



Operation Purple[®] AT HOME

... Activity 12 ...

CARDBOARD CREATIONS: BRIDGE BUILDER

Time: 60 Minutes | Participants: The whole family, kindergarten and up

This activity provides an opportunity for families to create a bridge out of cardboard and test its strength with everyday household objects!

FAMILY MISSION VALUES

Communication + Teamwork

WHAT YOU'LL NEED

- Cardboard
- Scissors
- Tape, glue, markers (optional)

INSTRUCTIONS

1. **Imagine + Design**

As a family, you are tasked with creating a bridge out of cardboard. Consider how long and strong it must be and use your imagination to decide what kind of design is ideal. You may want to first set a goal of how much weight you want the bridge to hold, then plan the amount of materials you may have and the time to bring it to life.

2. **Gather Materials**

After determining how much weight you want to hold, start gathering materials to build your bridge. It may be helpful to sketch out a design or even look at bridges on the internet for inspiration.

3. **Create**

Give each family member a different part of the bridge to build. Perhaps one person cuts out pieces of cardboard, another tapes. After all the major pieces are connected and built to your liking, you can decorate your bridge with markers or paint. Finally, give your bridge a name!

BUILDING TIP: Reinforcement is key. Be sure to brainstorm ways to best support your bridge and the weight you want to hold up.

.... Activity 12

4. Test!

After you've completed your bridge, place your bridge on two equal elevated surfaces. Slowly add weight using everyday household objects until you reach your goal. Take a photo and let us know how much weight your bridge could support.

Mission Accomplished!

WRAP UP

Sit down with your family or at a table and chat about the activity experience using these questions. Take turns reading a question and listen to each person's response.

- What was your favorite part of the cardboard creation activity?
- How is communication like a bridge?
- If you were going to design your bridge again, what would you change?