IC Mini Challenges

Here are some Mini Challenges that you can present to your team using the bag of materials. You can manipulate the challenges by the materials you provide for each challenge and by the emphasis of points that you allot. When the point emphasis is more on the creative use of materials and design than on the actual height, you will encourage your team to take a bigger risk with non-traditional materials. Each challenge is 5 minutes.

- 1. Using two kinds of materials, build the longest line possible that can be picked up.
- 2. Using three kinds of materials, build the tallest tower possible that will stand on its own for at least 10 seconds.
- 3. Using two kinds of materials build a bridge from one chair to another.
- 4. Using three kinds of materials build a tower that is at least 10 inches high that will hold weight. (Weights can be bean bags, boxes of nails, anything of your own design)
- 5. Using two kinds of materials build a bridge that will hold weight.
- 6. Using four kinds of materials, build a course with at least 5 turns from a chair to the floor. Test your course with a marble.

In order to help the team build skills you can change the materials or challenge in any way you wish. Each time the team does the challenge a different way, have the team members discuss ways they can produce the most surprising results to get the most points.

Materials

Start with a One Gallon size zip bag. Add in any quantity/any size. Varying the number or items in the bag produces surprising new results. Add items to this list as befits your creative mini challenges!

Paper-type	<u>Length type</u>	<u>Round-type</u>
Squares of toilet paper	craft sticks	cotton balls
sheet newspaper	spaghetti	small marshmallows
sheets colored paper	1-foot lengths yarn or string	gumdrops
sheets of aluminum	tooth picks	marbles
foil	pencils	balloons
index cards	pipe cleaners	
mailing labels		
envelope	<u>Cylinder-type</u>	<u>Other</u>
small lunch bag	styrofoam cups	paper clips
paper plate	toilet paper tubes	rubber bands
	straws	

Remember that these materials may be used in any way imaginable. Don't put something in the bag that you want back or don't want thrown away.