

# COSPACES

## Become a world builder (Kids)



Flashcards



ca. 30 min.



9 Years+



Prior knowledge:  
None



CoSpaces is an online tool which you can use to program and design virtual worlds. The flashcards serve as an introduction to the tool and can be used without prior knowledge.



### Learning competences

- > Understanding of the structure of a visual programming language
- > Designing virtual spaces with CoSpaces



We look forward to your feedback on our material: [info@coding-for-tomorrow.de](mailto:info@coding-for-tomorrow.de)

Coding For Tomorrow is an initiative of the Vodafone Foundation Germany gGmbH in cooperation with JUNGE TÜFTLER gGmbH  
[www.coding-for-tomorrow.de](http://www.coding-for-tomorrow.de)



# GENERAL INFORMATION ABOUT COSPACES

For CoSpaces you need...

- > a laptop with a mouse (recommended)
- > Internet access
- > an account or an invitation from your teacher.

Create a new account:

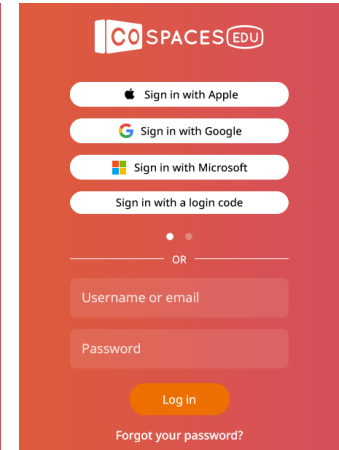
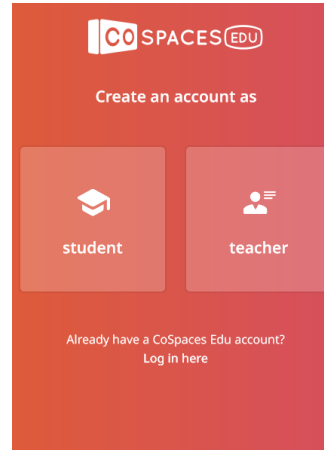
<https://edu.cospaces.io/Auth/Signup>

Log into an existing class:

<https://edu.cospaces.io/Auth>

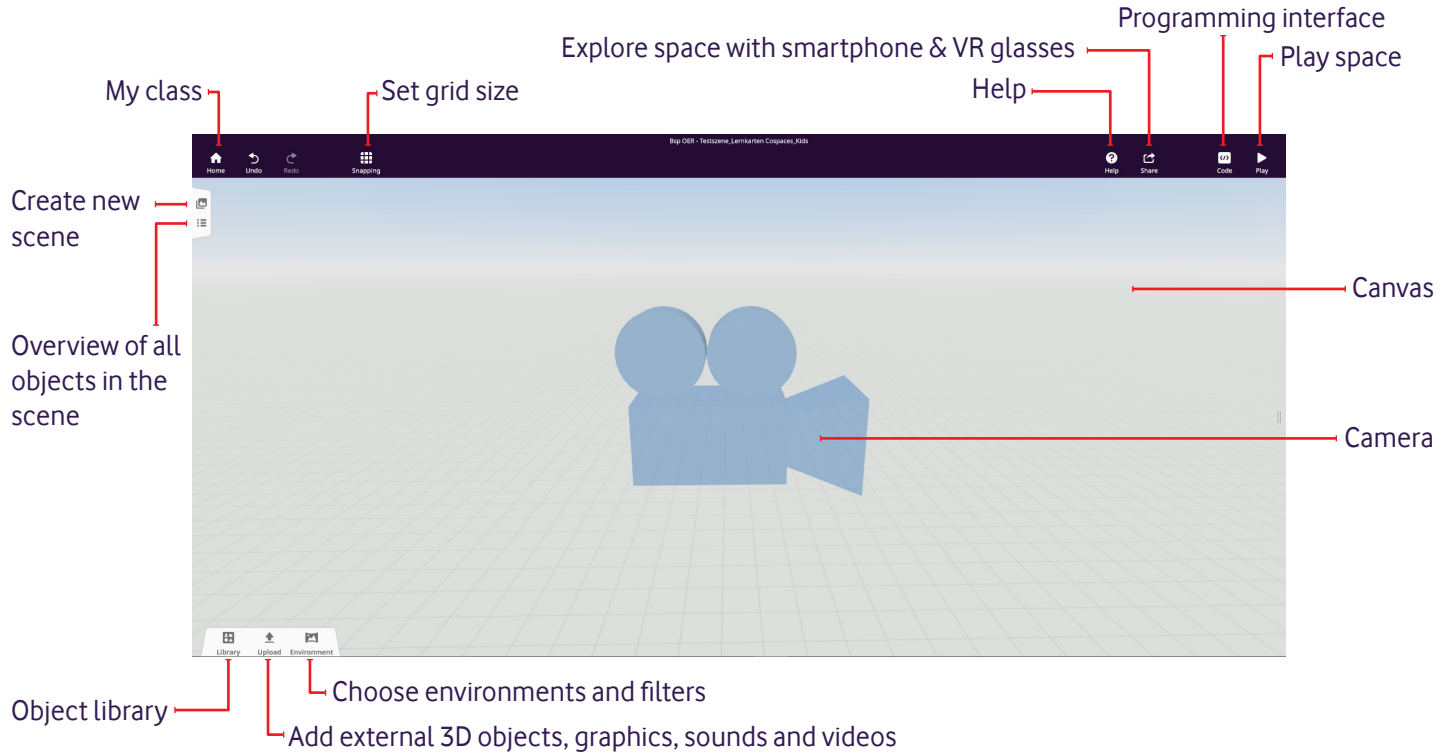
- > a tablet or smartphone (optional)

👉 With the CoSpaces app and a cardboard you can even view your project using virtual reality.





# USER INTERFACE





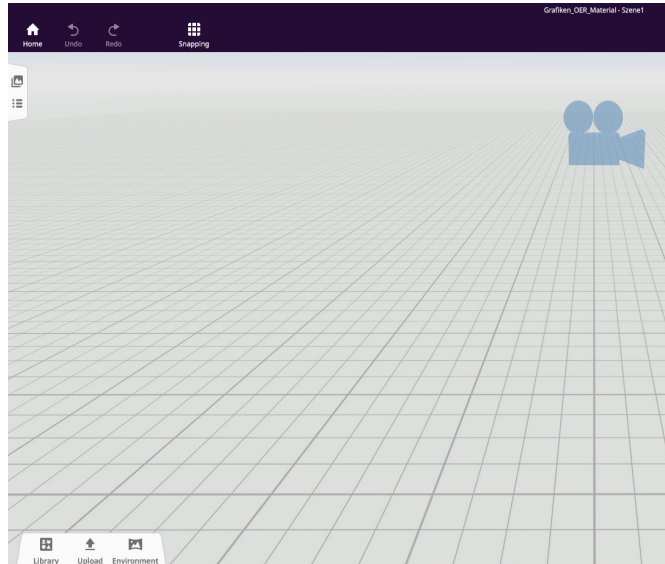
# MOVEMENT IN 3D SPACES (computer)

**Task:** Use the camera from your scene for orientation and look at it from all sides.

## Keyboards

= Zoom in or out with plus or minus key.

= Move the camera view with the arrow keys.



## Mouse

= Turn and tilt the 3D view.

+ **Space** = Move the point of rotation, which works as an anchor point for turning and tilting the 3D view.

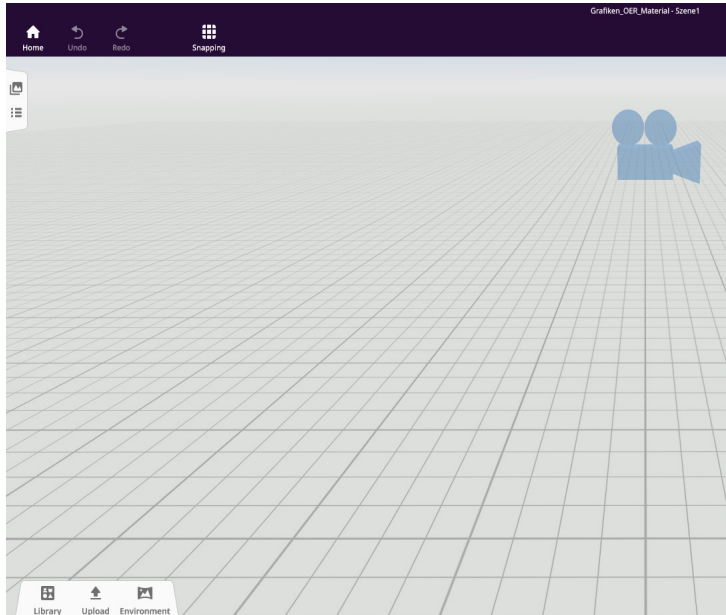
= Zoom in or out by scrolling the mouse wheel back and forth.

+ **Space** = Zoom to the position of the cursor.





# MOVEMENT IN 3D SPACES (tablet or smartphone)


**Task:** Use the camera from your scene for orientation and look at it from all sides.




Tablet

 = Rotate the view of the camera left and right.

 = Tilt the view of the camera up and down.

 = Move the view of the camera.

 = Zoom in or out.



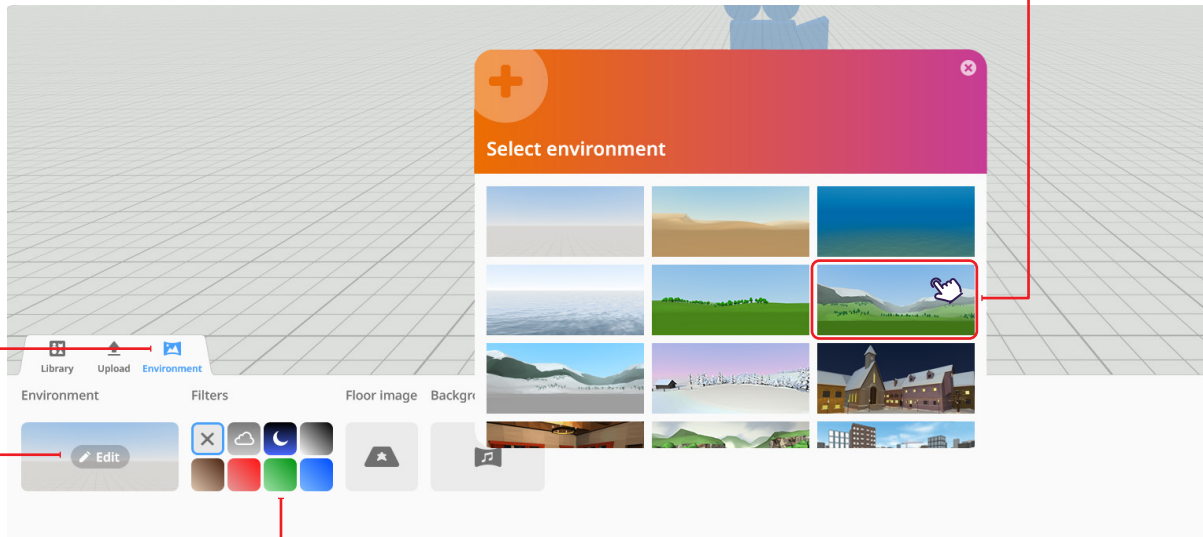
# ADD AN ENVIRONMENT

**Task:** Find a suitable environment for your scene.

1 Click on  
"Environment".

2 Use the  
„Edit“ button.

3 Click on one of the pictures,  
to select an environment.



Filters can be used in some environments.

👉 This allows you to make your scene look different.  
(e.g. rainy = sad / cloudy)



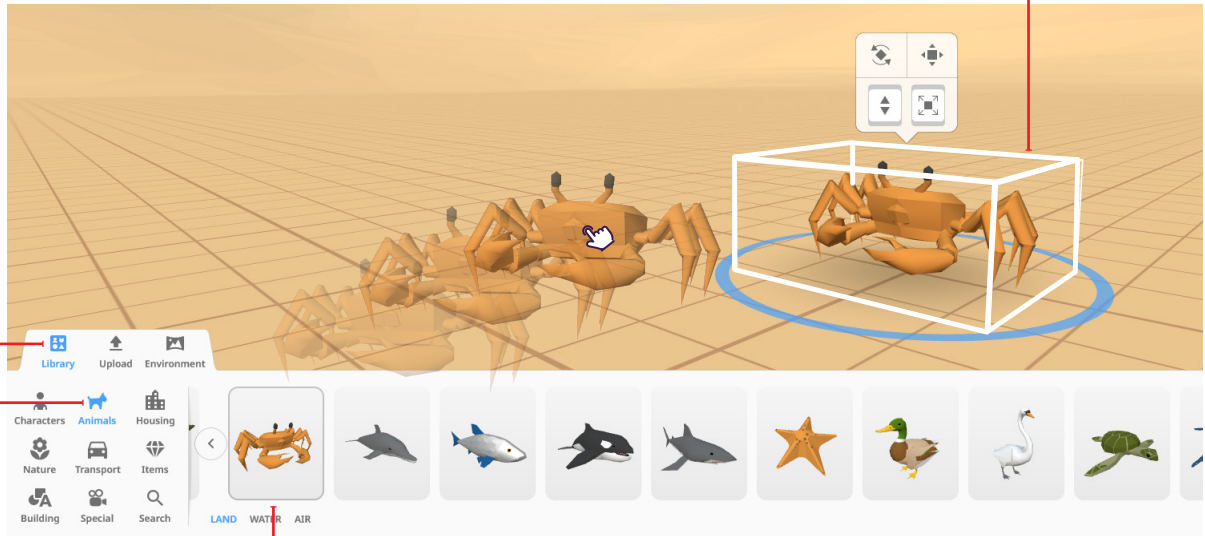
# ADD OBJECTS AND FIGURES

**Task:** Drag a new 3D object (character / animal / building) into your scene.

Active objects are presented in a white box.

1 Open the „Library“.

2 Select a section.



3 Now drag the object into the scene while holding down the left mouse button.

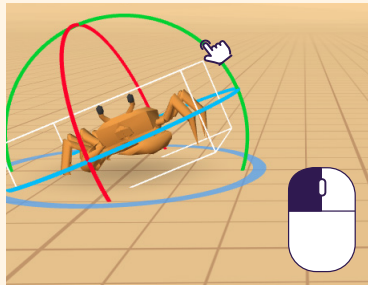




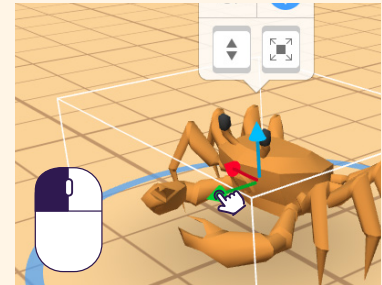
# ROTATE, CHANGE AND MOVE OBJECTS

**Task:** Select an object from your scene and change it.

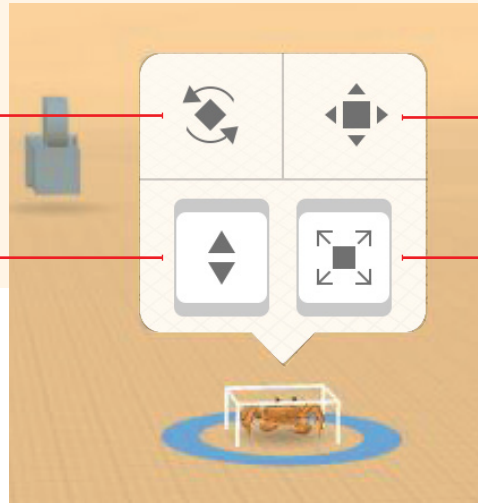
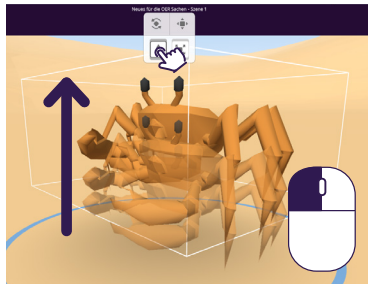
Rotate object.



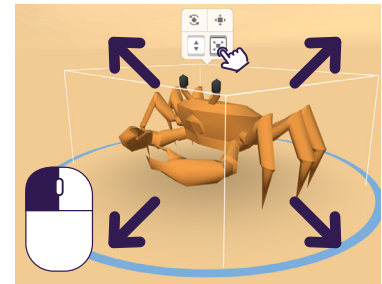
Move object.




Let the object float.



Enlarge/Reduce object.



 If you are using a tablet, use a finger instead.





# ANIMATE OBJECTS AND CHARACTERS

**Task:** Let the crab or another object from your scene dance.

## Animation.

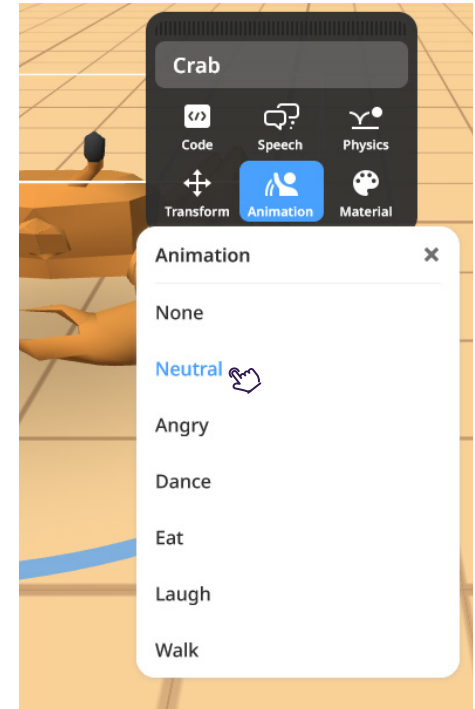
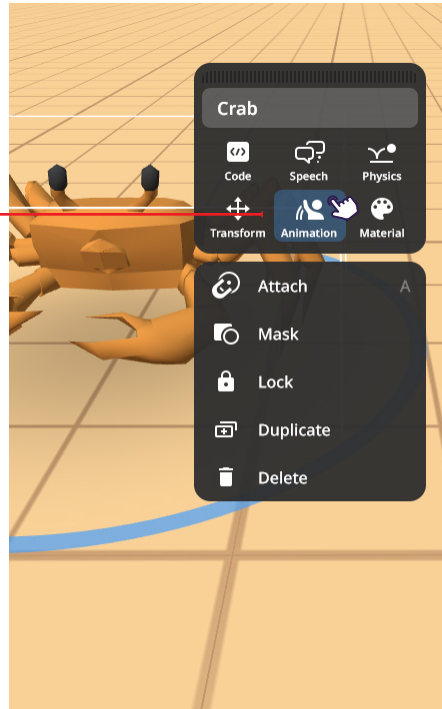
Your object can have different types of animations.

You can set the animations here or later with your programm

Click on an activated object by using the right mouse button.

Then select the button „Animation“.

Now you have to choose one of the given animations (here „Neutral“).

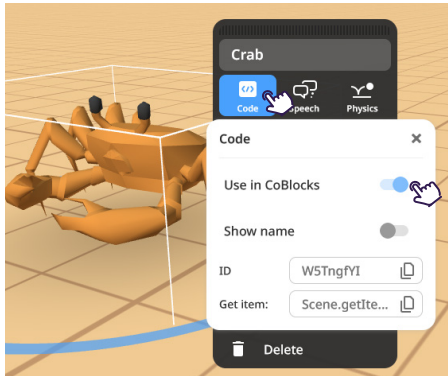




# INTRODUCTION TO PROGRAMMING



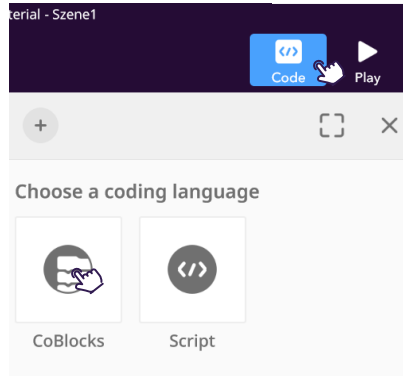
**Task:** Program an animal from your scene and let it dance.



Unlock objects for CoBlocks.

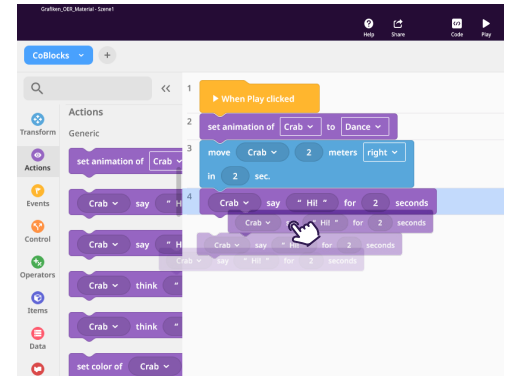
Click on your object and select the „Code“ button.

Then enable the controller „Use in CoBlocks“.



Open the programming editor.  
Select the „Code“ button in the upper right corner of the user interface.

As a beginner, you should select CoBlocks.



Write your first program.

The different commands are color coded.



Actions

Here you will find many commands that have something to do with object actions, such as language or animation.



# ADD TEXTS

**Task:** Program an animal from your scene and let it speak or display a text field.



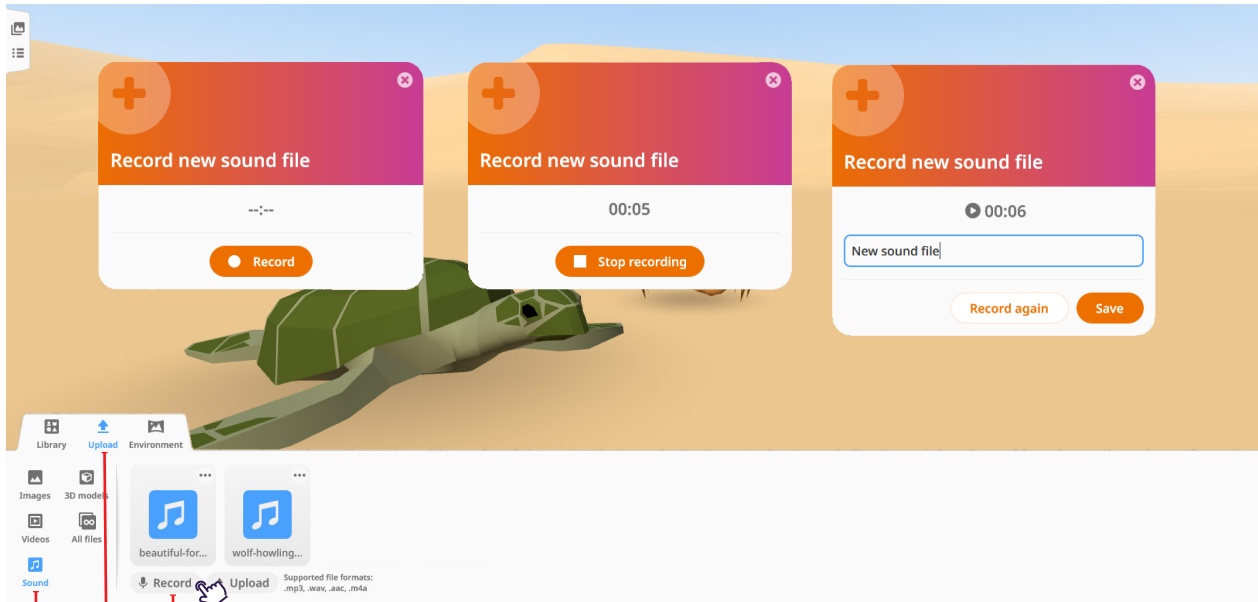
Display texts.  
There are different commands that enable you to use text as ...

- speech bubbles
- thought bubbles
- text fields.



# ADD SOUND RECORDING

**Task:** Record a sound or your own voice.



Record sounds.

Use the „Upload“ button. You can find this under the heading “Sound”. Record your own voice or other sounds.



# PLAY SOUND RECORDINGS

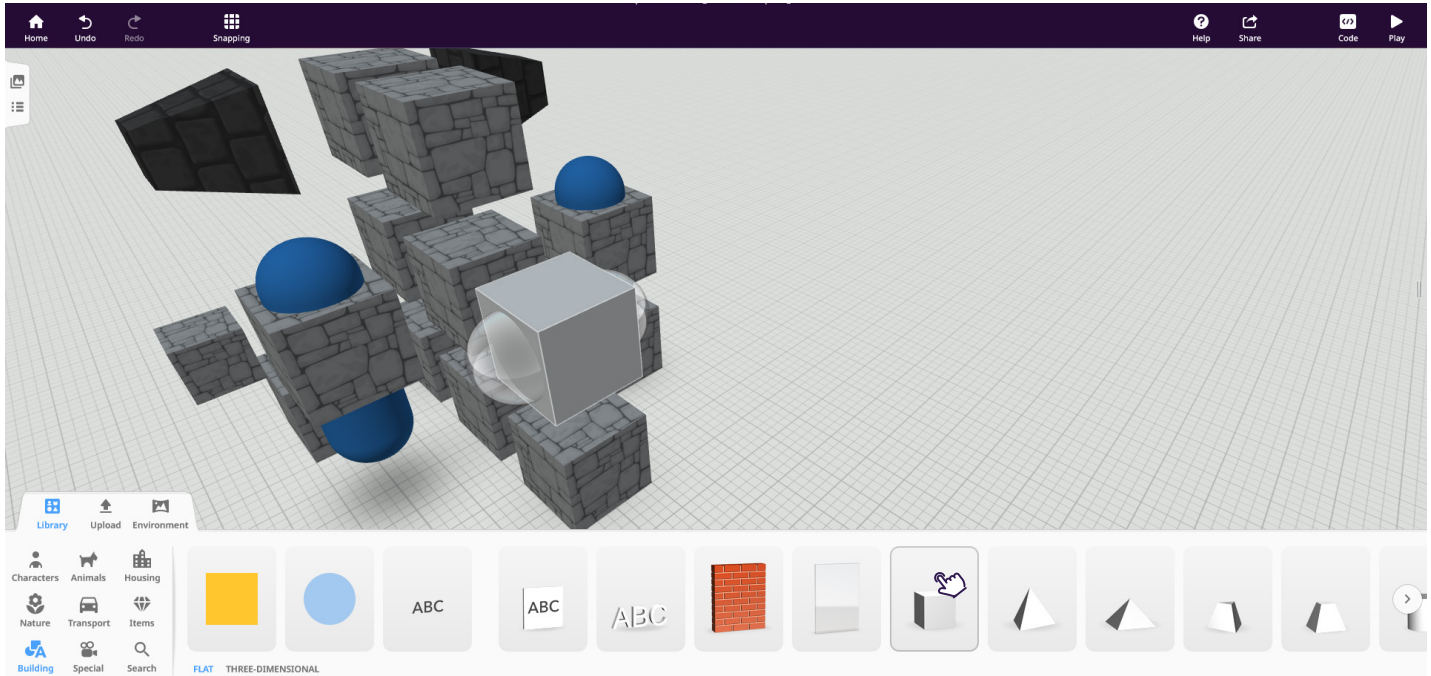
**Task:** Program an object in your scene to play your sound recording.





# BUILD OBJECTS YOURSELF

**Additional task:** Build your own spaceship or building.

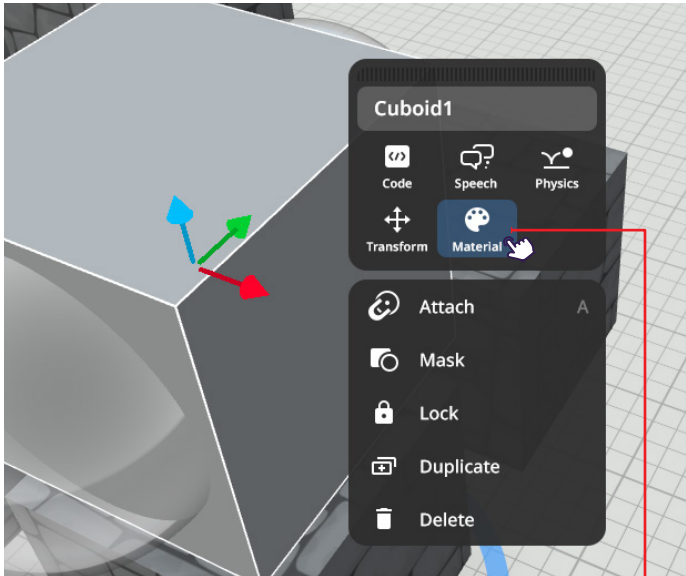


Select the “Building” section and drag the objects you need into your scene.



# BUILD OBJECTS YOURSELF

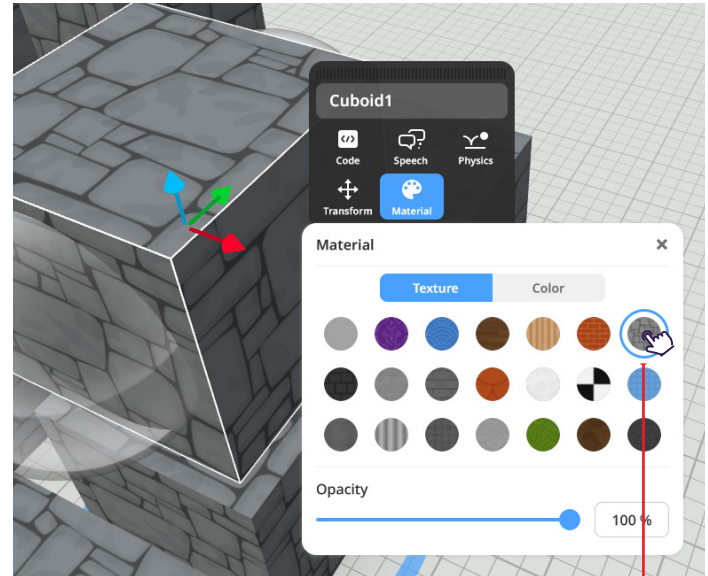
**Additional task:** Design your own spaceship or building.



Change colors/textures.



Click on the object and use the „Material“ button.



Then you have to choose a color or texture.



# YOUR OWN IDEAS AND PROJECTS

 **Additional task:** Now you can create your own worlds and bring them to life. Let's start!

