

BUILD A BRIDGE!

Engineering Challenge Worksheet

Name:

Team:

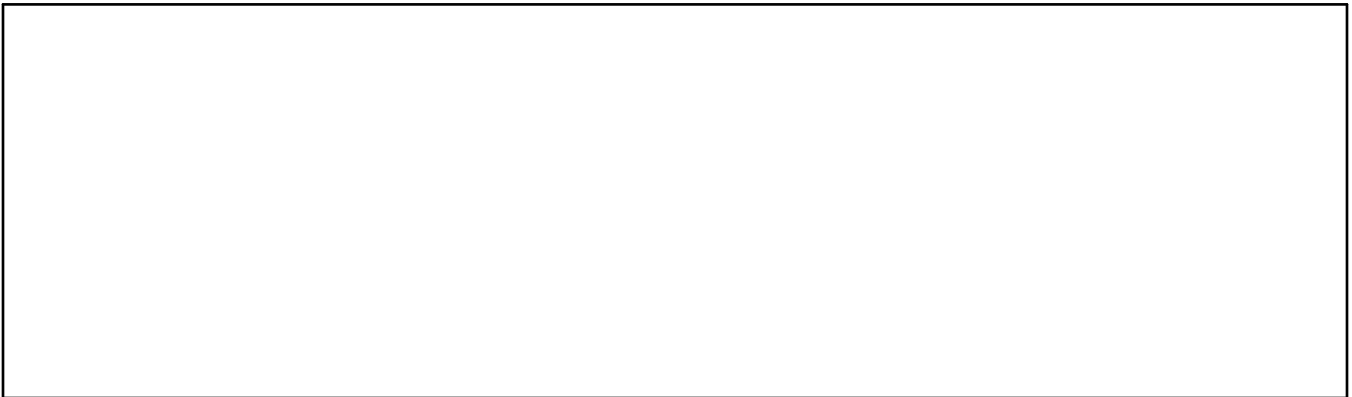
Your mission: Design and build a bridge that spans a gap and carries weight. Engineers make predictions, test ideas, learn from results, and improve their designs.

1. THINK LIKE AN ENGINEER

What do you think will make a bridge strong?

2. DRAW YOUR FIRST DESIGN

Sketch your bridge. Label at least one important part of your design.



3. BUILD & TEST

Test	What did you change?	Weight held
First design		
Improved design		

4. WHAT HAPPENED?

Where did your bridge bend, break, slip, or stay strong?

5. IMPROVE YOUR DESIGN

What is ONE change you would make next? Why?

BUILD A BRIDGE — REFLECTION

6. ENGINEERING THINKING

My bridge was successful because...

The most surprising thing I observed was...

When I changed _____, the bridge _____.

A good engineer needs to be willing to...

7. CHALLENGE YOURSELF

If you had to make your bridge span twice as far, what would you change?

8. SHOW WHAT YOU LEARNED

Complete one or more:

I learned that a bridge can be stronger when... _____

I learned that testing is useful because... _____

My best design idea was... _____

ENGINEER'S NOTE

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