Creating with building blocks

Lesson complexity: Beginner
Grades: Kindergarten and up
Subjects: Any
Created by: CoSpaces Edu

Introduction:
Letting your students build their own 3D creations with CoSpaces Edu is a great way for them to develop their spatial skills, imagination, and get familiar with using the building blocks in CoSpaces Edu.

Benefits:

● Learn basic 3D creation skills
● Improve spatial skills

Activity examples:

● Let your students’ imagination run wild and give them complete freedom to create anything they like using the building blocks in CoSpaces Edu.

● Set a few boundaries to add some structure and challenge their creativity. For example, let students create whatever they wish, but in relation to a particular topic that you define as a general direction.

● Test logical or critical thinking by providing a specific theme based on which your students will have to find a creative idea. For example, you could ask them to build something within a historical setting.
Creation guide

Use the CoSpaces Edu building blocks as if they were Legos and create anything you want!

The building blocks are easy to use and offer various features to play with.

In this example, we will build a bridge or a roman aqueduct from scratch.

In CoSpaces Edu, go to “Library” and to the “Building” category, where you will find all the building blocks.

Our aqueduct will need columns that get slightly thinner towards the top. Select the “Frustum 4 sides” block and use the arrows to shape it as you’d like. You can also apply a texture and color to it to make it look nicer!

All the shapes you create can be easily duplicated, repositioned or resized.

Duplicate the first column you created and position it next to the original one. Then, we will create an arch over our 2 columns. The “Tube” object works well for this shape. Drag and drop it onto the stage and use the controls to half the tube. Place it so that the tube is positioned over the columns.
To make your construction look nicer, you can now add cubes to fill in the gaps between the arch and the two columns.

Next, duplicate the structure as many times as you like to create the bridge. Notice how we saved a lot of work by building just one segment of the bridge first and then duplicating it.

Finalize your roman aqueduct by duplicating your objects and adding some additional cubes.

See how you can build a complex structure by putting together simple shapes?

There’s so much more you can build! Go crazy and create anything!

Finally, you can add any environment you like as the background. Click "Environment" and pick one you like.

You can also drag and drop objects from the “Library” category to decorate the scene. For example, you could add some vegetation around your Roman aqueduct.
Example space

Roman Aqueduct

View example space