Creating with building blocks Lesson plan

Created by the CoSpaces team

Education level: From primary school

Subject: Adaptable to any subject

Format: Individual or in groups

Duration: Approx. 1 hour

Introduction and lesson objectives:

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

The building blocks available in CoSpaces Edu can be used to virtually create anything, similar to how kids would build with Lego bricks, but with unlimited resources and an infinite creation space!

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

Learning goals and student benefits:

- Learn 3D creation skills
- Improve spatial skills
- Develop creativity
- Develop design 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.

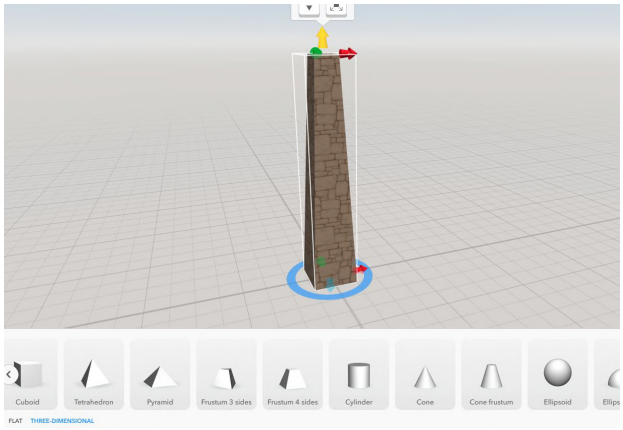
Extension idea:

Let your students develop their creation further by adding other elements around their constructions and animate them to turn their scene to life.

Assessment and evaluation suggestions:

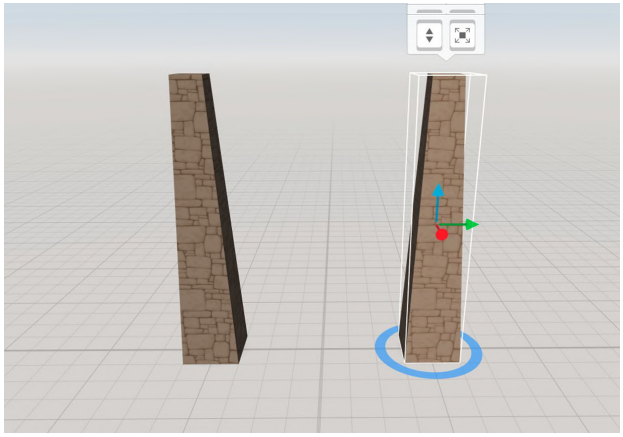
- Have your students built their own original constructions?
- Did they use several building blocks from the CoSpaces Library?
- Did they manage to assemble them precisely using the relevant features such as the Attach and Group tools?

Creation guide



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

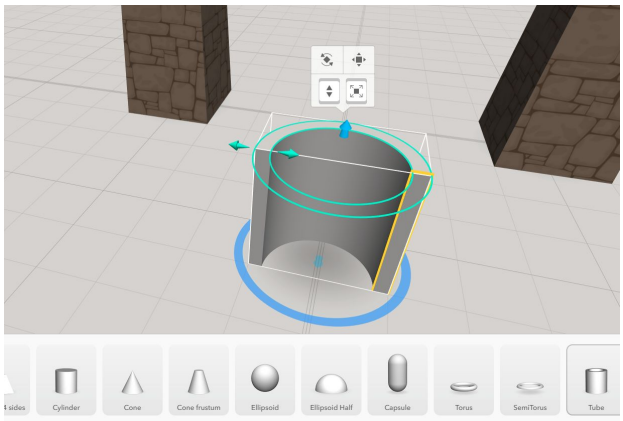
In this example, let's build a bridge or a roman aqueduct from scratch.



Go to the **Building** category in the **Library** to find the **building blocks**.

The aqueduct will need columns that get slightly thinner towards the top.

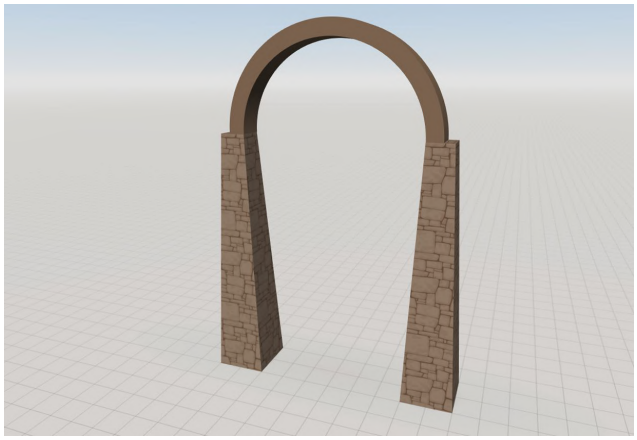
Select the **Frustum 4 sides** building block and use the arrows to shape it as you'd like. You can also apply a texture and color to it to make it look nicer!



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

Duplicate the first column you created and place it next to the original one.

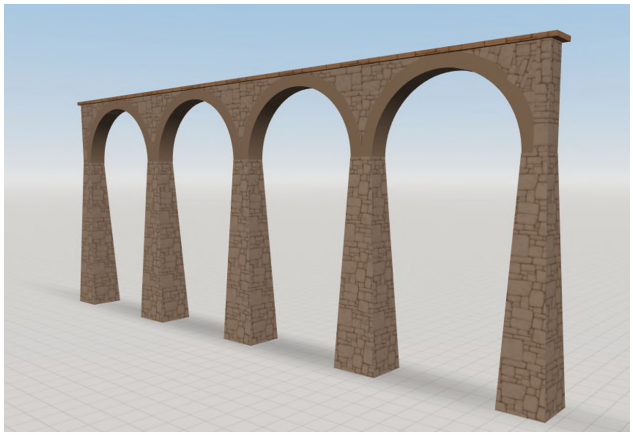
Create an arch over the two columns using the **Tube** building block and use the controls to cut it in half. Place it to be positioned over the columns.



To make your construction look nicer, you can add cubes to fill in the gaps between the arch and the columns.

Next, duplicate the structure as many times as you like to create the bridge.

See how you can save 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.

Isn't it awesome 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 an **environment** as your scene's background. Click Environment and pick one you like.

You can also drag and drop objects from the different Library categories to decorate your scene. You can, for example. add some vegetation around your Roman aqueduct.

Example CoSpace

Roman Aqueduct

edu.cospaces.io/XBC-STD