

# Think! Team Building Challenge

## Class Description

This class will bring out the builder in every participant while sharpening the ability to problem-solve and developing team work. Each week the students will receive building materials and project specifications without any instruction of HOW to do it. They will have to flex their brain muscles in order to complete the assigned constructions.

Target Grade Level: 4<sup>th</sup> and up (I am more than willing to take younger students who are ready to try, try, try!)

## Class Overview

Week 1- Basic Building Principles, The Importance of Failure, Spaghetti & Marshmallow Constructions

Week 2- Silverware Towers & Straw Towers

Week 3- Spaghetti Challenge

Week 4- Cardboard Cars & Puff Mobiles

Week 5- Cool Catapults & Paperclip Art

Week 6- Plastic Bag Parachutes & Toy Towers

Week 7- Ski Boat Air Jets

Week 8- Egg Towers & Geometrical Shapes

Week 9- Cards & Straws

Week 10- Build a Bridge & Tool Bridges

Week 11- Tremendous Trampolines



Supplies Needed (bring to class on first day)

2 boxes of 100 count paperclips, box of plastic ware (forks, spoons, knives), 1 lb. box of spaghetti, 200 drinking straws, 1 bag rubber bands (per family)

Additional Materials Cost: \$6 per student

**“Results! Why, man, I have gotten a lot of results. I know several thousand things that won’t work.”**

~ ~Thomas Edison, on his failure to achieve a working light bulb

# Think! Team Building Challenge Plans

## Week 1

talk- Basic Building Principles & Thinking Outside of the Box

### Challenge #1 Spaghetti & Marshmallow Constructions

Supplies: 1 box spaghetti, 1 bag mini-marshmallows

Instructions: Build **any** construction with the materials.

## Week 2

### Challenge #1 Silverware Tower

Supplies: 8 spoons, 16 forks, 8 knives

Instructions: Make a tower that is as tall as possible (record measurements as you go in case it tumbles).

### Challenge #2 Straw Tower

Supplies: bag of straws, 6 inches of string, 6 paperclips, 6 inches of tape

Instructions: Build the tallest and strongest tower you can. It should be able to hold at least THREE books.

## Week 3

### Challenge #1 Spaghetti Challenge

Supplies: 1 box of spaghetti, 1 box of paperclips

Instructions: Build something strong or long. You have to be able to pick it up without it falling apart.

## Week 4

### Challenge #1 Post-It Note Towers

Supplies: 1 package post-it notes

Instructions: Make a tower as TALL as possible.

### Challenge #2 Puff Mobile

Supplies: 3 straws, 4 (mint) Lifesavers, 1 piece of paper, 2 paper clips, tape (50 cm)

Instructions: Make a car out of the materials provided. Race the cars, but you can only blow them to make them go!

## Week 5

### Challenge #1 [Cool Catapult](#)

Supplies: 6 chopsticks, plastic cup, sticky tack, elastic bands (tons)

Instructions: Make a catapult

(I showed some YouTube videos of catapults so students would understand how they work.)

### Challenge #2 [Paperclip Art](#)

Supplies: paperclips

Instructions: Put a handful of paperclips on the table and make something with them!

## Week 6

### Challenge #1 [Plastic Bag Parachutes](#)

Supplies: plastic shopping bags, yarn, paper cup, scissors, eggs, penny

Instructions: Make a parachute and test it by dropping a penny, once you think it works . . .

try an egg!

### Challenge #2 [Toy Tower](#)

Supplies: random toys (remind moms to have kids bring toys to class)

Instructions: Make another tower that is as tall as possible by stacking your toys!

## Week 7

### Challenge #1 [Ski Boat Air Jets](#)

Supplies: Styrofoam meat trays, balloons, rubber bands, washers, pool of water (duct tape & extra trays!)

Instructions: Make a ski boat that jets across the water

## Weeks

### Challenge #1- [Egg Towers](#)

Supplies: 12 Bamboo skewers, 12 straws (bendy and not), 12 inches of masking tape, scissors, egg, ruler

Instructions: Build a tower that will support the egg and keep it at least one inch above the surface of the table. You may not tape anything to the table or the egg.

### Challenge #2- [Geometrical Shapes](#)

Supplies: box/bag of straws, box of paperclips

Instructions: Make the largest geometrical shape you can (3D) . . . think really LARGE!

## Week 9

### Challenge #1- Cards and Straws

Supplies: box of paperclips, bag of straws, deck of cards

Instructions: Build the largest structure you can.

## Week10

### Challenge #1- Build a Bridge

Supplies: 2 cups, 2 spoons, 6 sticks of spaghetti, tape, 2 pieces of paper, pennies, measuring tape

Instructions: Build a bridge that spans 8 or more inches and see how many coins it can hold!

### Challenge #2- Tool Bridges

Supplies: tools, paint stirrers, tape measure, toy car

Instructions: Make a bridge out of the tools

## Week11

### Challenge #1- Trampolines

Supplies: plastic animals, balloons, rubber bands, circular objects (1 per group)

Instructions: make a trampoline that the animal can bounce on