

# SPAGHETTI BRIDGE CHALLENGE

## PROBLEM STATEMENT:

Design and construct a model of a single span truss bridge with the help of spaghetti noodles satisfying the constraints stated below.

## DIMENSION SPACING:

The dimensions of the bridge model must be within the following limits:

Length: 56-60 cm      Width : 10-11 cm      Height: 12-16 cm

There should be a proper clearance for a 10cm X 8cm X 8cm box to pass through the span of the bridge. The members of the bridge can be built by grouping a maximum of 8 sticks of spaghetti noodles together.

## ARENA SPECIFICATION

- The arena has two wooden columns representing the landmass on the sides of a river.
- The distance between the inner edges of these columns is 46 cm.
- One cylindrical support of diameter 2cm and length 15cm is placed on each of the wooden column.
- One of the cylindrical support is fixed to the column and the other is free to act as a roller.