

# Load 'er Up

- 1) This is a two part problem, **In Part I, you will have 5 minutes to develop your strategy and practice. In Part II, you will have 3 minutes to test your solution. You cannot talk in Part II**
- 2) You will divide your team into two groups, the Signalers and the Loaders
- 3) **Your problem is to use materials to communicate with each other so you can place items into the correct spaces in each egg carton.**
- 4) The Signalers will be on one side of the room and the Loaders will be on the other.
- 5) **In Part I, you will be given the items for placement. You cannot alter any of these items. In addition, you will have 4 numbered egg cartons, the signaling materials plus a practice loading guide.**
- 6) **When Part II begins,** All signaling materials will be returned to the table and the Signalers will be given the official loading guide. **You will have 3 minutes to load the items in the correct spaces in each egg carton.**
- 7) **The Signalers may only use the materials provided to communicate to the Loaders as to where the items should be placed. Signalers may not talk or use body language to communicate to the Loaders in Part II.**
- 3) You will be finished at the end of 3 minutes or when the team says they want to be scored.

Scoring will be as follows:

2 points per item for the correct placement in the correct carton.

1-10 points for creativity of your signaling system

1-10 points for how well you work together.

Penalty 5 - 50 points for talking or use of body language during Part II.

*Read the directions 1 through 7 in bold a second time.*

## For Judges Only:

Be sure that the Signalers and Loaders are **at least 10 feet apart** and have a table or desk in front of them.

Provide the **LOADERS** with the following items:

- 4 paperclips
- 2 golf balls
- 2 ping pong balls
- 2 shells
- 4 pennies
- 2 nickels
- 2 clothes pins
- 2 pom poms

Provide the **SIGNALERS** with the following materials:

- 1 ruler
- 1 unsharpened pencil
- 1 pipe cleaner
- 1 sock
- 1 piece of yarn 12" long
- 1 sheet of 8 1/2" x 11" of paper
- 1 box

You will also need 4 egg cartons (cardboard rather than clear plastic) numbered 1-4

### NOTES:

Both signalers and loaders may look at the **practice loading guide** to help them plan their signaling system but only the signalers may look at the **official loading guide** until they've tried the problem. Then the signalers should bring the official loading guide to share with the loaders so they can see how they did. Have then team talk about their signaling system, make improvements and try it again. It may be beneficial for the loaders and signalers to switch positions, too. **NOTE:** *New teams often aren't aware they could use sound (like tapping with the ruler or pencil) to signal the other part of the team. Tell them this after they've tried the problem once and let them regroup to figure out a new signaling system and retry loading the egg cartons again.*

### **IF they ask..but only if they ask....**

**They may NOT** use the set of directions for signaling

The some of the materials for the signalers **MAY** be altered. They may alter the pipe cleaner, yarn, and the paper but not the others. (The directions say the "items" may not be altered. "Items" are the things the Loaders are placing in the egg cartons. It does not say that the "materials" cannot be altered but they should ask first.

Draw up a **Practice Loading Guide**. Only give placement for about 1/3 of the items and not every kind of item.

For the **Official Loading Guide**, It would be good to have two or three items in one or two holes, as well as many with no items scheduled to be placed there. Include all items except for 2 or 3 items (your choice)

Items and materials can be changed so this problem can be practiced multiple times.