

CARDBOARD RACE CARS!

Engineering Challenge Worksheet

Name:

Team:

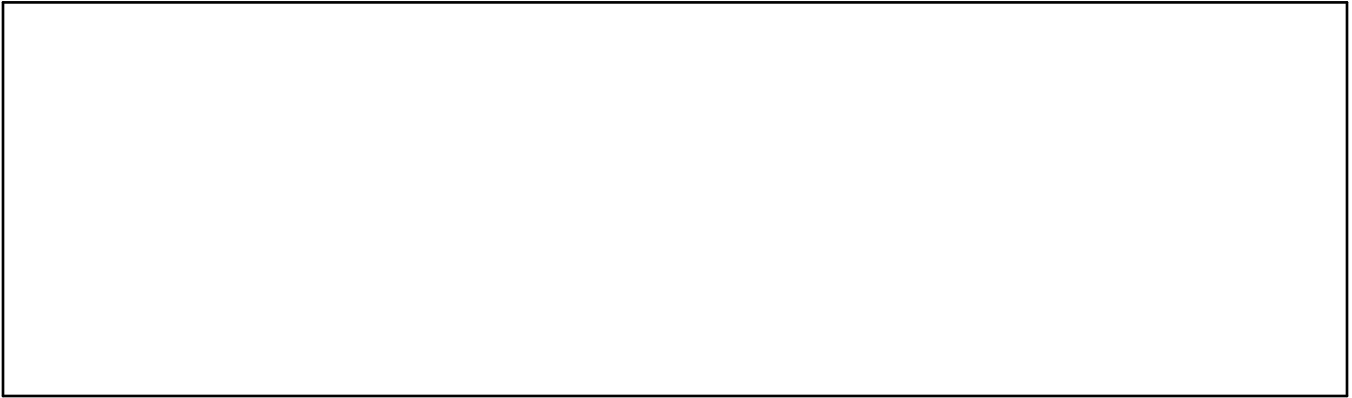
Your mission: Design and build a cardboard car that rolls smoothly and travels as far or as fast as possible. Engineers test ideas, measure results, and improve their designs.

1. THINK LIKE AN ENGINEER

What do you think will help a car roll well?

2. DRAW YOUR FIRST DESIGN

Sketch your car. Label the wheels, axles, or another important part.



3. BUILD & TEST

Test	What did you change?	Result
First design		
Improved design		

4. WHAT HAPPENED?

Did your car roll straight? What did you notice about the wheels and axles?

5. IMPROVE YOUR DESIGN

What is ONE change you would make next? Why?

CARDBOARD RACE CARS — REFLECTION

6. ENGINEERING THINKING

My car worked well because...

The most surprising thing I observed was...

When I changed _____, the car _____ .

A good engineer needs to be willing to...

7. CHALLENGE YOURSELF

If you had to make your car travel twice as far, what would you change?

8. SHOW WHAT YOU LEARNED

Complete one or more:

I learned that wheels and axles work best when... _____

I learned that testing is useful because... _____

My best design idea was... _____

ENGINEER'S NOTE

There is not always one “right” car design. A test gives you information. Use that information to make your next design better.