



Under the Bridge

Instant Challenge



A Destination Imagination Instant Challenge is a great way to help children develop 21st century skills in the 4Cs: creativity, communication, collaboration, and critical thinking. Join your child in solving this Challenge or encourage a group of friends or siblings to tackle it!

Focus: Innovation and design process, technical design and construction, logical reasoning.

Bridge building is a science and bridges are everywhere. Lots of structures use the same sort of ideas as bridge building. Walls of a house have supports inside of them that hold weight and act as a bridge from one wall to another wall. Water and boats go under bridges. People walk across bridges. Cars drive on bridges that go over other streets.

Now is your turn to see if you can build a bridge!



Challenge

Your task is to create a bridge that is high enough for a basketball or soccer ball to go under.

Part 1: Use only the materials below to build a bridge. Your bridge must be long enough and high enough that you can roll a basketball under the bridge without the basketball touching the bridge. The bridge must be freestanding and may not be attached to anything or held in place.

Part 2: Roll a ball under the bridge.



Materials

- 2 Sheets of Paper
- 2 Paper Cups
- 2 Paper Plates
- 6 Chenille Sticks (Pipe Cleaners)
- 5 Mailing Labels
- 2 Index Cards
- 2 Rubber Bands
- 24in (60cm) of String
- 1 Basketball or soccer ball
- 1 Pair of Scissors

The scissors may not be damaged and may not be part of the bridge.



Reflection Questions

- A. What material was the easiest to use for height?
- B. What material was the easiest to use for length?
- C. What material was used in the most creative way?
- D. What made the bridge stand up by itself?