

# 10-Minute Maker Challenges

*Quick, Fun, Failure-Friendly Projects for K-6 Classrooms*

These challenges are designed to spark creativity and problem-solving in just 10 minutes. Perfect for transition times, early finishers, or quick maker sessions. All use simple, classroom-friendly materials.

## 1. Cardboard Creature

**Grade Level:** K-6 | **Time:** 45-60 min

**Materials:** Cardboard, tape, scissors

**Challenge:** Build a moving creature from only cardboard, tape, and scissors.

**Full Instructions:** [maker404.com/404-challenges/cardboard-creature/](http://maker404.com/404-challenges/cardboard-creature/)

## 2. Balloon-Powered Car

**Grade Level:** 2-6 | **Time:** 45-60 min

**Materials:** Balloon, straws, bottle caps, cardboard

**Challenge:** Create a car that travels using only balloon power.

**Full Instructions:** [maker404.com/404-challenges/balloon-powered-car/](http://maker404.com/404-challenges/balloon-powered-car/)

## 3. Cup Stack Claw

**Grade Level:** 2-6 | **Time:** 45-60 min

**Materials:** Cups, string, craft sticks, rubber bands

**Challenge:** Design a claw mechanism to stack cups without touching them.

**Full Instructions:** [maker404.com/404-challenges/cup-stack-claw/](http://maker404.com/404-challenges/cup-stack-claw/)

## 4. Marble Maze Master

**Grade Level:** K-6 | **Time:** 45-60 min

**Materials:** Cardboard, straws, tape, marble

**Challenge:** Build a maze that guides a marble from start to finish.

**Full Instructions:** [maker404.com/404-challenges/marble-maze-master/](http://maker404.com/404-challenges/marble-maze-master/)

## 5. Paper Clip Chain Reaction

**Grade Level:** K-6 | **Time:** 30-45 min

**Materials:** Paper clips, craft sticks, dominoes

**Challenge:** Create a chain reaction using simple materials.

**Full Instructions:** [maker404.com/404-challenges/paper-clip-chain-reaction/](http://maker404.com/404-challenges/paper-clip-chain-reaction/)

## 6. Straw Tower Challenge

**Grade Level:** K-6 | **Time:** 30-45 min

**Materials:** Straws, tape, paper clips

**Challenge:** Build the tallest free-standing tower using only straws and tape.

**Full Instructions:** [maker404.com/404-challenges/straw-tower-challenge/](https://maker404.com/404-challenges/straw-tower-challenge/)

**Pro Tips:**

- Keep materials simple and accessible
- Emphasize the design process over perfect results
- Celebrate creative solutions and "productive failure"
- Let students iterate and improve their designs

Find more challenges at [maker404.com/404-challenges](https://maker404.com/404-challenges)