

Okay friends, welcome to Creative Steam. We will be playing and learning or should I say we will be learning as we play. Let's try making our own bridge while at home. Remember, we will be glad to know how it went. Come on, let's go!



Let's make a bridge



Depending on the type of bridge to be built, think of some of the materials helpful for the stand, carriage as well as the balance. To make your own design here are some suggested materials

Suggested materials

1. Long ruler or measuring tape
2. Plastic cups, wood or gap between 2 tables or big books
3. Scissors
4. Cello tape
5. Non-flexible drinking straw, bamboo or solid card board
6. Weight for testing (e.g. stones, water in bottle etc.)

The above are different types of bridges we see around us. Now, try and remember where engineers have made any such bridges for our use?

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Before you build your bridge...

- ✓ Do you know what the strongest shape is?
- ✓ Do you know that Engineers design structures using shapes that support a lot of weight without collapsing?
- ✓ Which shape do you see often in bridges?
- ✓ Do you know you can experiment with shapes and think like an engineer to build a bridge?

TO DESIGN BRIDGE TO CARRY STONES

1. Building the base of the bridge by putting together the straws to give it the desired firmness.
2. While it is resting flat, test the bridge with stone to see how it holds up under a load.
3. Position bridge on 2 cups or 2 books 10cm or 15cm apart
4. Test how many stones it can carry without collapsing. (check stone weight if possible)
5. Now try other types using your own ideas

THINK ABOUT THESE

- Why did you select the materials you used?
- Which shapes did you try out in your bridge and what was the maximum weight it could carry?
- What can you do to expand your bridge?
- What can you do to make your bridge stronger?
- What can you do to make your bridge look good?

Share yours with us on our website, www.beaconfamily.net/CSatHome.html or e-mail, beaconfamilyhub@gmail.com. Send us picture of what you did and what you learnt. By the way, don't give up if it does not work the first time. Try again and again, we are glad to help make it work ☺.

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