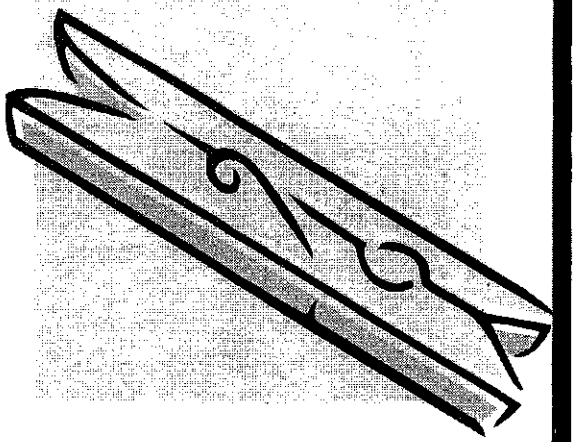
Clothespin Car Engineering Challenge

Can you make the clothespin car that travels the farthest distance when launched from a ramp?



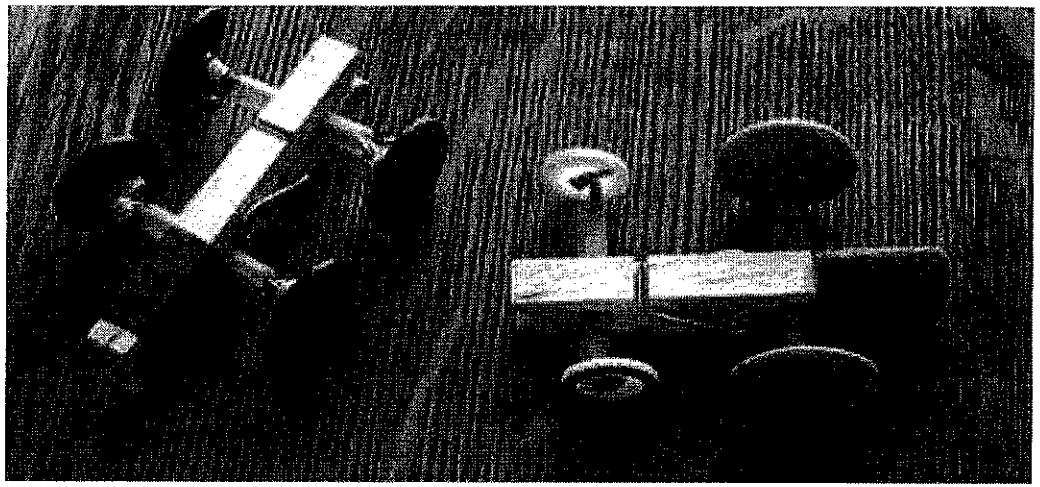
Created by: Smart Chick Teaching Resources

Teacher Directions

Materials: (per student)

- Clothespin
- 4 Assorted Buttons
- Colored Masking Tape and Scissors
- Pipe Cleaner
- Straw

- Ramp (one per classroom)
- Tape Measure



Set-Up:

- Students will need to cut the straw and pipe cleaner into two pieces.
- The car should be able to roll, allow time for students to make adjustments as needed.
- You will need to launch these from a ramp, the ramp can be made from any material (we used a three sided cardboard display board with the sides cut off) and you can decide on the height of the ramp.
- Provide a flat surface for the construction.

Goal:

Students will build a clothespin car from the materials provided that can roll down a ramp.

Clothespin Car

Engineering Challenge

Can you make the clothespin car that travels the farthest distance when launched from a ramp?

Challenge Rules

- You must use **only** the materials provided for the challenge.
- The cars must all be launched from the same ramp at the same height.
- Your goal is to build the clothespin car that will travel the farthest distance.
- Remember, the wheels of the car should spin.
- There are many different ways to complete this challenge. Be creative!

Student Lab Sheet: Clothespin Car Challenge

Name _____

Were you successful in this challenge? Why or why not?

What was the most difficult part of this challenge? Why?

What was the best idea you came up with during this challenge?

My Questions:

How far did your clothespin car travel? What did it do once released from the top of the ramp?

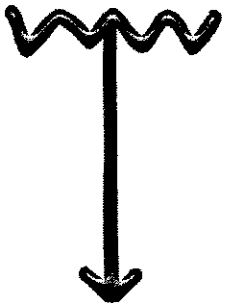
What did you learn about construction and engineering during this challenge?

Sketch your solution on the back of the sheet.

Student Lab Sheet: Clothespin Car Challenge

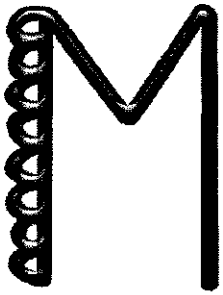
Name _____

What is the science behind this challenge?



Research this topic using books and/or the Internet and record any information you find.

What was your design solution for this challenge?



What data can you record from this challenge?