**Instant Challenge: Paper Bridge**

In this activity students will work as a team to design a paper bridge and document their process in their engineering notebook.

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| [Image result for card stock](https://www.google.com/imgres?imgurl=http://www.jampaper.com/userFiles/productImages/15-02036-Legal-Size-8-1-2-x-14-Paper-Cardstock.jpg&imgrefurl=http://www.jampaper.com/PaperCardstock/LegalSize812x14PaperCardstock&docid=E-yy4pItZYlXqM&tbnid=7mmS7tNg4CVOwM:&vet=10ahUKEwjOsZOGjLHTAhXjqFQKHYDZDRgQMwh_KA0wDQ..i&w=1000&h=1000&bih=458&biw=1051&q=card%20stock&ved=0ahUKEwjOsZOGjLHTAhXjqFQKHYDZDRgQMwh_KA0wDQ&iact=mrc&uact=8)[Image result for 3/4' wooden cubes](https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=0ahUKEwjirdzljLHTAhWIwFQKHaBgCxQQjRwIBw&url=https://www.etsy.com/listing/224214824/25-wood-blocks-square-34-inch-wood-cubes&psig=AFQjCNEyshRjLbfoVWrBs1r3rguYcE6VOQ&ust=1492711139132134) |

Equipment

* Engineering notebook
* Pencil
* ¾-in. wooden blocks (2)
* 1 sheet of 8 ½ x 11 in. cardstock
* Assorted construction tools such as scissors

Procedure

1. Follow the direction of the teacher while completing this activity.
2. Use the design process learned earlier in this lesson. Document each step in your engineering notebook.

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1. Design and build a product that maximizes the distance between two blocks which are connected by a continuous route of paper. The product must meet the constraints below.
   1. The paper must form a continuous chain of connectivity from one block to another without touching the tabletop.
   2. Paper-to-paper linkage will be considered continuous.
   3. The two wooden blocks are ¾-in. wooden blocks.
   4. Both blocks are at table height.
   5. Cardstock can be modified.
   6. Additional material can be used during construction, but not on the final product.
2. The winning design meets the constraints above with the blocks farthest apart.