

Destination ImagiNation®

Instant Challenge

Advanced Level

STRETCH IT

Challenge: Your TASK is to add objects to a tray so that it descends to the floor as close as possible without touching the floor.

Time: You will have up to 2 minutes to use your IMAGINATION to discuss strategy and up to 5 minutes to add objects to a tray to suspend it just above the floor.

Set-up: In the middle of the room is a tray that is suspended from an elastic band. The tray may be lowered by putting objects on it. The suspended tray is surrounded by a taped line that may NOT be crossed. Outside the taped area, there is a table with objects of different weights and materials you may use to place the objects on the tray.

Procedure: During the Challenge, no part of a team member's body may cross the taped lines. If any part of a team member's body crosses one of the taped lines while the team member is placing an object, the object must be brought back across the taped line and placed again.

•Part One (2 minutes): Discuss strategy. You MAY touch the weights and materials, but you MAY NOT start building or testing anything.

•Part Two (5 minutes): Using the provided materials, you are to make one or more devices that will allow you to place objects on the tray. After building the device(s), you are to use the device(s) to add objects to the tray so that it is suspended just above the floor. You may remove objects at any time, but NO objects may be directly under the tray to prevent it from touching the floor. The closer the tray is to the floor without touching the floor, the more score your team will receive. You may not intentionally push or pull the tray as part of your solution.

Materials:

May NOT be damaged:

2 6 ft (180 cm) Wooden Poles

1 PVC Pipe 5 ft (150 cm) in Length

1 Plastic Cup

May be changed:

2 6 ft (180 cm) Pieces of String

6 Paper Clips

6 Mailing Labels

2 Pencils

4 Straws

6 Toothpicks

Objects to add to the tray (may NOT be damaged):

2 Metal U's

4 Large Nails

Hammer

Small Plastic Jar

2 Golf Balls

Small Book

2 Decks of Cards

Screwdriver

Scoring: You will receive

A. Variable points depending upon how far the tray is suspended above the floor:

up to 1 in (2.5 cm): 50 points

1 up to 2 in (2.5 – 5 cm): 40 points

2 up to 4 in (5 – 10 cm): 30 points

4 up to 8 in (10 – 20 cm): 20 points

8 up to 12 in (20 – 30 cm): 10 points

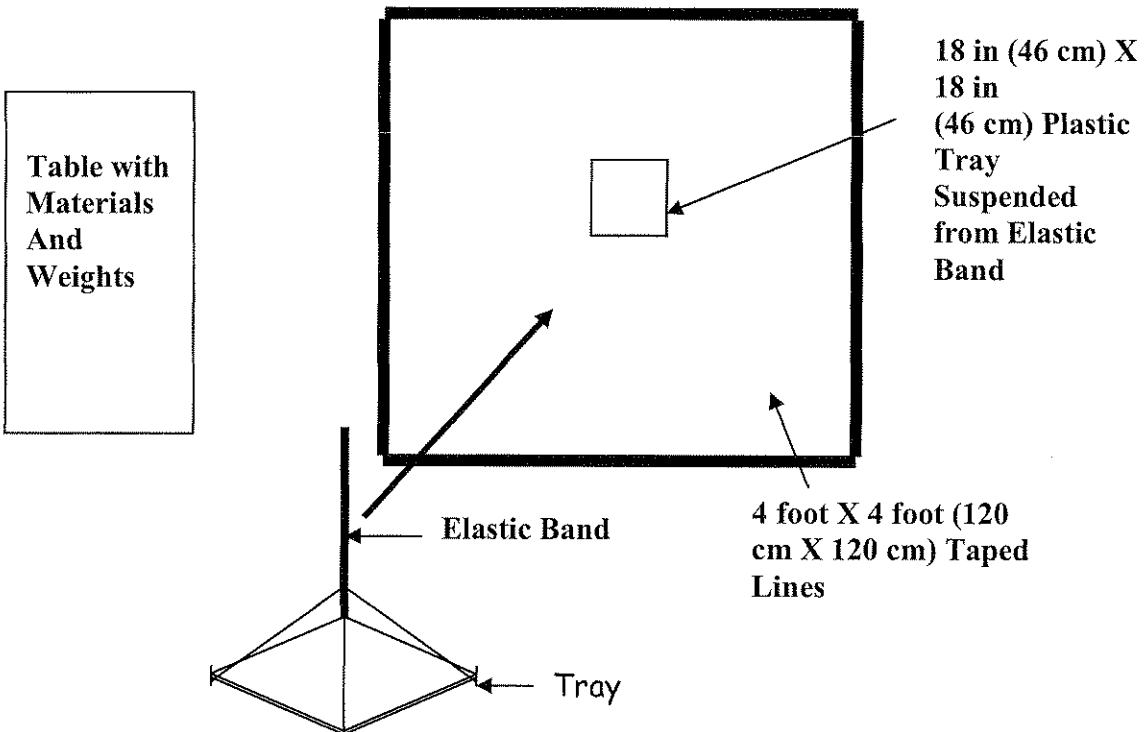
12 or more in (≥ 30 cm): 5 points

B. Up to 30 points for how creatively you use the materials.

C. Up to 20 points for how well your team works together.

For Appraisers only:

1. The set-up consists of tray suspended from an elastic band about 2 feet above the floor. The other end of the elastic band is attached to a rope that is attached to the ceiling. The tray is surrounded by a 4 foot X 4 foot (120 cm X 120 cm) taped square. Outside the taped square is a table with materials and weights.



2. Appraisers need to be positioned near the taped lines so that they may determine if any part of a team member's body crosses one of the taped lines. If a team member crosses over a taped line, that team member should be warned. Any objects that are placed on the tray as a result of the team member crossing over the line should be removed by the team before proceeding.
3. The elastic band holding the tray needs to be replaced after each team competes.
4. If an object falls on the ground, the team may retrieve the object. However, if the tray is resting on an object that ends up directly underneath it and prevents the tray from being any lower, the team should receive 0 for score element A.
5. If the tray touches the ground, team members may remove an object as long as time remains. The object must be removed using the team-created device.
6. An object on the tray may touch the ground as long as the object does not prevent the tray from touching the floor.