

2002 CITY SIGHTS

CITY SIGHTS FIELD SET-UP

OVERVIEW: The FLL playing field setup needed for practice consists of the Field Mat on a smooth flat surface, with Mission Models on top and Border Walls surrounding the perimeter.

OPTIONAL TABLE: Though the setup can be on a floor, it is recommended that you build the Optional Table. See the Team Manual, Appendix B for instructions.

FIELD MAT: This comes in a large tube as part of your Challenge Set. The tube also contains a sheet of re-closable fastening material (called 3M Dual Lock).

A SMOOTH FLAT SURFACE: Part of the Optional Table. If you are not building the Optional Table, choose another uninterrupted area. A smooth tile floor or quality whiteboard can be used.

TOURNAMENT SET-UP: At the tournament, two Optional Tables are joined together back to back, and each team is matched against another team (see the figure on page 3).

MISSION MODELS: These are made from the LEGO bricks in your Challenge Set, using the building instructions you can download from the FLL web site. The rest of this document describes how to arrange them on the mat once they're built.

ROW OF PLANTS: Cut ten 3 x 3 cm squares of Dual Lock. Lock two together at a time to make pairs. Peel the backing off one side of each pair, and stick the pairs evenly spaced on the mat in the rectangle labeled "Plants". Peel the remaining backs. Carefully align the Row of Plants over its rectangle, with branches facing away from BASE, and press the model onto the Dual Lock. Complete the setup of this model by hanging a Food Loop from its hook hole onto each of the four branches. The stalks of the plants are to be straight and vertical. The branches are to be perpendicular to the rectangle's length, but must be free to pivot. Tip: To straighten the stalks, press vertically down on them and they will self-align.

SOCCER FIELD: On the Soccer Field, align a Rock over each of the four squares labeled "Rock". Do not fasten the Rocks with Dual Lock.

BUILDING SITE: Cut twelve 1 x 1,5 cm rectangles of Dual Lock. Make and peel pairs as described above, then stick a pair over each of the six small rectangles found in the larger rectangle labeled "Building". Peel the remaining backs, then carefully align the Building over its rectangle, with the short side oriented as indicated on the mat, and press the model onto the Dual Lock. The four Bundles Of Materials associated with this model may be placed anywhere in the rectangle labeled "BASE".

BRIDGE: Cut eight 4,5 x 4,5 cm squares of Dual Lock. Make and peel pairs, and stick a pair over each of the four blank squares in the bridge area. Cut four 3 x 3 cm squares of Dual Lock. Make and peel pairs, and stick a pair to each ramp's short swivel-leg. Hold the half of the Bridge that consists of a ramp only (no deck), and align it so that its tall legs are over their two squares, and so the bottom of the ramp is between its marks, then press the legs onto the Dual Lock. Reach under the ramp and press the short swivel leg to the mat. Repeat this technique for the other half of the Bridge (with deck). Do not use Dual Lock anywhere else for this model. Bridge setup is complete when the deck is raised upright.

GATE: Note in advance how the Gate will be positioned, over the rectangle labeled "Gate". Its short section will be stuck to the mat, and its larger sections will be free to swing toward BASE... Cut two 6 x 1,5 cm rectangles of Dual Lock. Pair and peel, and stick the pair onto the

rectangle named "Gate". Place the short section of the Gate over the rectangle and press onto the Dual Lock. . Do not use Dual Lock anywhere else on this model. The free end of the Gate should slide along the mat and not swing through the air. Gate setup is complete when the Gate is closed.

WINDMILL: Cut eight 3 x 3 cm squares of dual Lock. Make and peel pairs, and stick the pairs to the bottom of the Windmill in all four corners. Center the Windmill (it will not fit exactly) over the rectangle labeled "Windmill" with the pushbar oriented as indicated on the mat. Complete the setup for this model by winding it 15 revolutions counter-clockwise and setting it by lightly pulling out on the pushbar.

BARREL RACK: Cut two 8 x 4 cm rectangles of Dual Lock. Make and peel a pair, and stick the pair over the rectangle labeled "Barrel Holder". Align the Barrel Rack over its rectangle, with the pushbar oriented as indicated on the mat. Level the rack by pinching the long and short beams flush. Complete the setup for this model by laying the four Toxic Barrels down on top, such that they would roll if the rack tilted, then slide them sideways until they are all aligned against the rail nearest the Building.

BUSHES AND TREES: Cut eight 1,5 x 1,5 cm squares of Dual Lock. Make and peel pairs, and use them to stick the two trees and two Bushes over their respective squares.

MARKET: Cut eight 1,5 x 1,5 cm squares of Dual Lock. Make and peel pairs, and use one at each corner of the Market to stick it over its rectangles, with the short wall oriented as indicated on the mat. Complete the setup of this model by placing four Food Loops on the mat inside the Market, lying down.

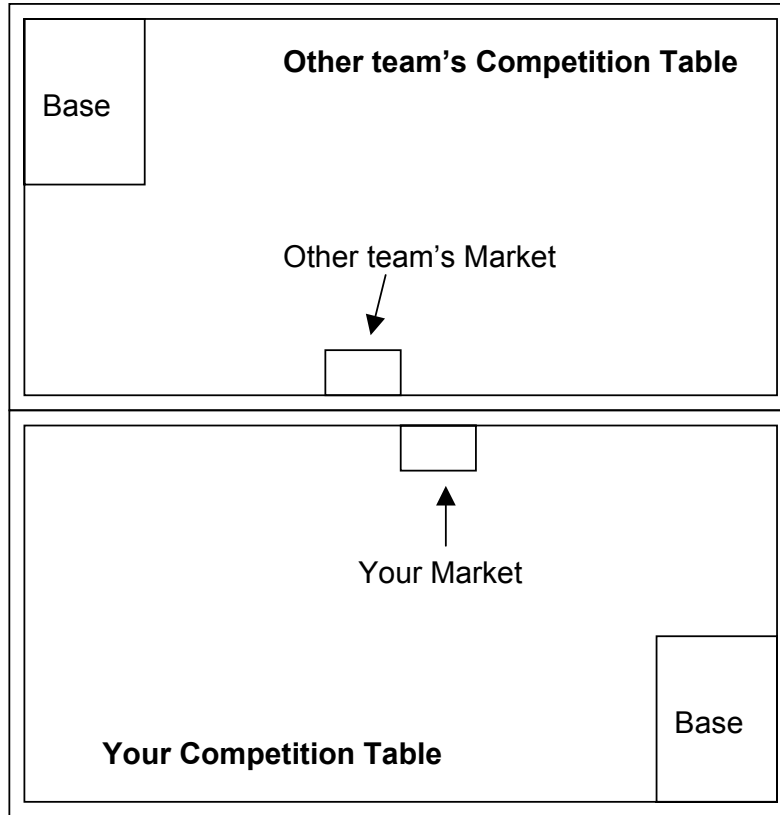
If you are not setting up two Optional Tables next to each other, you need to replicate part of another Table to fully practice deliveries to the other team's market. Secure a 60 cm long piece of 5 x 10 cm lumber behind the Border Wall behind the Market. Then secure a cardboard replica of your Market diagonally across from yours, on the left (at the tournament, Markets will be left corner-to-left corner, except separated by a double thickness Border Wall). See the figure on page 3 for more details.

MODULAR HOUSING UNITS: Position one unit over the rectangle labeled "Red House" with the drain tube oriented as shown on the mat. The other two units may be placed anywhere in the rectangle labeled "BASE". Do not use Dual Lock on any of the units.

BASE: Place the remaining four Food Loops anywhere in the rectangle labeled "BASE". BASE should now contain four Bundles of Materials, two Modular Housing Units, and four Food Loops.

GENERAL: Void practicing in extreme light conditions. At the tournaments all Optional Tables will have identically lightning over the tables. Your team will get time before the competition to readjust your robot to the Tournament lightning. Keep the mission models in original condition by straightening and tightening them often. Though some models are fragile, do not rely on their destruction for your strategy, as some may be glued together at a tournament (however, the Plants, Trees, and Bushes are designed to separate at their LEGO connections, and will not be glued). Avoid cleaning the mat with anything that will leave a residue. Try a damp cloth, and a pencil eraser for tough marks.

Tournament set-up:



Single practice field:

