

**The following instructions explain how to create ONE set of resources for the Scaffolding Cube Challenge.**

**ONE set is required for EACH Team of Participants**

#### To Purchase:

- 4 lengths (each 3meters) PVC waste pipe 21.5mm (B&Q FloPlast works very well and is cheap)
- 1 roll each of Red/Blue/White/Yellow/Black Electrical tape
- 1 bag of 100 large cable ties.

#### Also required:

- Junior hacksaw
- Pencil
- Tape measure
- Permanent marker

#### Instructions

- Cut 2 of the 3 meter lengths of waste pipe into 60cm lengths using the junior hacksaw (10 in total)
- Cut 1 of the 3meter lengths of waste pipe into 70cm lengths (4 in total)
- Cut the remaining length of waste pipe into 2 x 60cm lengths and 2 x 70cm lengths

**Ensure that all cuts are straight as this will affect the final structure**

- Using the permanent marker, mark a line 9cm from each end of every length of waste pipe. This will act as a guide to keep the cube shape.
- Using the coloured electrical tape mark the lengths of waste pipe in the following manner
  - 4 of the 60cm lengths with blue tape to be the transoms. Using permanent marker add a “T” in the centre.
  - 4 of the 60m lengths with the red tape to be the standards. Using permanent marker add a “S” in the centre.
  - 4 of the 60cm lengths with white tape to be the ledgers. Using permanent marker add an “L” in the centre.
  - 4 of the 70cm lengths with the yellow tape to be the Sway Braces. Using permanent marker add a “SB” in the centre.
  - 2 of the 70cm lengths with the black tape to be the Plan braces. Using permanent marker add a “B” in the centre.

**Please note that the lengths of waste pipe are reusable but cable ties will need repurchasing/replenishing after every use.**