

# Experimental Cities: Handheld Digital Cities Activity Guide

This is an activity guide to explain how to create your own Digital Handheld City using the application CoSpaces Edu and the Merge Cube. Think about how nature can inspire the design of your city. First of all, watch our video 'Handheld Digital Cities' to get inspired. Once you're ready, use the step-by-step guide to explore some of the ways to build your city..

## Making your city

### YOU WILL NEED:

- Laptop or tablet
- CoSpaces Edu app
- Merge Cube template (Scissors + Glue)

### Step 1: Getting started

Cut out Merge Cube template, fold into a cube and glue tabs securely.  
Leave to dry.



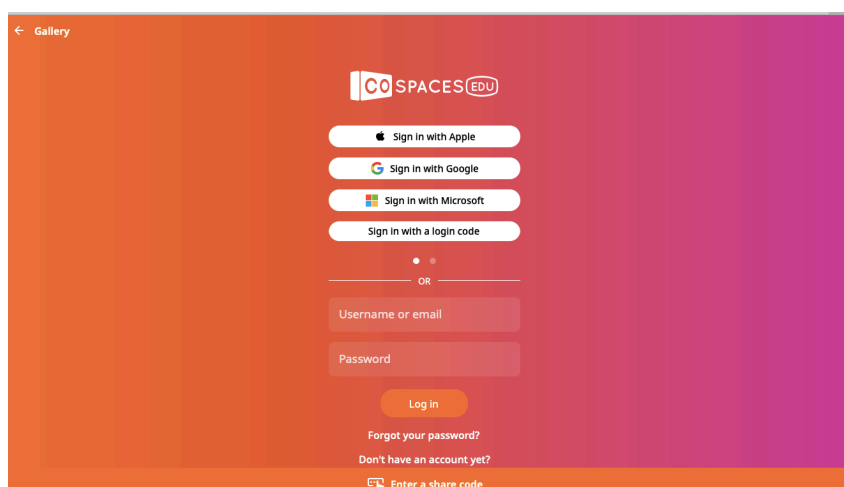
Discover more ideas here



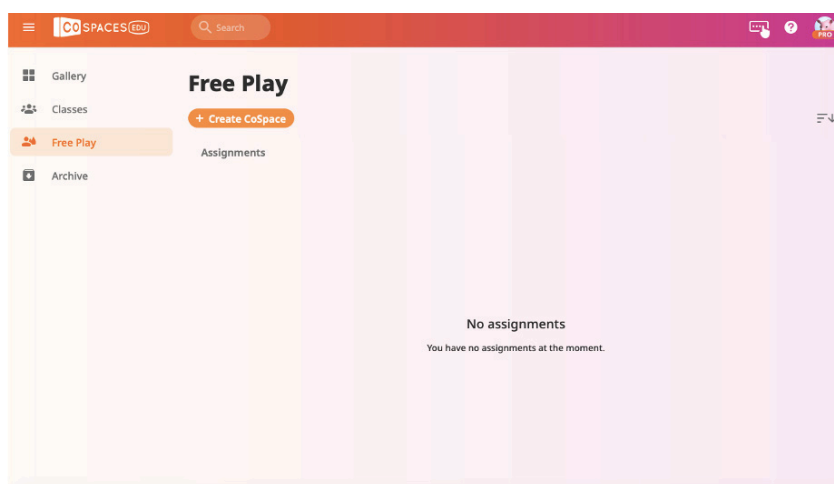


## Step 2:

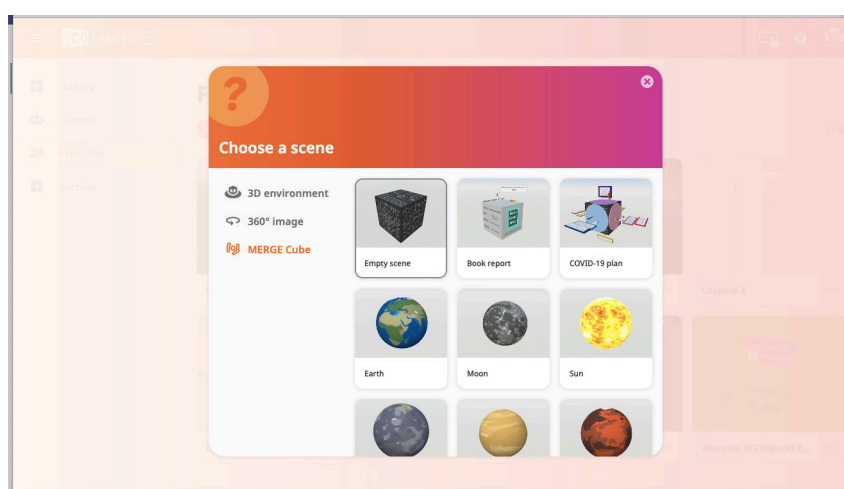
Log in to Cospaces with your **Username** and **Password**



## Step 3: Click on 'Freeplay' and then choose 'Create Cospace'

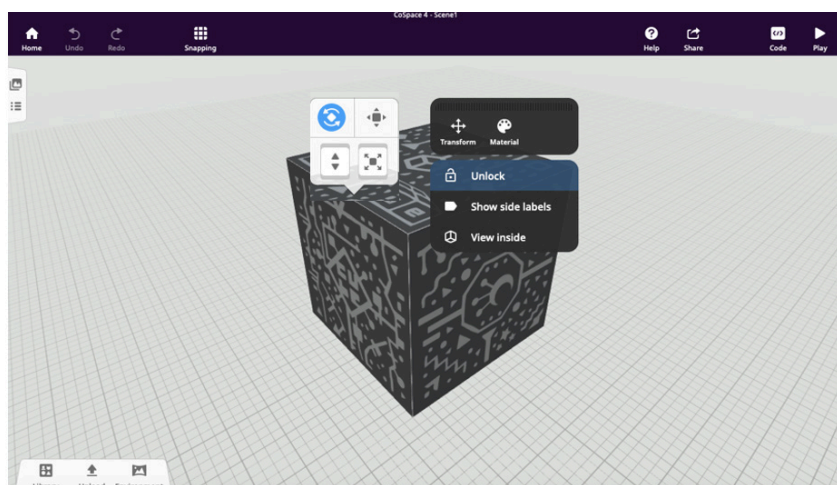


## Step 4: Select 'MERGE Cube' and then choose 'Empty Scene'

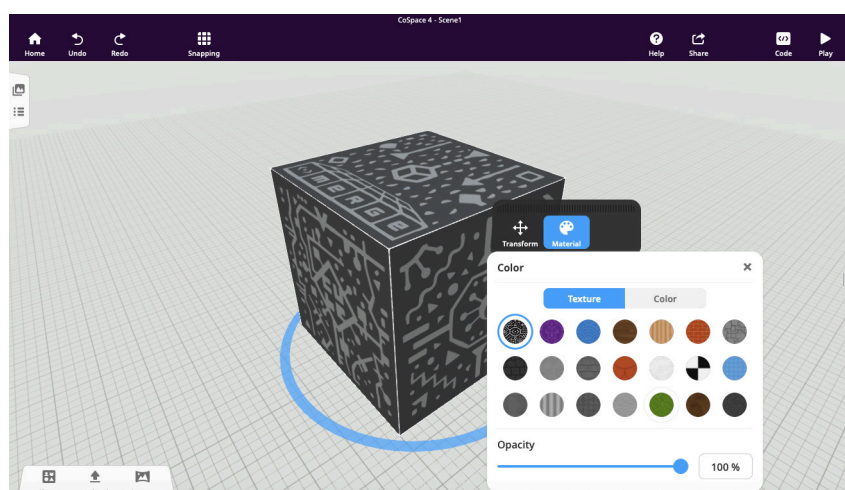




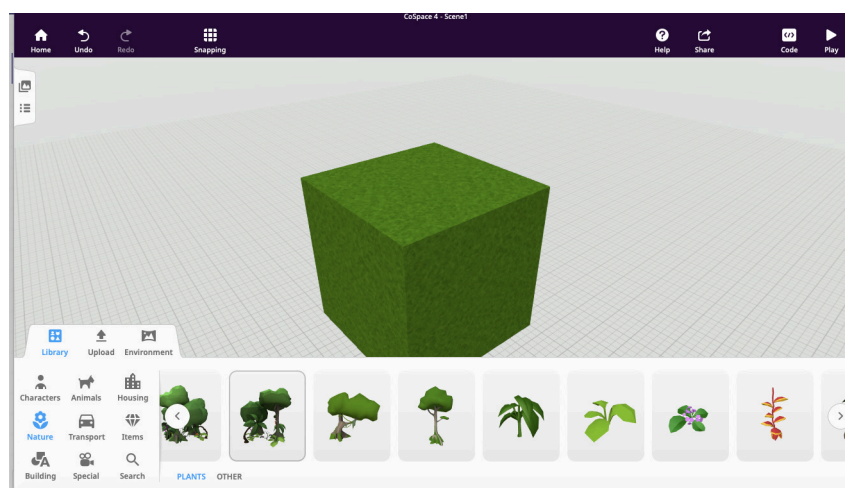
**Step 5:** Double click on the Merge Cube and click '**Unlock**' so you can move it around. The white buttons allow you to change the size and position of your Merge Cube



**Step 6:** Double click on Merge Cube and select '**Material**' to change the colour of your Merge Cube. You can also do this for other objects you place in your scene

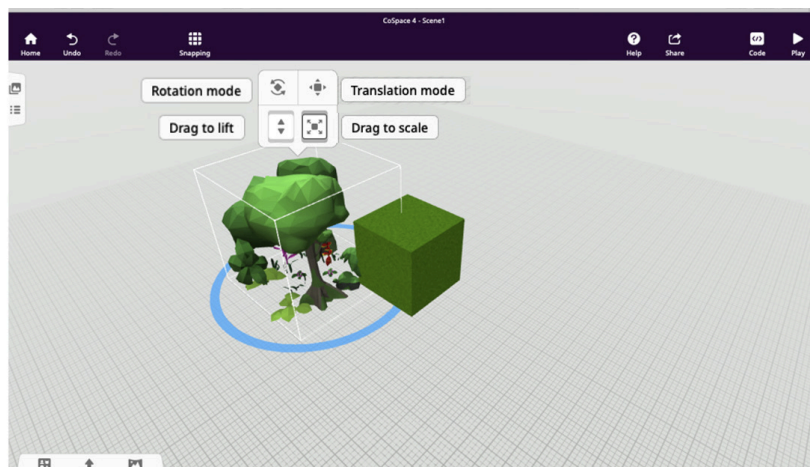


**Step 7:** Click on '**Library**' in the bottom left corner to look through the different objects to create your own scene. Choose an object you like, hold down your click button on it then drag it out to the Merge Cube.

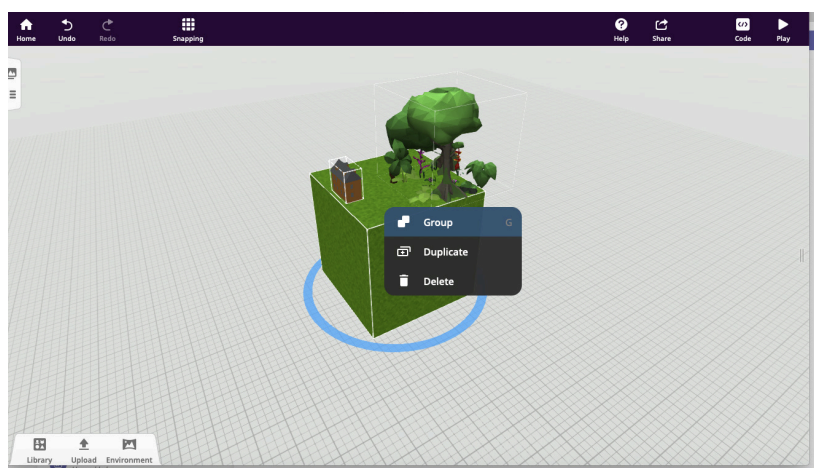




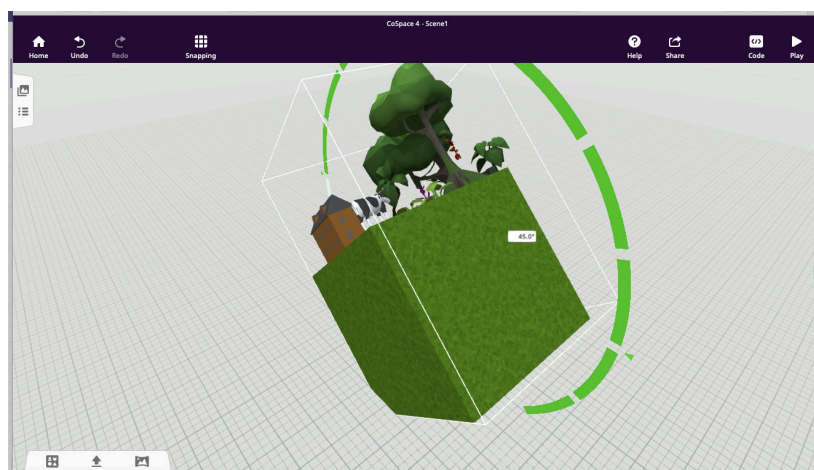
**Step 8:** Click once on your object to use the different buttons to change its size and position. To lift up and down, or scale (change) the size of your object, click on the button and hold down whilst you move the mouse.



**Step 9:** When you are happy with where you have placed your objects, you can group them together so they stay in place. Hold down the '**Shift**' button and click on all your items so a white box appears around them. Double click on an item and choose '**Group**'.

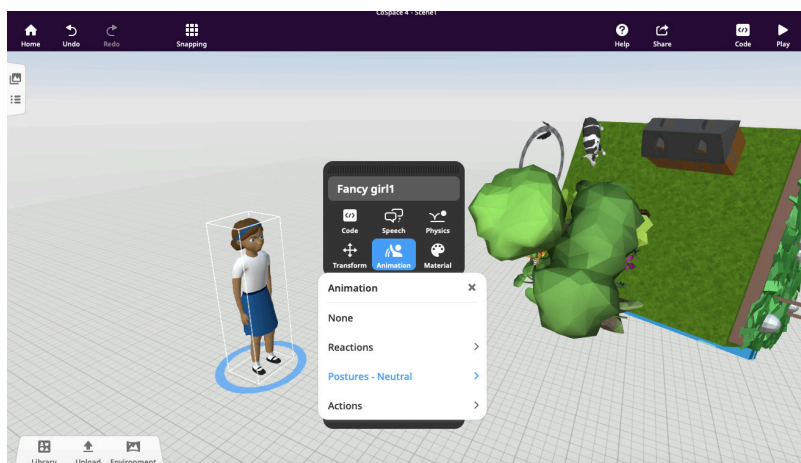


**Step 10:** You can then rotate the Merge cube to begin working on a different side

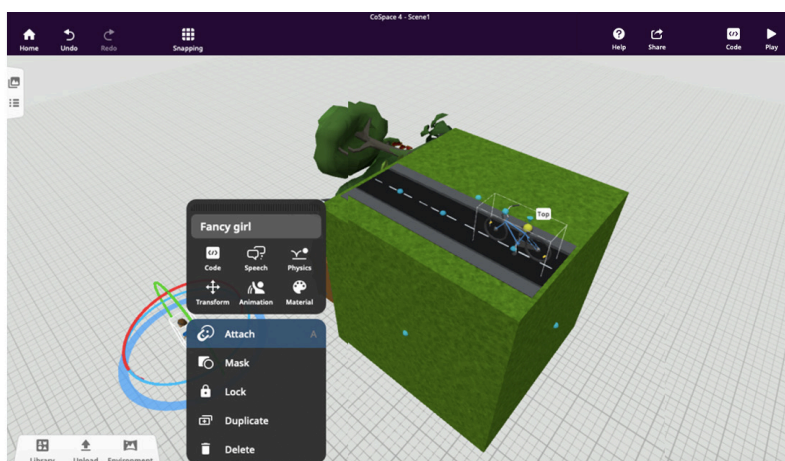




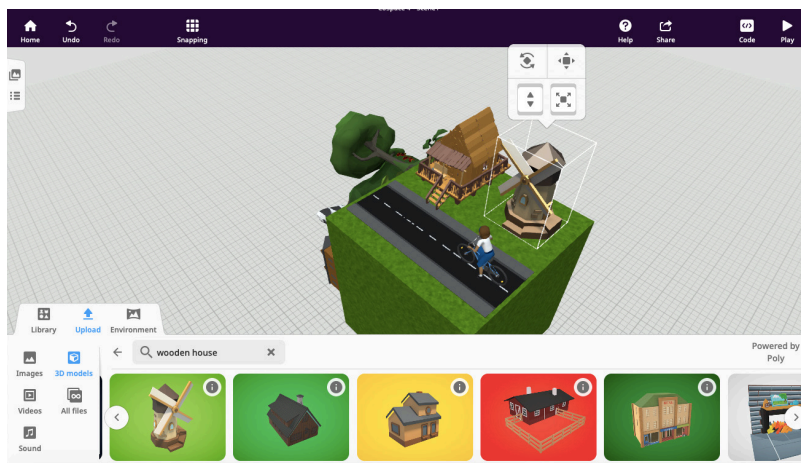
**Step 11:** You can animate any characters or animals to show movements and gestures by double clicking on the character, choose '**Animation**' to have a look through the options and try some out.



**Step 12:** To make a person ride a bike or to attach two objects together, double click on the person and choose '**Attach**'. Some small blue dots will appear, choose the blue dot of the place or object you would like to attach your character to, and it will move there.

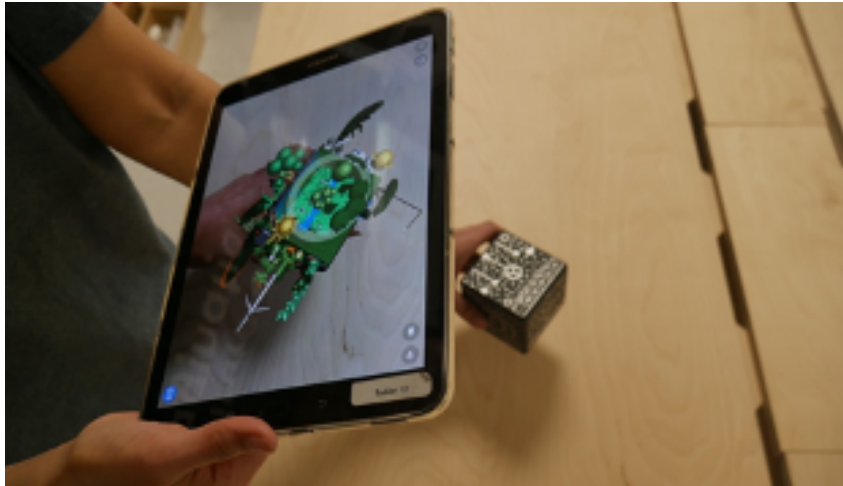


**Step 13:** Explore adding in other 3D objects by clicking on 'Upload' in the bottom left corner, choosing '**3D models**' and typing in the words of what you would like to look for. Drag these objects into your scene and resize and position them onto your merge cube city.



## Seeing your city

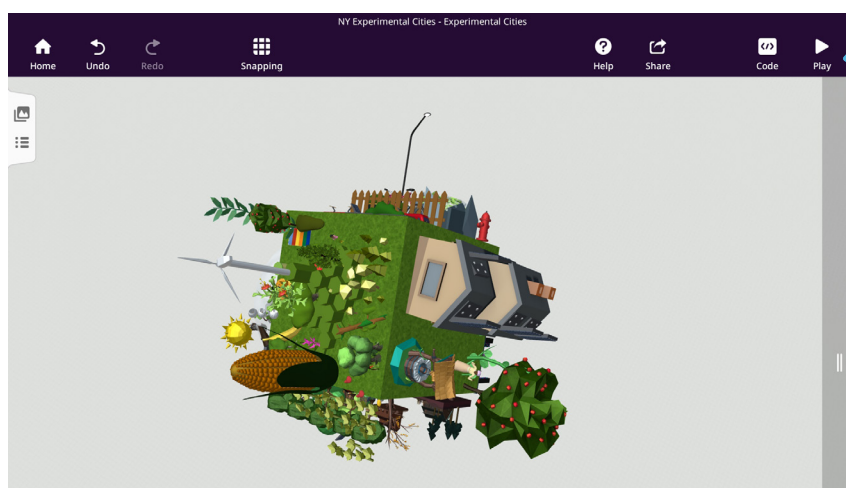
Once you've completed your design, you can view it in augmented reality, where your virtual city can be seen in the real world.



**Step 14:** Using a phone or tablet, open the CoSpaces App



**Step 15:** Open your Merge Cube design and press the 'Play' button



**Step 16:** Your screen should change to show the outline of cube. Try to align your Merge Cube into the white lines.



When you do this, your city should pop up on screen.



**Step 17:** Experiment with viewing your digital handheld city in different places in the real world around you, for example, the park!

