

## Lesson plan

# MathCity

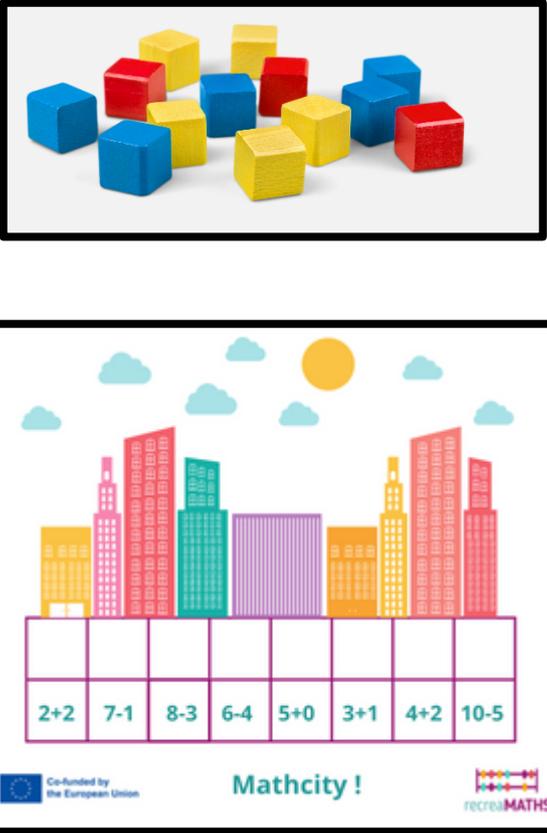
<b>Short description of the activity</b>	Describe very quickly the meaning of the activity This activity focuses on learning to count and do simple math building blocks and forming a city skyline, also comparing the sizes of the buildings.
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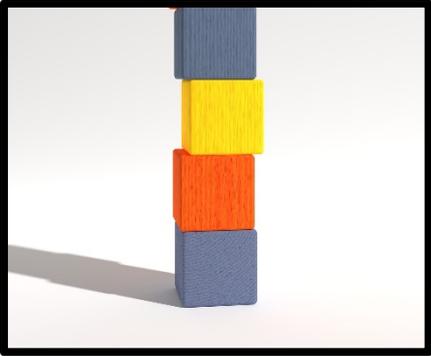
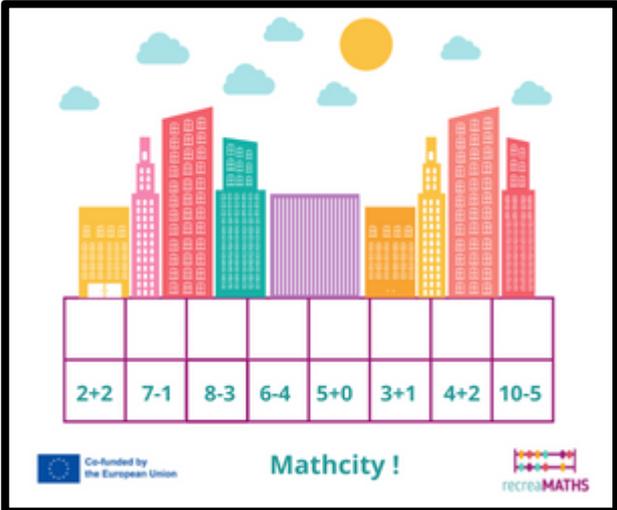
<b>Level of difficulty</b>	➤ Level 2 (6-7)
<b>Duration of the activity</b>	➤ 10 minutes
<b>Number of participants</b>	Individual activity, but it can also be done in pairs.
<b>Inventory of the hands-on exhibit</b>	<ul style="list-style-type: none"> <li>- 1 laminated workshop sheet</li> <li>- Building blocks (3D modeling)</li> </ul>

<b>Skills required of children</b>	<ul style="list-style-type: none"> <li>- Pupils should know the difference between addition, subtraction and comparing sizes. The pupil can position objects next to each other having a minimum level of fine motor skills.</li> </ul>
<b>Skills worked on</b>	<ul style="list-style-type: none"> <li>- The child develops the capacity of making addition and subtraction with the help of objects.</li> <li>- The child compares the sizes of the towers.</li> <li>- The child develops further fine motor skills.</li> </ul>

## Instruction and description of the activity, step by step

<b>Instruction</b>	Solve the operations shown in the table and complete the result with the blocks at their disposal.
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Step by step	Description	Illustration
<b>Step 1</b>	<ul style="list-style-type: none"><li>- Making the material<ul style="list-style-type: none"><li>➤ Duration:</li><li>- 10 hours approximately to print 45 blocks</li><li>- 30 minutes approximately for printing and laminating the workshop sheets</li></ul></li></ul>	 <p>The illustration is divided into two parts. The top part shows a collection of 15 colorful blocks (blue, yellow, red) scattered on a white surface. The bottom part shows a worksheet with a city skyline background. The skyline is composed of buildings of different heights and colors (yellow, pink, teal, purple, orange, red). Below the skyline is a table with 8 columns and 2 rows. The first row is empty, and the second row contains the math problems: <math>2+2</math>, <math>7-1</math>, <math>8-3</math>, <math>6-4</math>, <math>5+0</math>, <math>3+1</math>, <math>4+2</math>, and <math>10-5</math>. At the bottom of the worksheet are logos for 'Co-funded by the European Union', 'Mathcity!', and 'recreaMATHS'.</p>

<p><b>Step 2</b></p>	<p><u>Conduct the activity:</u></p> <ul style="list-style-type: none"> <li>- Put the laminated sheet and the building blocks on the table at the student's disposal and ask the pupils to explain what they see and if they understand the equations on the sheet.</li> </ul>	 
<p><b>Solution</b></p>	<ul style="list-style-type: none"> <li>- The child calculates simple subtraction and addition equations, when they have the final number, they build a tower with building blocks and position them on the sheet creating a city landscape.</li> </ul>	

<p><b>To go further</b></p>	<ul style="list-style-type: none"> <li>-The teacher can provide more complex works sheets with bigger "cities" with higher and higher buildings as they learn new math equations over time to stimulate learning. For this, the teacher can create a giant map with squares to place the buildings and the</li> </ul>	
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	equations written inside of them.	
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<b>Resources</b>	<a href="https://cintaandco.com/2020/08/17/build-a-city/">https://cintaandco.com/2020/08/17/build-a-city/</a>
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