

Set up your field

Your challenge set contains:

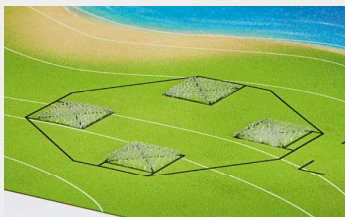
Field Mat, Mission Models, Dual Lock and White LEGO bricks that can be used to build your Innovation Project prototype

1. BUILD THE MISSION MODELS – Use the LEGO elements from your Challenge Set, and building instructions. Estimated time for 1 person = 6 hours. **Accurate Mission Model construction is essential. Double-check your builds, especially that all pieces are connected securely.**

2. DUAL LOCK AND SECURE MISSION MODELS – Follow the instructions on the following pages.

Dual lock – Find the brown sheets of this material from 3M in your Challenge Set. It sticks Models to the Mat, but allows removal too.

SECURING MODELS – “X” Squares show where to Dual Lock Models to the Mat. Use it as in this example, and **be very exact.**



STEP 1: Sticky side down



STEP 2: Sticky side up



STEP 3: Align model, press down

MODEL STRESS – When pressing a Model down, press on its lowest solid base structure instead of crushing the whole Model. Lift at that same structure if you need to separate the Model from the Mat.

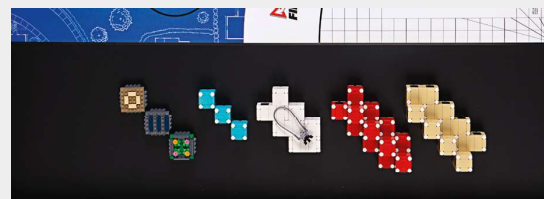
Loose models – Place as shown detailed here.



One blue unit w/flat roof



One white unit



In home, arranged any way you like:
Bat, sustainability upgrades (solar panels, roof garden, insulation), 14 units, your structure for mission 11



Inspection drone



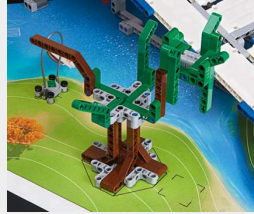
Six precision tokens

Simple secured models

Secure and prepare as shown and detailed here.



Swing



Tree



Traffic jam

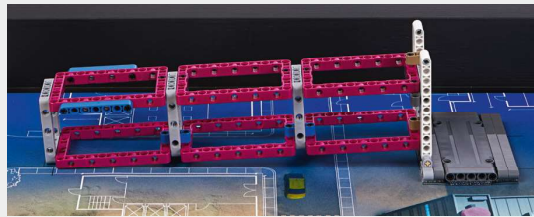


Elevator

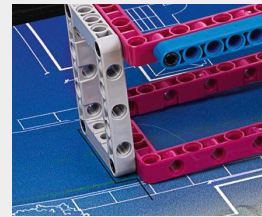
Multi-step secured models

Secure and prepare as shown and detailed here.

Steel construction:



Step 1



Step 2: Push East

Test building:



Step 1



Step 2

Crane:



Step 1: Tie square knot near end of string



Step 2: Hook this blue unit and wind all the way up. Rotate arm all the way clockwise

Multi-step secured models (continued)

Bridge:



Step 1: Carefully remove the bridge's entrance



Step 1: bottom view



Step 2: Double-check all dual lock locations



Step 3: Reinstall the entrance



Step 4: Adjust dual lock to get corners on red dots



Step 5: Be sure flag moves freely and points down



Step 6: Be sure the bridge top is centered over the north wall and substitute wall (if you have a wall).



Step 7: Use the support axles under the bridge top so it can hold a heavy robot. Experiment to see which length makes the top most level

TIP - Use books for Bridge support if your Field has no walls.