## Lesson plan

## Match the solids

| Short description <br> of the activity | $>$ Learning about solids |
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|  | $>$ Sorting objects by shape |
|  | $>$ Counting to 10 |


| Level of <br> difficulty | Level 1 (4-5) |
| :--- | :--- |
| Duration of the <br> activity | 15 minutes |
| Number of <br> participants | Individual activity (or in pair) |
| Inventory of <br> the hands-on <br> exhibit | -6 different solids (3D modeling) |


| Skills required of <br> children | - The child is able to express the fact that these <br> - solids have different numbers of faces. <br> - The child is able to compare the shapes of the <br> solids with everyday life objects. <br> - The child knows how to catch the objects (here the <br> solids and cards). <br> - The child can position objects next to each other. <br> - The child is able to describe what they see and <br> compare. |
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| Skills worked on | - The child compares the objects. <br> - The child learns to classify objects according to <br> criteria, here the difference of faces and shape in <br> solids. <br> - The child connects the shapes of solids with the <br> shapes of objects they may encounter in their daily <br> life. |

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

| Instruction | First arrange the solids in a straight line. Touch and process <br> them for a while. Then, count the numbers of faces of the solid <br> and place the right cards under each one, first images of objects <br> of everyday life and then numbers corresponding to the faces. |
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| Step by step | Description | Illustration |
| :---: | :---: | :---: |
| Step 1 | Making the material : <br> Duration: variable according to the 3D printer. <br> - 10 hours approximately to print the 6 solids. <br> - 1 hour to print, cut, and laminate the 24 cards. <br> Material preparation: <br> - Prepare the 6 geometric solids <br> - 24 Laminated cards. |  |
| Step 2 | Conduct the activity: <br> - Put the 6 solids on the table at the learner's disposal. <br> - Ask the learner if they can describe the material in front of them. Also, ask if they know what a face of a solid is. |  |


| Step 3 | - <br> Explain to the children <br> what the faces of the <br> solids are and teach <br> them how to count <br> the faces. |  |
| :--- | :--- | :--- |
| Step 4 | - <br> The child has cards <br> with the images of the <br> solid to match and the <br> numbers that <br> correspond to the <br> faces. |  |
| Step $\mathbf{5}$ |  |  |


|  | done and discuss with <br> them on their findings |  |
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| To go further | Encourage the child to <br> match the solids to the <br> objects in the room where <br> the activity takes place. |  |
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| Resources | https://www.teacherspayteachers.com/Browse/Search:solid\%20shap <br> $\frac{\text { e\% \% 20matching }}{\text { https://www.pinterest.com/pin/220535712982858971/ }}$ <br> https://www.pinterest.com/pin/809310995551432661/?mt=login |
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