

Small Cup Tower

Supplies:

Small cups

Piece of paper

Procedure/Activities:

Using a small stack of cups, try building a tower on top of a sheet of paper.

When you finish building your tower, give the paper underneath a gentle shake. Does your tower still stand?

Try experimenting with tower design. Can you design a tower that can still stand after the paper shakes? How tall a tower can you build?

Index Card Tower

Supplies:

Index Cards

Procedure/Activities:

Using only index cards, try building a tower. You can rip and fold the index cards, if needed. How tall can you make your index card tower?

Large Cup Tower

Supplies:

Large cups

Procedure/Activities:

Using one stack of large cups, try building a tall tower.

When you finish building your tower, measure it. How tall of a tower is it? Is it taller than you? If not, can you build a tower taller than you? Can you build a tower taller than everyone in your group?

Aluminum Foil

Supplies:

Aluminum Foil

Procedure/Activities:

Using only aluminum foil, what can you make? Can you make a building? Can you create an animal? Can you make your favorite shape? What else can you make with aluminum foil?

Marshmallow Towers

Supplies:

Marshmallows
Toothpicks
Paper Plate
Pennies

Procedure/Activities:

Using only toothpicks and marshmallows, trying build the following:

A flat triangle
A flat square
A pyramid
A cube

Once you have mastered basic shapes, try building a tower. How tall can you make the tower?

After building your tower, try to build a structure that can support a paper plate. Add a penny to the plate. How many pennies can you add before the structure collapses?

What other designs can you build using only toothpicks and marshmallows?

Straw and Tape Tower

Supplies:

Straws
Masking Tape

Procedure/Activities:

Using only tape and straws, what type of tower can you build? Can you build a tall tower? How tall? Can you make a fancy tower?

What else can you build with only straws and tape?

Discussion Questions for the Family:

What shape do you think is the strongest? Why?

What shape do you think is the weakest? Why?

What was difficult about building a tall tower? What was easy? What was fun?

What was difficult about building a strong building? What was easy? What was fun?

Which was your favorite tower to build? Why?

Which was your least favorite tower to build? Why?

What was your favorite building material? Why?

What was your least favorite building material? Why?