

Activity Paper Bridge Challenge

Introduction:

Sometimes our answers are simpler than our questions. Creativity is the root of good design. We must learn from our errors through clear and focused documented trial.

Challenge:

In this activity you will work in your team to design a solution to a problem using the Engineering Design Process. You will also document this process within your engineering notebooks. You will design the longest continuous bridge elevated by only 2 linking cubes using just 1 sheet of 8.5x11 inch cardstock paper. Your cubes must exist on the same plane and in order for the bridge to be counted as continuous papers must overlap such that they make contact with one another.

Equipment:

- Engineering notebook
- Pencil
- $\frac{3}{4}$ in. Linking Cubes (2)
- 1 sheet of 8 $\frac{1}{2}$ x 11 in. cardstock
- Assorted construction tools such as scissors

Procedure:

In teams of 3-4 you will follow direction provided by your teacher

You will document each step that you use in the design process that you learned from this lesson. Document each step in your Engineering Notebook.

Design, build, and test a structure capable of maximizing the distance that it spans across two linking cubes which are connected by a continuous track of paper. The product must in the end be:

- Continuous from one block to the next without touching the surface it spans

