

Lesson plan

Find your other half

| | |
|--|--|
| Short description of the activity | Learning about axial symmetry. Solve this problem by sorting and classifying the shape halves and then reconstructing the shapes using the axis of symmetry. |
|--|--|

| | |
|--|--|
| Level of difficulty | Level 2 (6 – 7 years old) |
| Duration of the activity | 10 minutes |
| Number of participants | Individual |
| Inventory of the hands-on exhibit | -3D printed shapes (cut in half) -Lines of Symmetry Worksheet (laminated) |




| | |
|------------------------------------|---|
| Skills required of children | - The child knows how to catch objects (the half pieces). |
|------------------------------------|---|

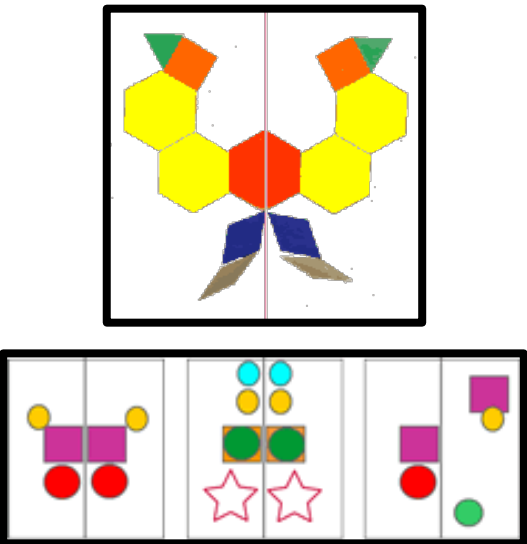
| | |
|-------------------------|--|
| | <ul style="list-style-type: none"> - Children can position those objects next to each other and form an entire element. - The child can recognize different shapes. |
| Skills worked on | <ul style="list-style-type: none"> - The child grasps the meaning of symmetry - The child understands the concepts and vocabulary of symmetry and experiment with symmetry art |

Instruction and description of the activity, step by step

| | |
|--------------------|--|
| Instruction | Try to find the other half of the given shape, creating the entire object. |
|--------------------|--|

| Step by step | Description | Illustration |
|---------------------|--|---------------------|
| Step 1 | <ul style="list-style-type: none"> - <u>Making the material:</u> <ul style="list-style-type: none"> ➤ Duration: variable according to the 3D printer. -3 hours approximately to print the 6 half pieces. - <u>Material preparation:</u> <ul style="list-style-type: none"> ➤ 1 hour to prepare the workshop sheets for printing, cutting, and laminating | |

| | | |
|------------------------|--|--|
| | | |
| <p>Step 2</p> | <p><u>Conduct the activity:</u></p> <ul style="list-style-type: none"> - Put the 3D-printed half pieces on the table at the students' disposal. |  |
| <p>Step 3</p> | <ul style="list-style-type: none"> - Teachers can ask students "Can you describe what shapes you recognize on the table and how you imagine their other half shapes?" |  |
| <p>Step 4</p> | <ul style="list-style-type: none"> - The teacher asks students to find the correct halves and put them in the right place on the worksheet. |  |
| <p>Solution</p> | <ul style="list-style-type: none"> - The child has observed the shapes and discussed with teachers the | |

| | | |
|-----------------------------|---|--|
| | <p>meaning and axis of symmetry.</p> | |
| <p>To go further</p> | <ul style="list-style-type: none"> - Some ideas for different shapes and materials to explore other types of symmetry. |  |

| | |
|-------------------------|--|
| <p>Resources</p> | <p>https://www.topmarks.co.uk/symmetry/symmetry-matching</p> |
|-------------------------|--|