

Train Design

You will need:

Masking Tape
Lollipop Sticks (15)
Dowel (2)
Spool (4)
Scissors
Paper Clips (6)
Wire (6 pieces, 20 cm long)
Ruler

Time: 65 minutes total

10 minutes: Brainstorming and Planning
30 minutes: Building
10 minutes: Testing and Adjusting
15 minutes: Group Run and Discussion

Team

Your team will include 2 to 3 members of your class.

Objective

Design and build a train car:

1. **Build a train car that meets all specifications.**
2. **It has to connect with hooks to your classmates train cars in front and back.**

You will not be given any more materials or any more time.

Specifications

- Width between wheels must match rail width (use your ruler to measure)
- Position hooks in middle (front and back) of dowel
- Your train car wheels have to roll, not slide, down the track

Things to think about for class discussion:

Explain your carriage design. What makes it unique?
Does your carriage work or not? What could make it better?
Did your design turn out how you originally thought it would?

