological Design Skills

Technological Design, Grade 11 University/College

- A. Technological Design Fundamentals
- B. Technological Design Skills

Technological Design, Grade 12 University/College

- A. Technological Design Fundamentals
- B. Technological Design Skills

Technological Design in the 21st Century, Grade 12, Open

- A. Technological Design Fundamentals
- B. Technological Design Skills

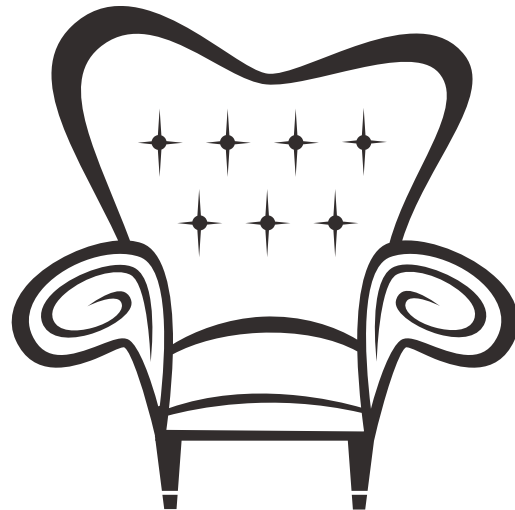
See supplementary document Ontario Curriculum Alignment for Engineer-in-Residence Secondary Classroom Activities: Science and Technological Education for relevant overall and specific expectations.

Assessment Categories:

- Knowledge and Understanding
- Thinking
- Communication
- Team-building skills

Type of Activity: Classroom/Lab or Independent Study

Preparation: approx 30 minutes



Time needed to complete the task: 75 minutes (Students are expected to research the project outside class)

Materials and Resources for Teachers:

None required

Materials and Resources for Students:

glue, scissors, exacto knife, string, corrugated cardboard

Activity Description:

Outline the task to the students and divide them into teams. Encourage students to produce a scale model of the chair from paper before cutting the cardboard. The chair must support each member of the group of four for at least 30 seconds, and the seat must be between 45cm–50 cm high. Glue may be used to laminate the cardboard up to 3 layers thick. The finished chair should also be aesthetically pleasing.