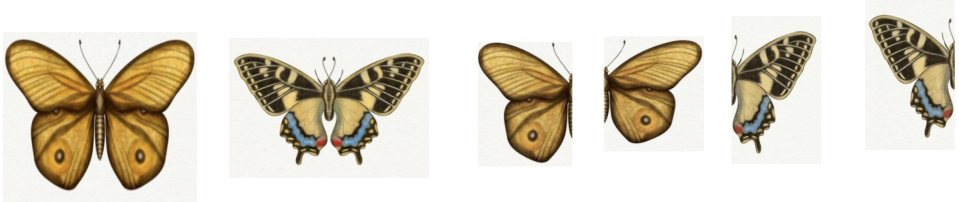



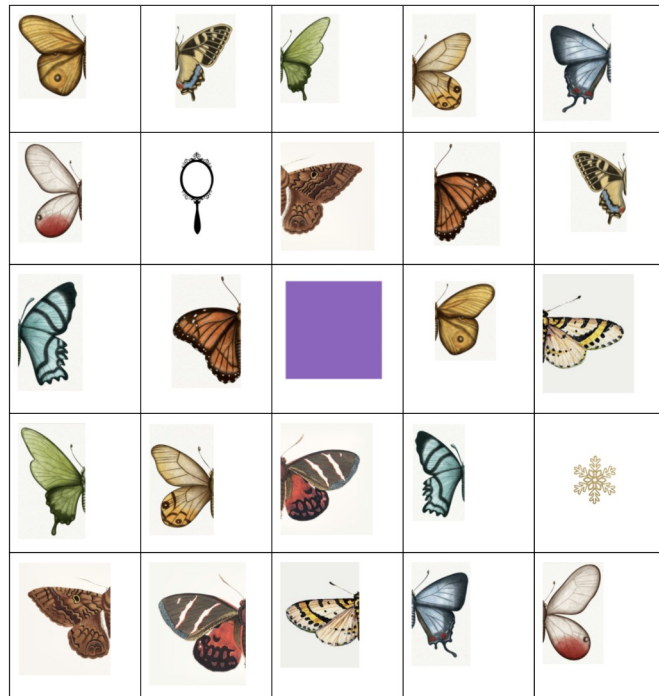


Symmetry of the butterfly

AGE RANGE	5-6
Activity for...	Single with robot
Author	Mine Güntaş, Melisa Kızılkaya, Dilara Oral, Tefvik Fikret Kindergarten, Turkey.
DURATION / TIMING:	30-40 minutes
REQUIRED MATERIALS:	<ul style="list-style-type: none"> ● Symmetry cards consisting of butterfly wings and full butterfly images required for the activity.  <ul style="list-style-type: none"> ● A mat of sufficient size for the cards to be placed on top (could be mat, styrofoam or blackboard).  <ul style="list-style-type: none"> ● Robot Doc,



- The platform prepared according to Robot Doc at the activity.





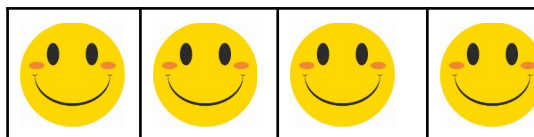
- An empty board for placing picture cards.



- Card box for placing event cards.

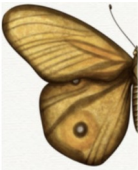


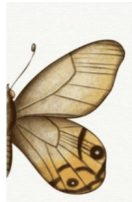
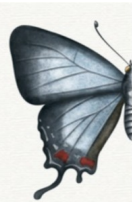



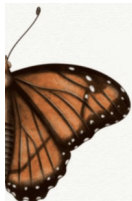


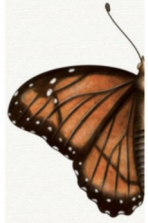

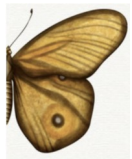


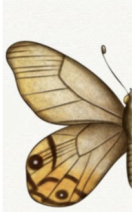





- Evaluation Board

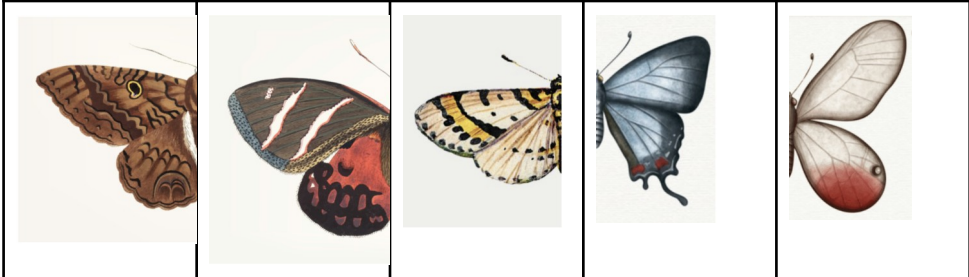




DOC ROBOT PLATFORM EXAMPLE



	
PREPARATION OF THE ENVIRONMENT:	<ul style="list-style-type: none"> ● Child should be in an empty space suitable for the activity environment outside the classroom under the guidance of the teacher.
DETAILED DESCRIPTION: How the activity is implemented?	<ul style="list-style-type: none"> ● The teacher stands with the child. ● In order for child to recognize the cards, the butterfly cards inside the box are examined. <p>1st Stage:</p> <ul style="list-style-type: none"> ● Inside the box, there are symmetry cards created with butterfly wings. ● Symmetry cards with butterfly wings are distributed to child and the teacher. Each card contains a half wing visual of a butterfly. ● The teacher chooses 1 butterfly card from the deck with the full butterfly visual in his/her hand. ● When the child has found the symmetrical cards of the butterfly card shown by the teacher, the child try to put together the symmetry visuals of the butterfly by saying "I have it". ● Matched cards are placed on the board and checked for correctness. ● The game continues until the teacher has no cards left. <p>2nd Stage</p> <ul style="list-style-type: none"> ● After the child gain experience with the previous activities, the teacher distributes the materials to the child. ● The teacher lays the platform on which the robot is used and



	<p>platform area are introduced to children.</p> <ul style="list-style-type: none"> ● The child places the symmetry card chosen by the player on the board. ● In the game, the purple area on the platform is the starting point. The robot is placed at this point first. In the game, a card is selected from the box and the half butterfly wing seen on the card is examined. The child's task is to find the exact symmetry of this card and make the correct coding that will lead the robot to the symmetry of the chosen card. If the child directs the robot to the selected wing picture from the box, that round must be considered wrong. The goal is to find the symmetry of the visual, not the visual itself. ● The teacher chooses a card from the box and says which butterfly card should have symmetry. ● The child will direct the robot to find the symmetry card chosen by the speaker. ● During the activity, if the child comes across the mirror or snowflake visuals on the platform during a coding, <ul style="list-style-type: none"> ➤ If the robot comes over the mirror visual, child will try to repeat a movement made by the child on their right. ➤ If the robot comes over the snowflake, the child will shout 'hey' as the teacher counts to 3 with their hands in the middle.
ROLES of the CHILD	The child actively participates and try to complete the tasks of the game.
ROLE of the TEACHER:	The teacher guides the child, and give proper feedbacks.
EXTRA RESOURCES	
Other remarks / Hints for the implementation	
References, if any	

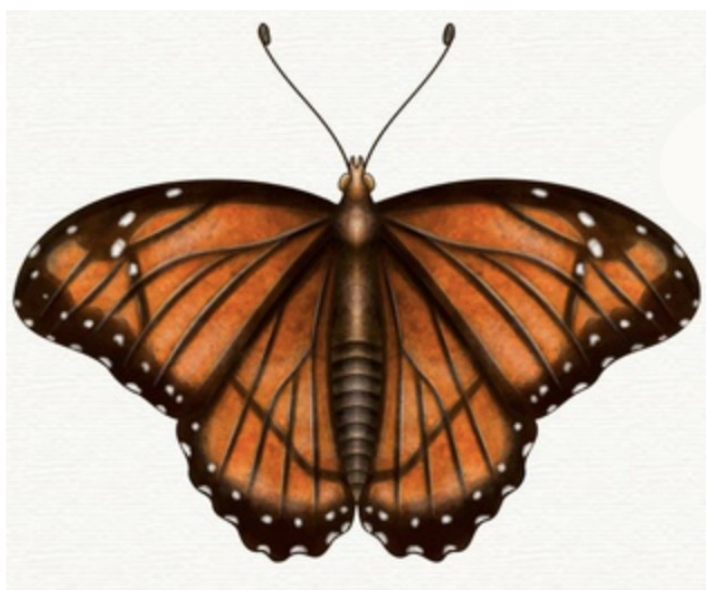




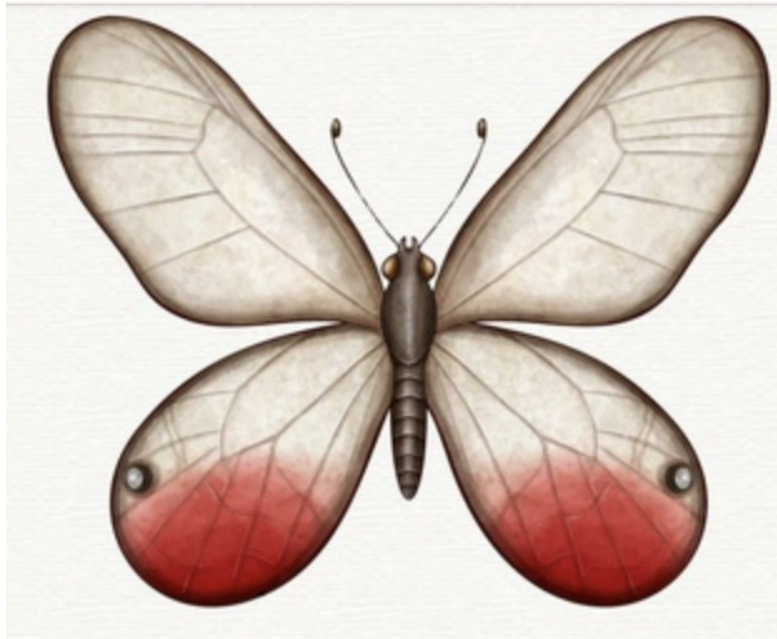
REQUIRED MATERIALS

Control Deck of Butterflies with Symmetry













Visuals to be placed on the platform and in the Box (print out in 2 sets).



