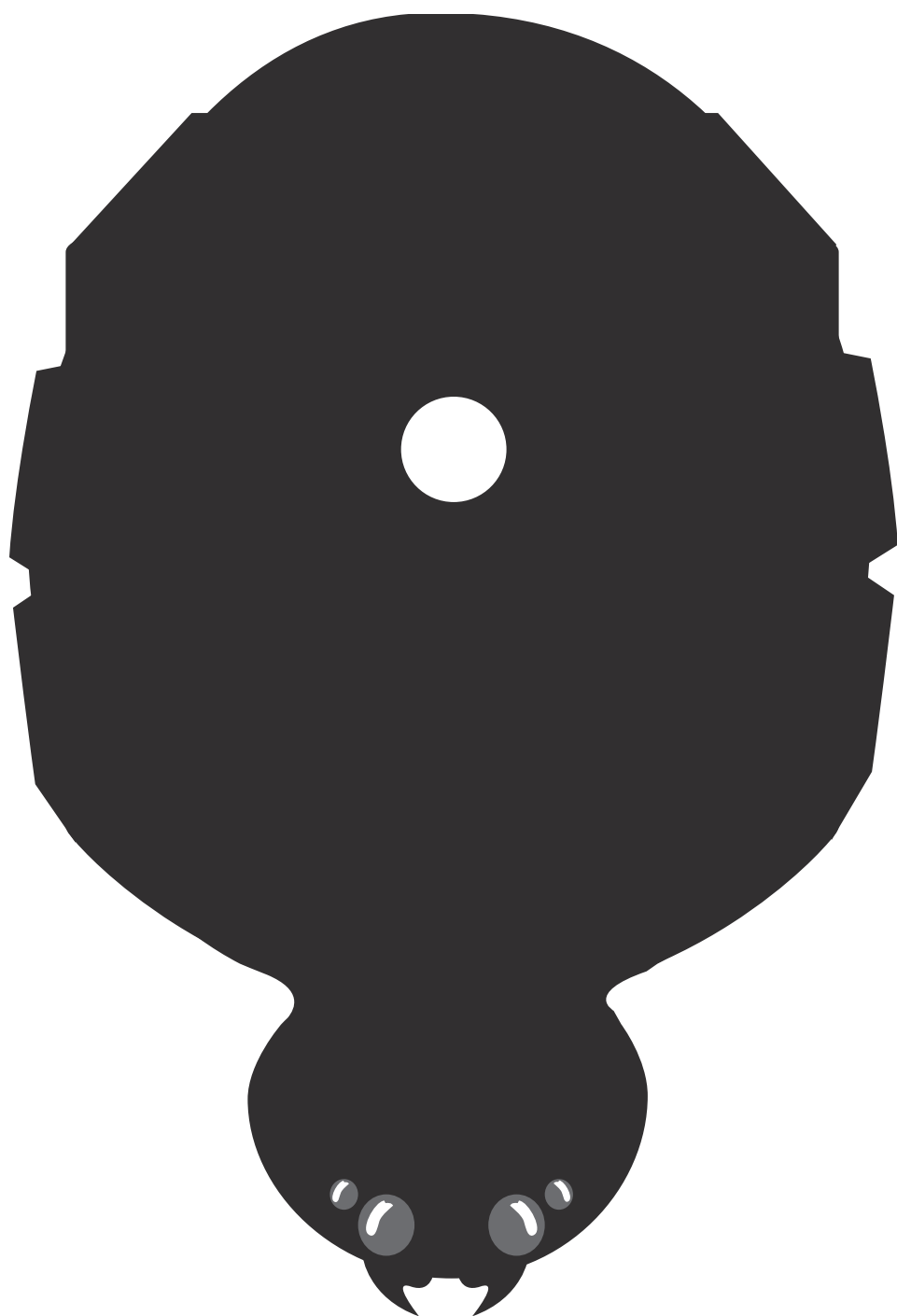


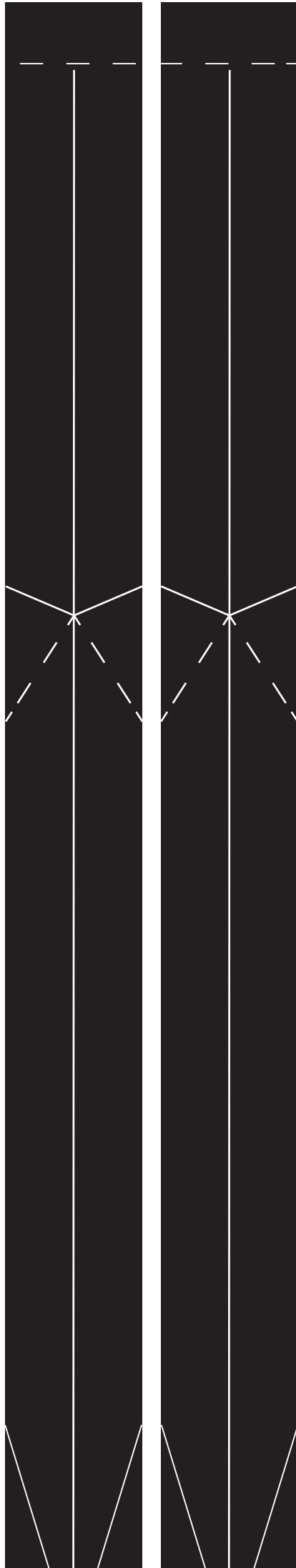
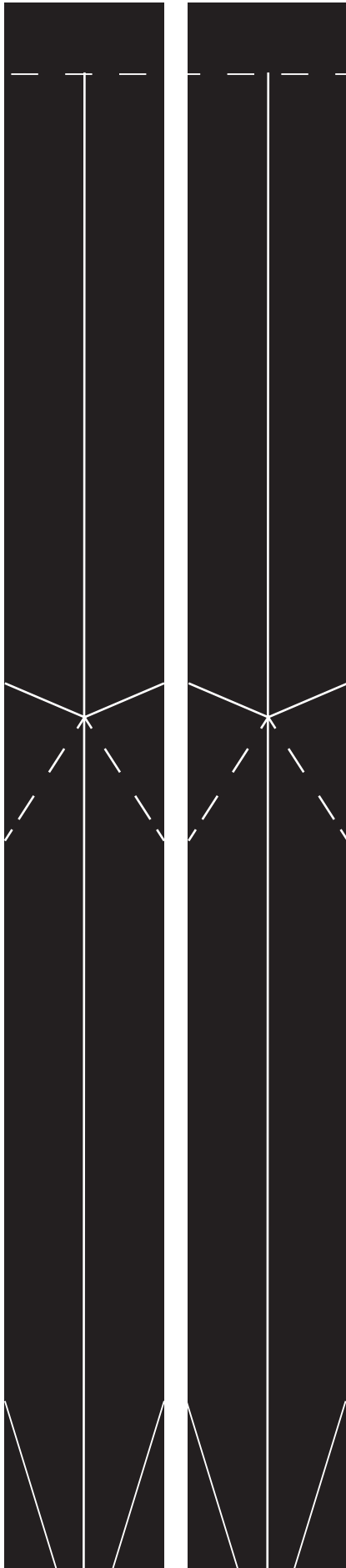
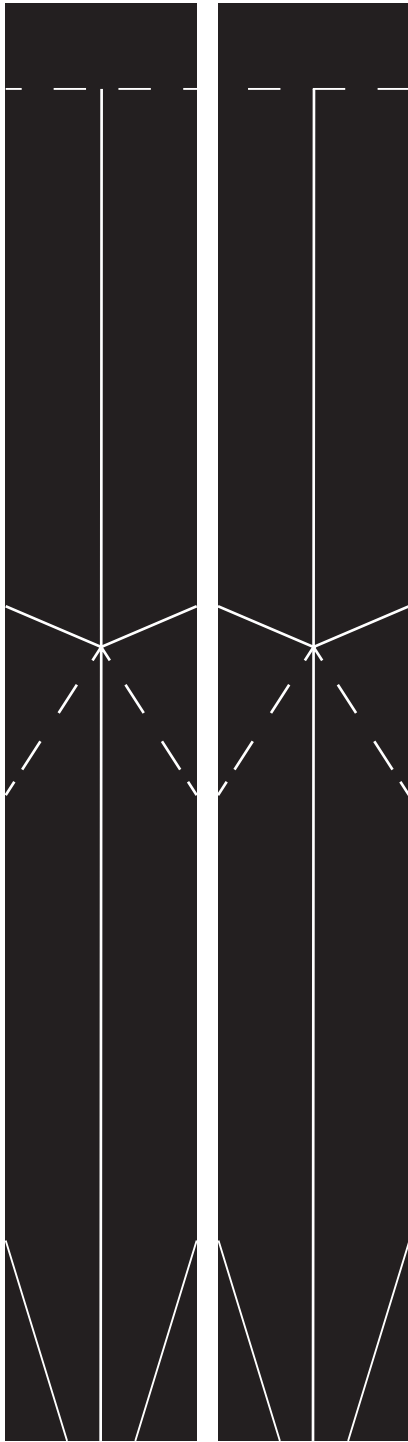
PI



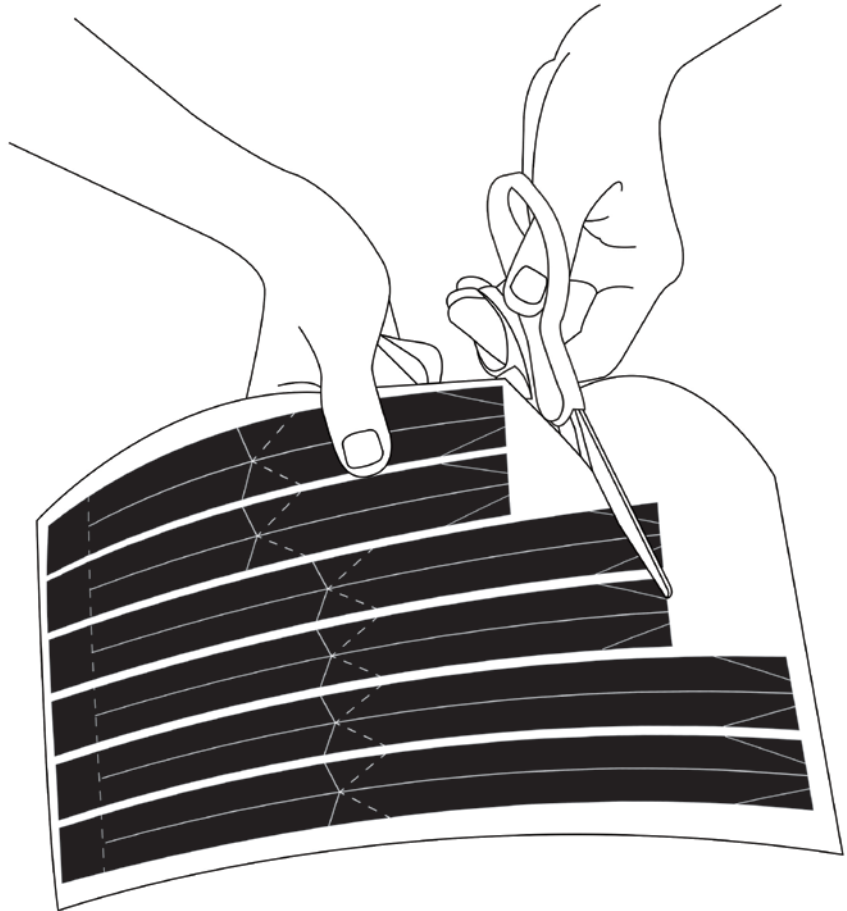
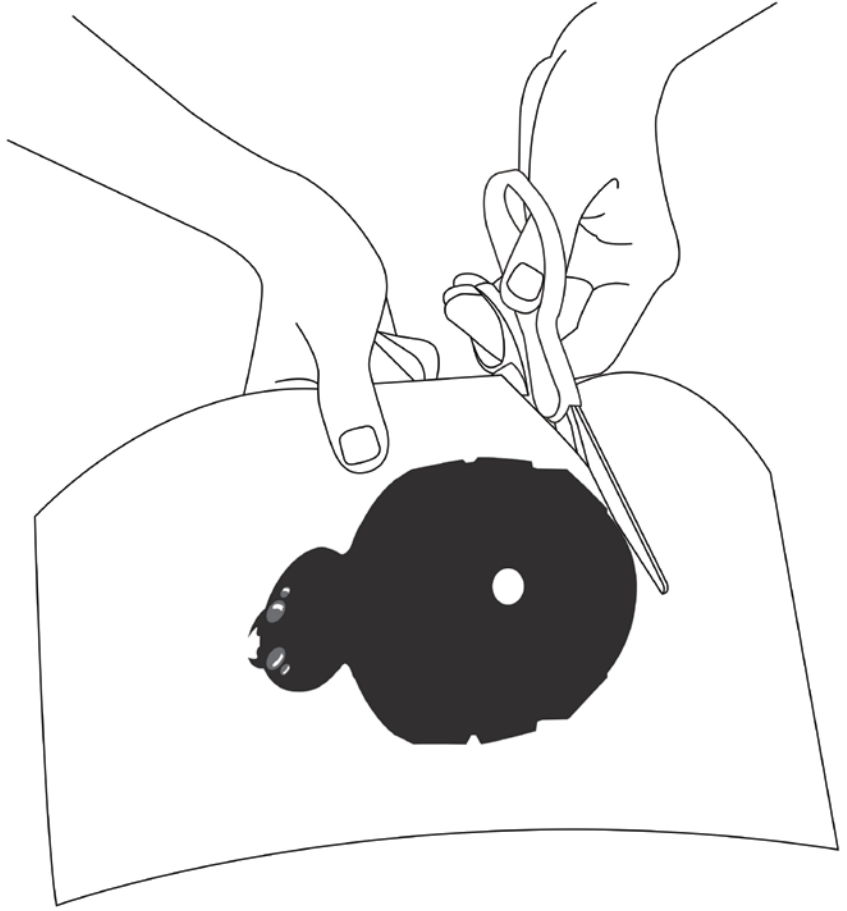
Transform Thymio into a spider and use the purple mode with a remote control to draw a spider web.

Not challenging enough ? Program Thymio to do it !





1

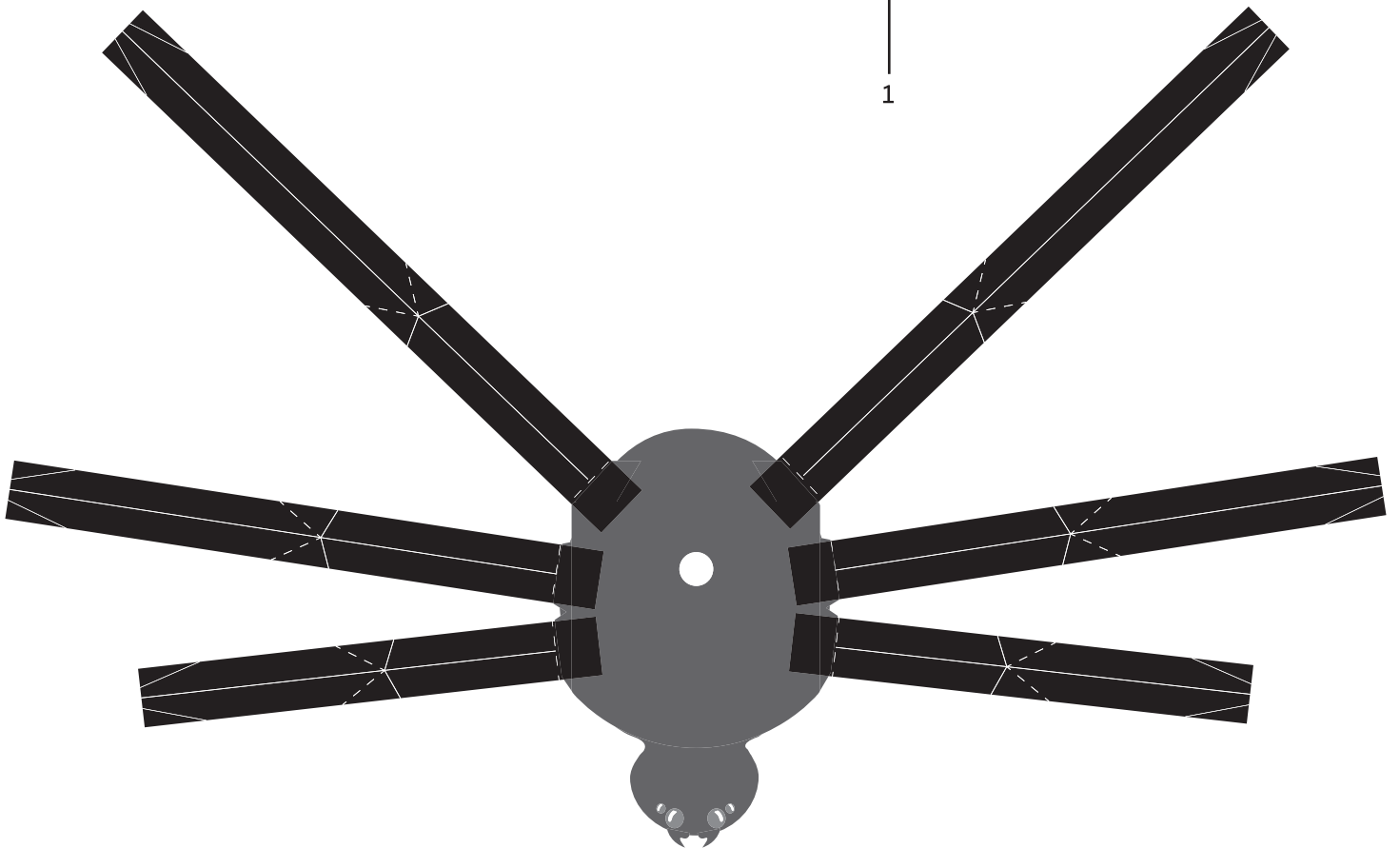
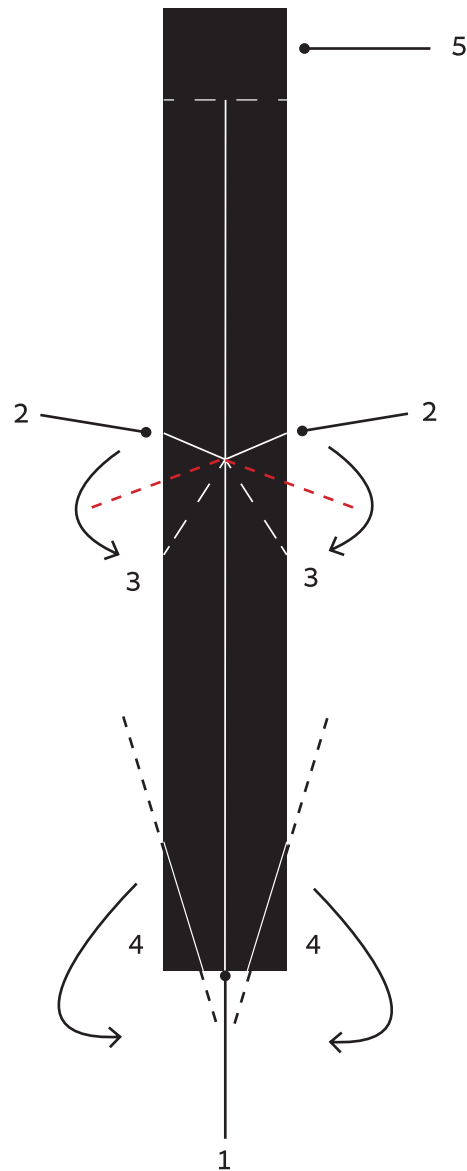


2

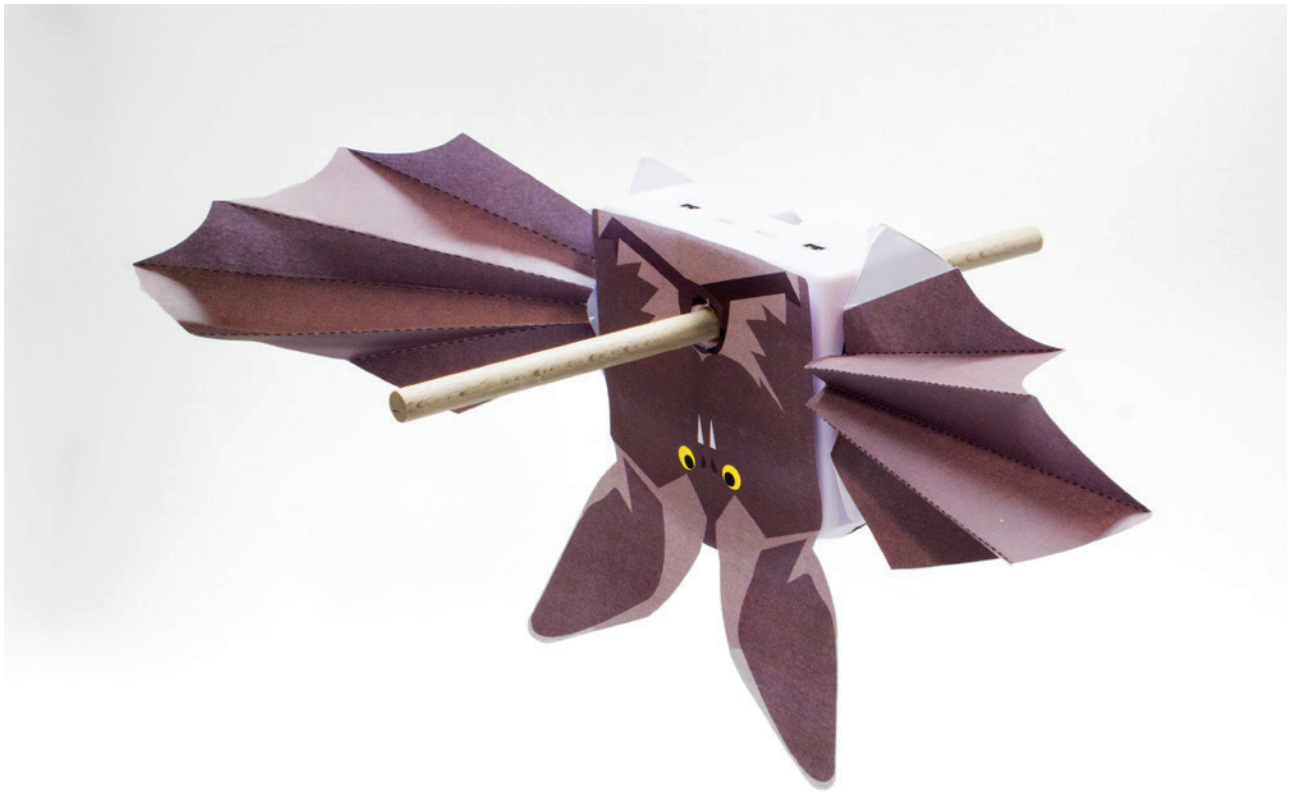
To allow the legs to be rigid, bend them over from the as follows:

- Fold **line 1** so that to form a mountain.
- Fold **line 2** down on the **line 3**. A fold will form on the red dotted line that you see here.
- To finish the legs in point, bend the **triangles 4** towards inside the mountain.
- Use the **tab 5** to fix the legs to the body of the spider as on the diagram below.

Your spider is finished!



JULIE



Julie can flap her wings! Just use the purple mode and a remote control to control it. Help her fly by taking it in your hands!

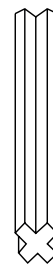
You can also be more creative. For example, if your bat is sleeping, makes sure it wakes up and moves forward when you put your hand over its head. You can even make her scream with the sound card!

2x



A

4x

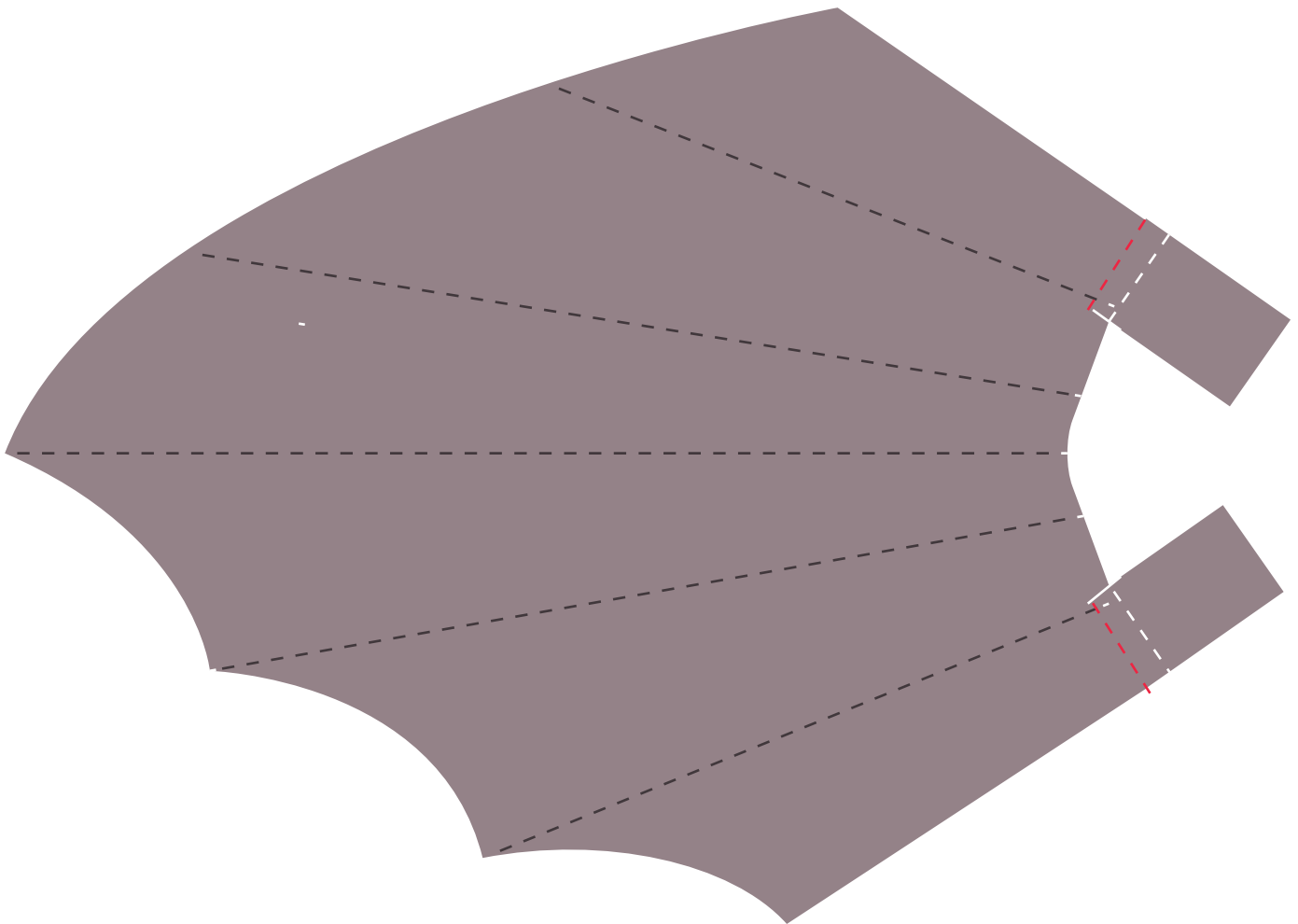
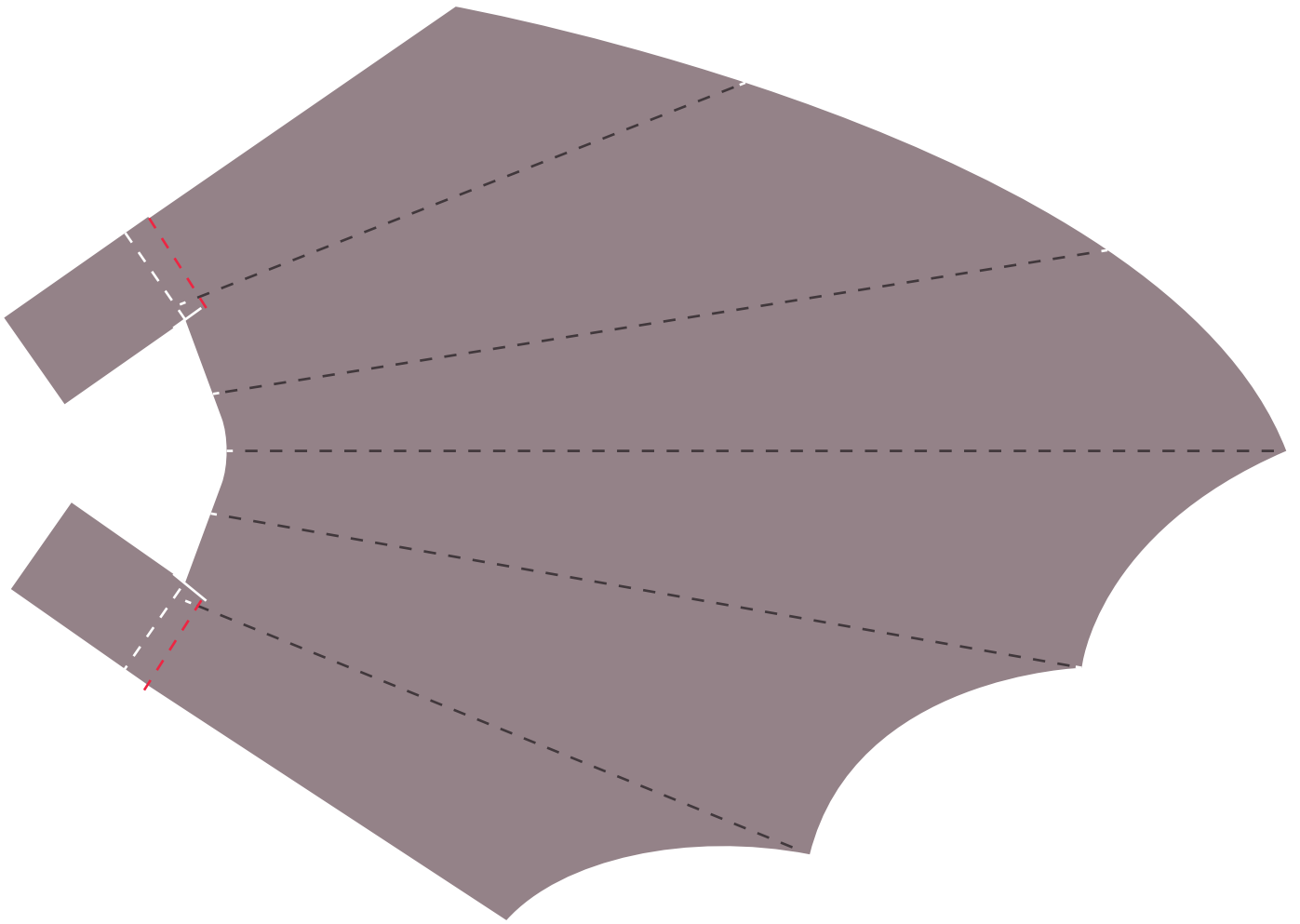


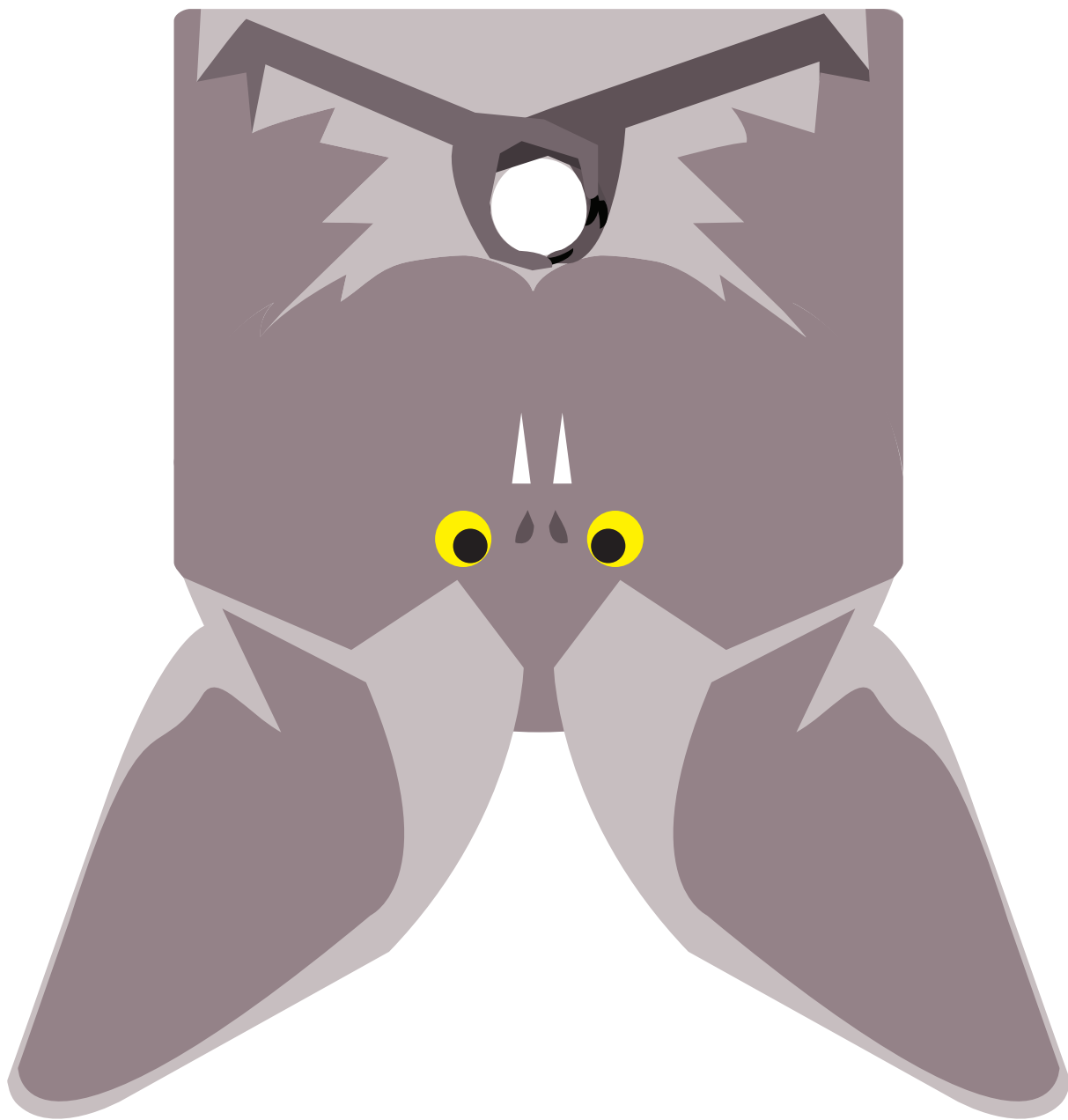
B

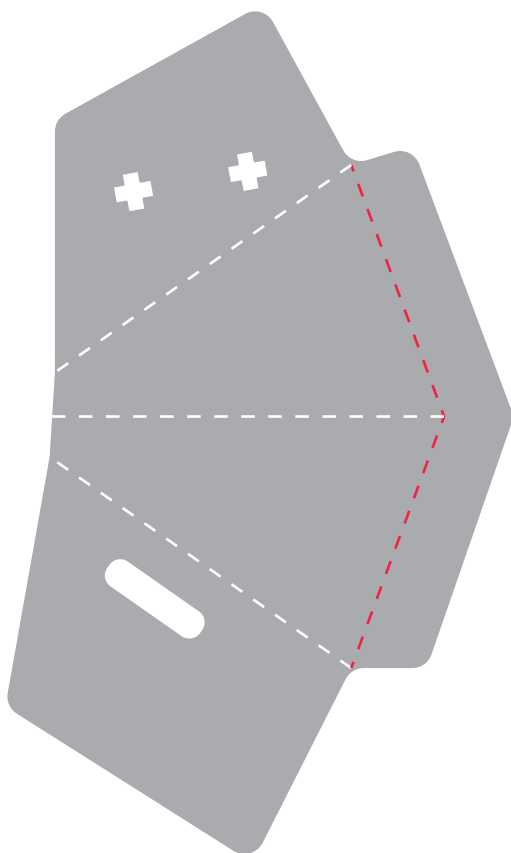
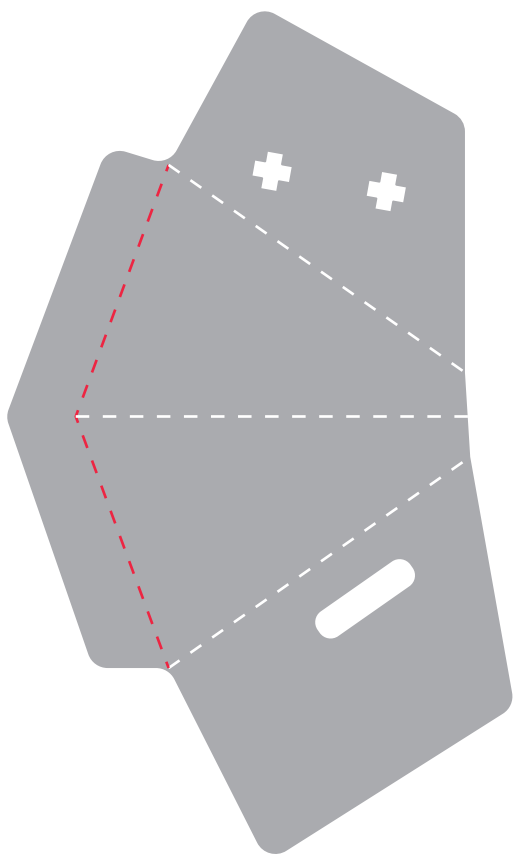
2x



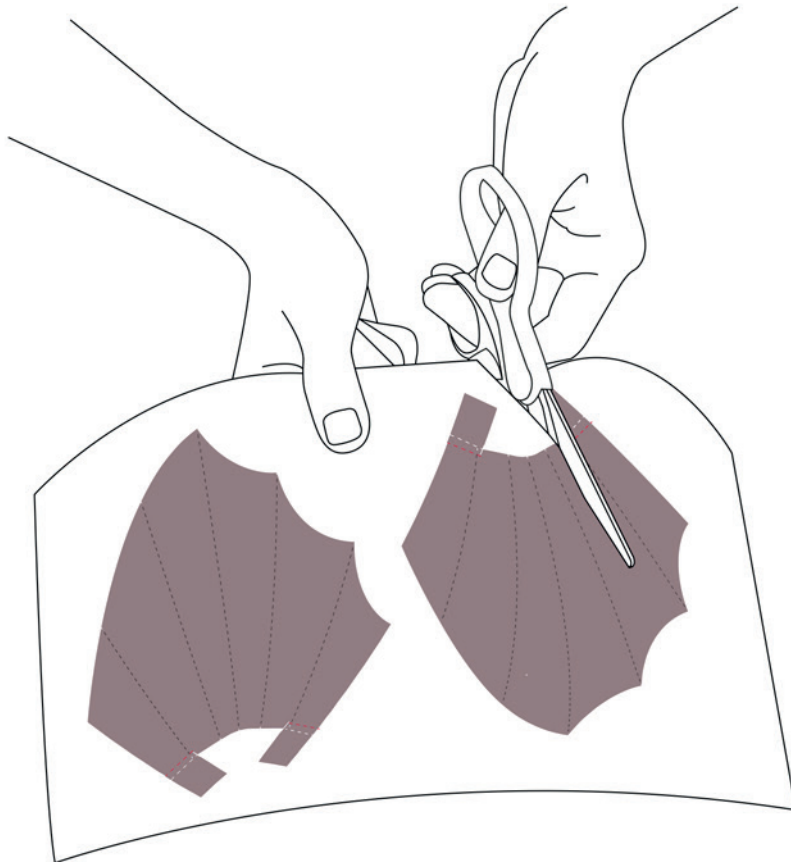
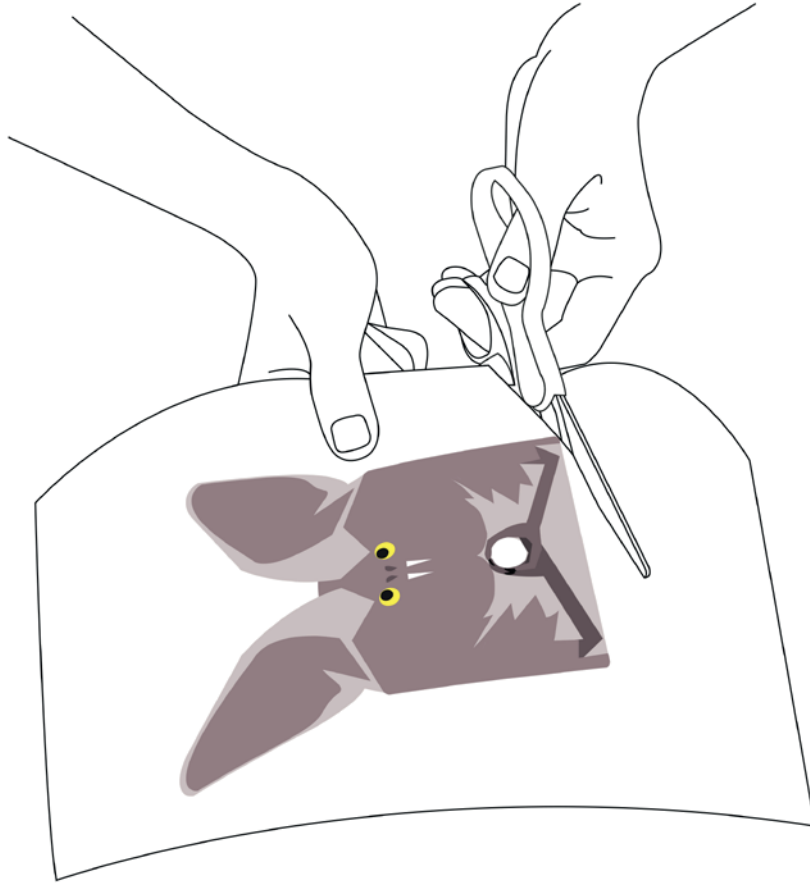
C





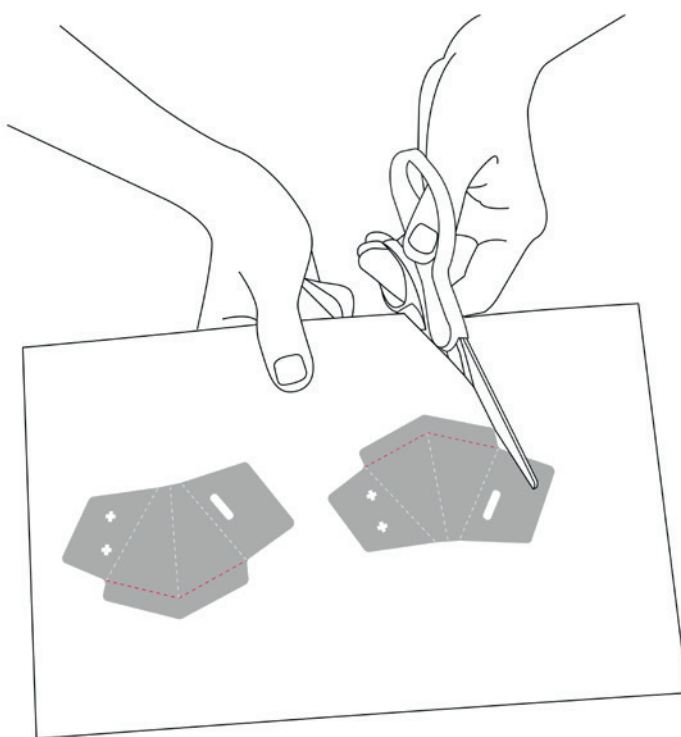
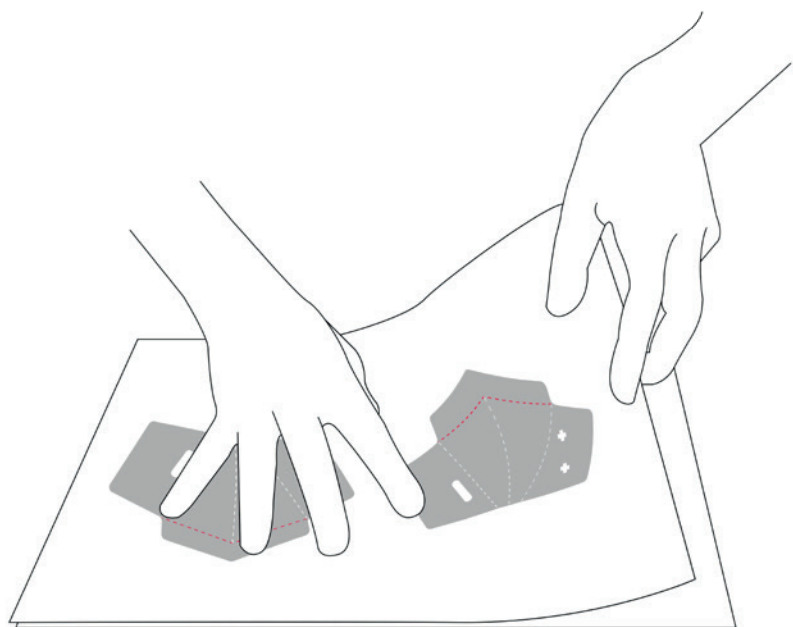
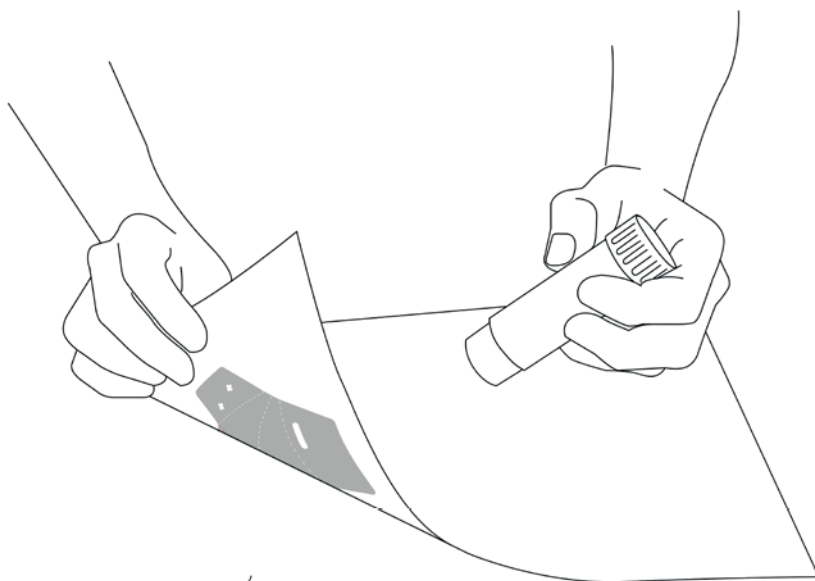


1



2

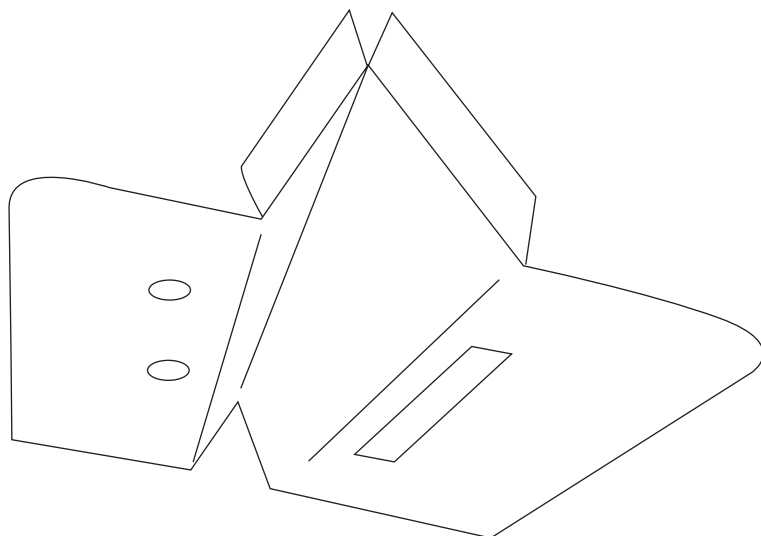
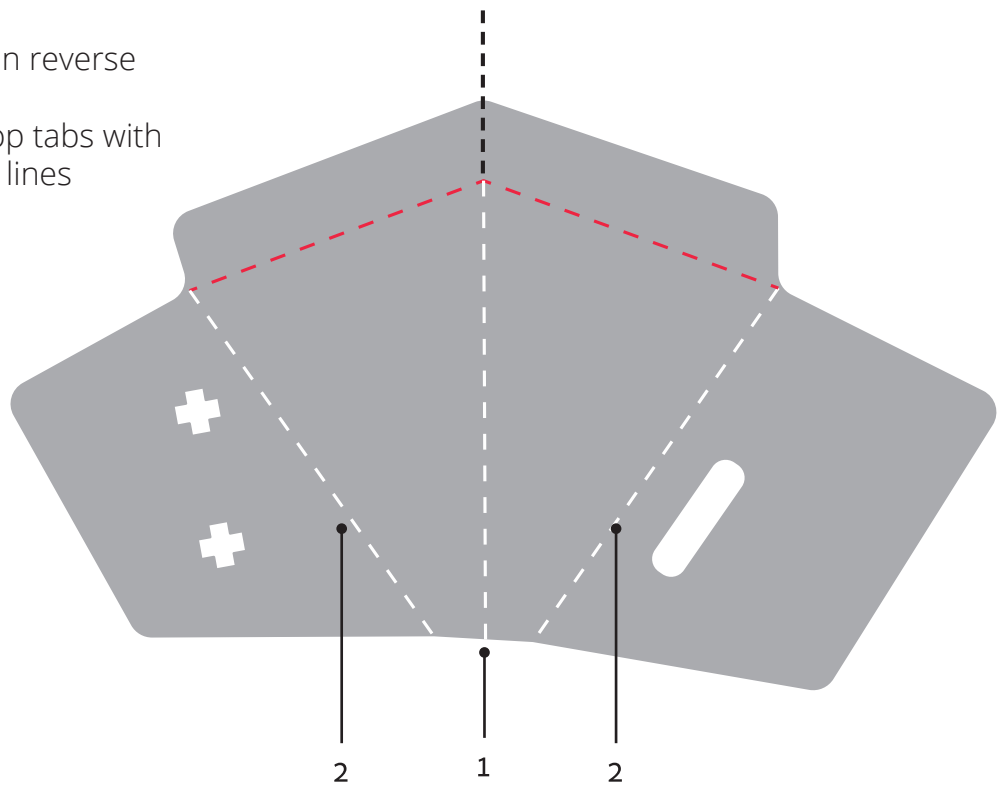
Glue the sheet of the two grey pieces on cardboard and cut them out.



3

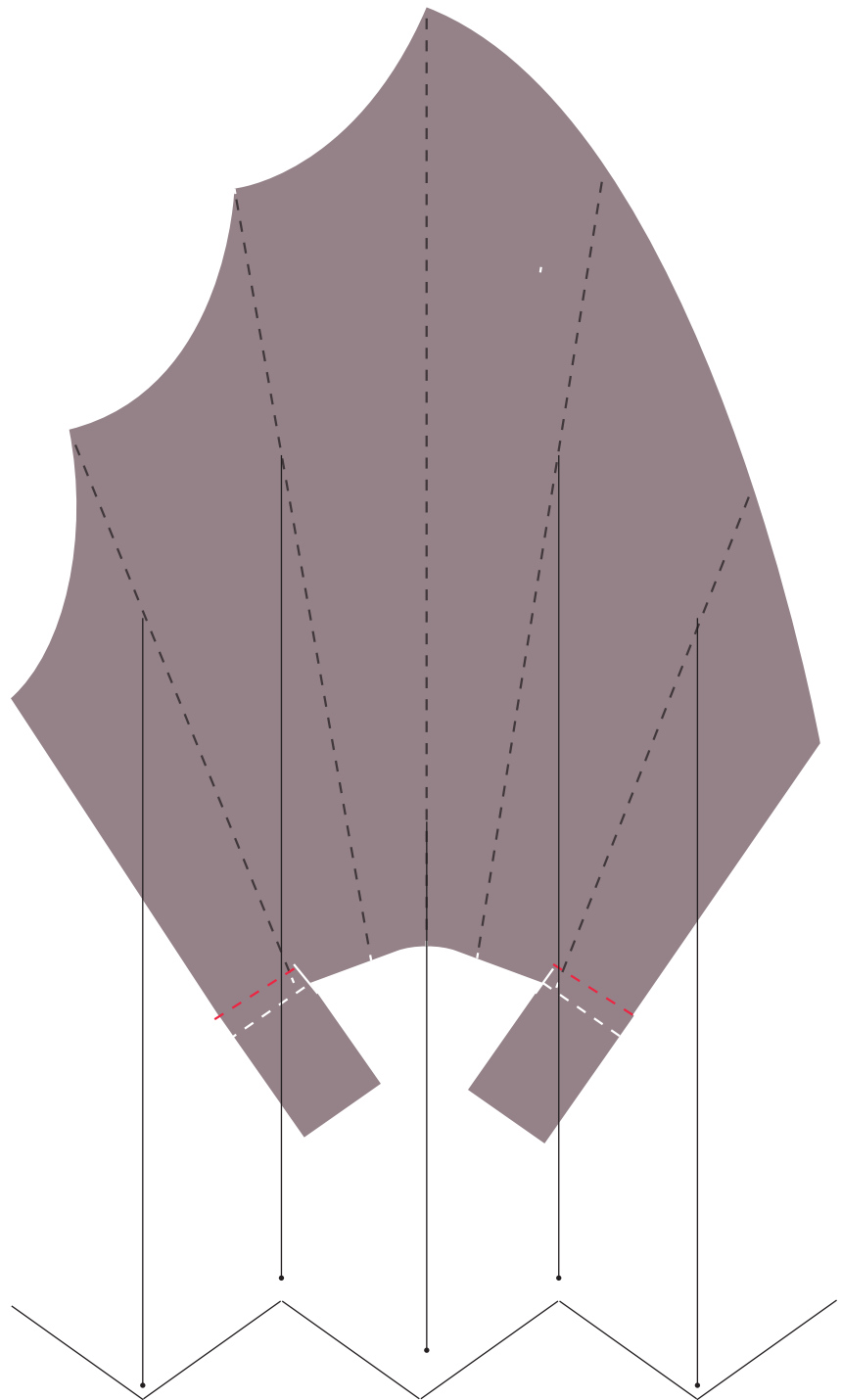
Fold the grey part as follows:

1. Cut following the black dotted line
2. Fold line 2 to form a mountain
3. Fold lines 2 in reverse
4. Fold the 2 top tabs with the dotted red lines



4

Fold both wings of your bat in an accordion on the black lines.

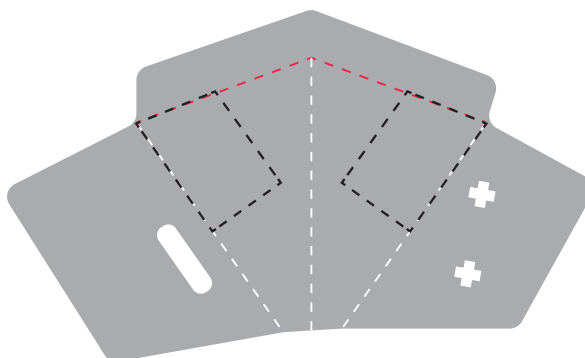
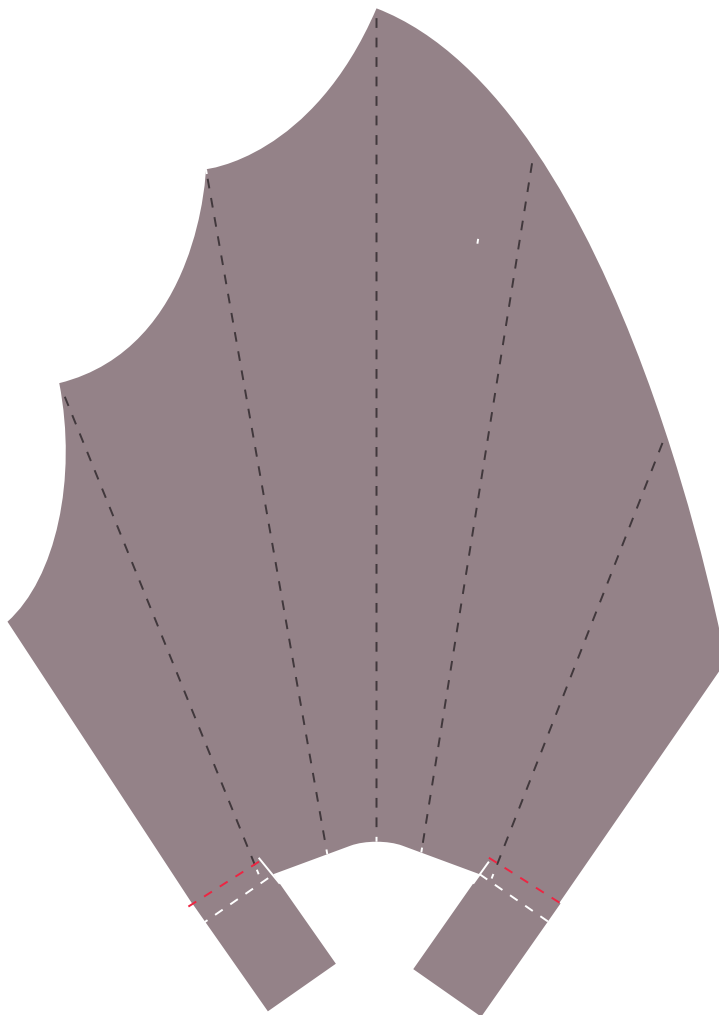


5

Now you have to assemble the wings and the two pieces you just folded.

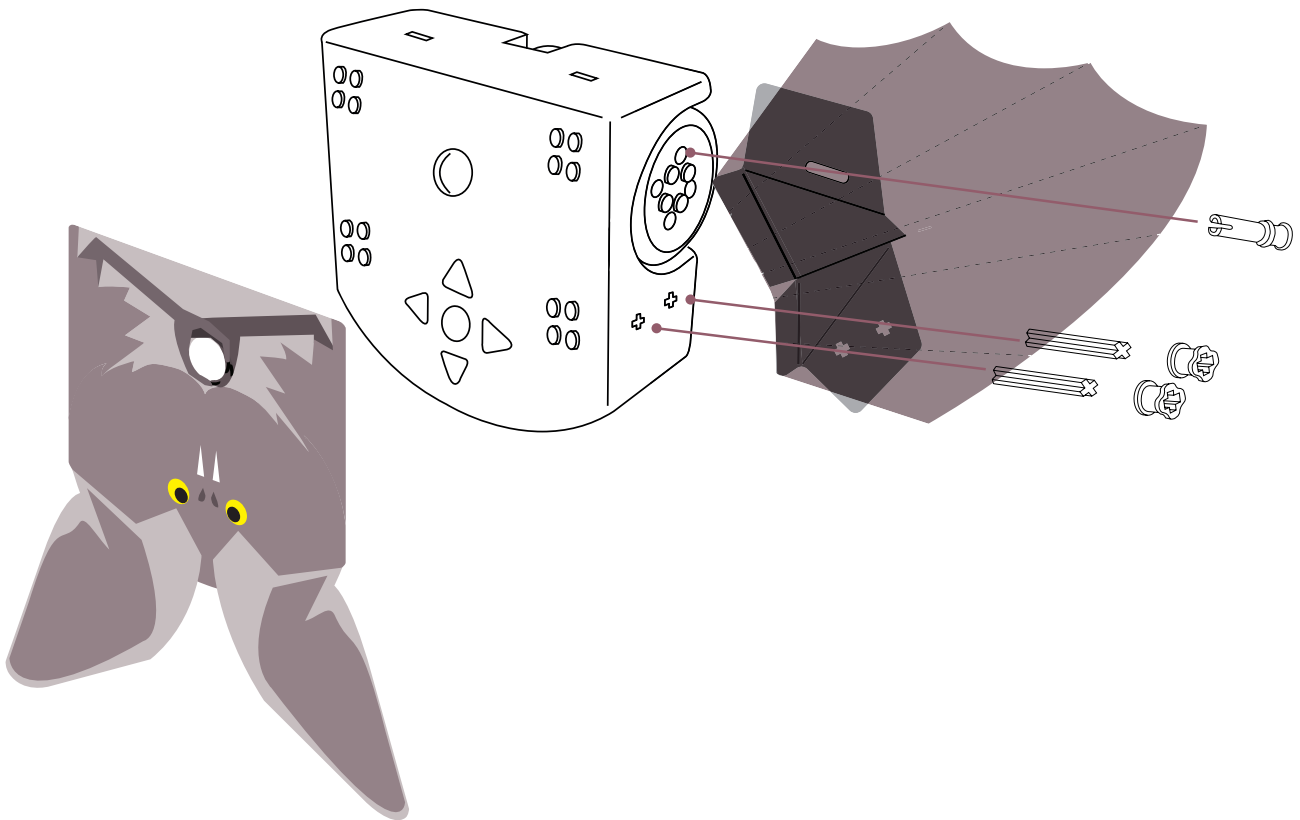
To do this, place the red line you see on the wings, on the red line of the grey room.

The tabs of the wings must stick together inside the «mountain» formed by the grey part as indicated by the black dots.



6

You can now mount your
bat using LEGO® parts A, B
and C!

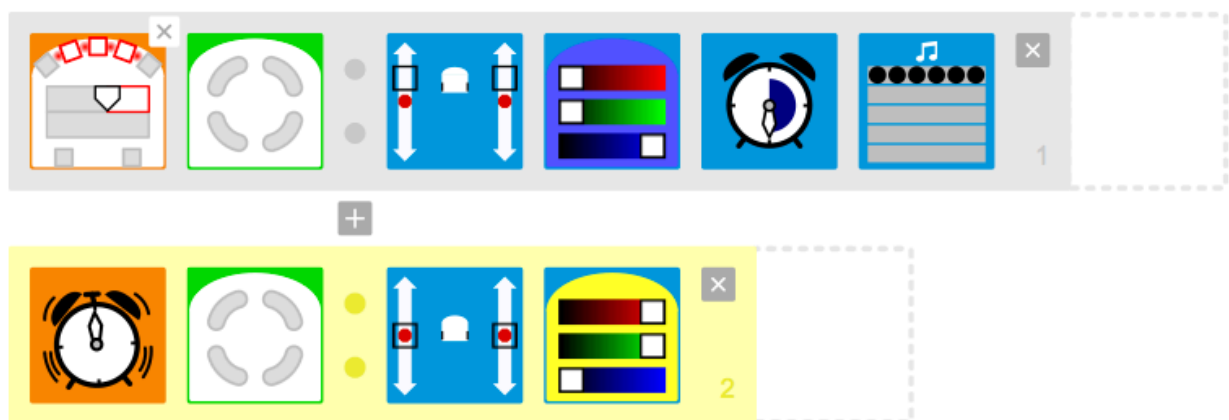


Solution

1. Connect Thymio to your computer and launch VPL

2. We will use the 3 sensors at the front of the robot. Drag the horizontal sensors event block and select them. Put both motor forward, change the color, set a timer and add a sound.

3. Now we will use the Timer event. It means that Thymio will do something at the end of the previous timer. Then, stop the motors and change the color again.

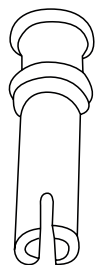


BOO

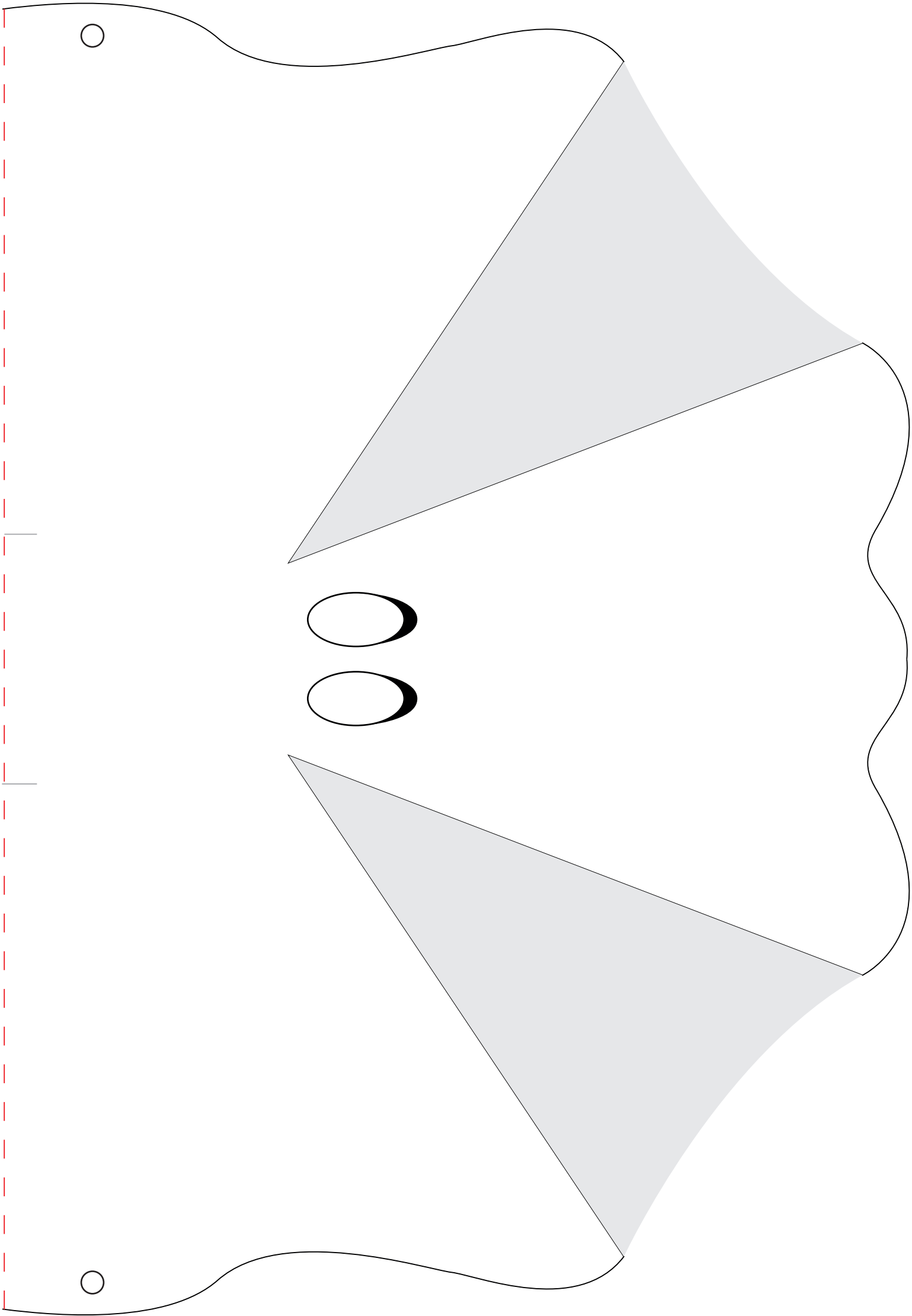


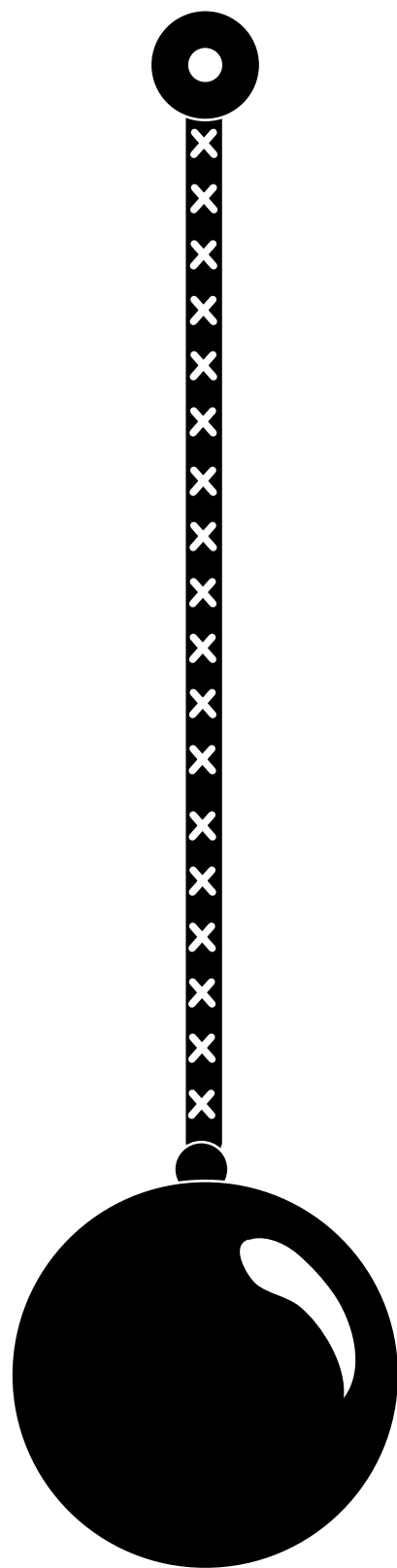
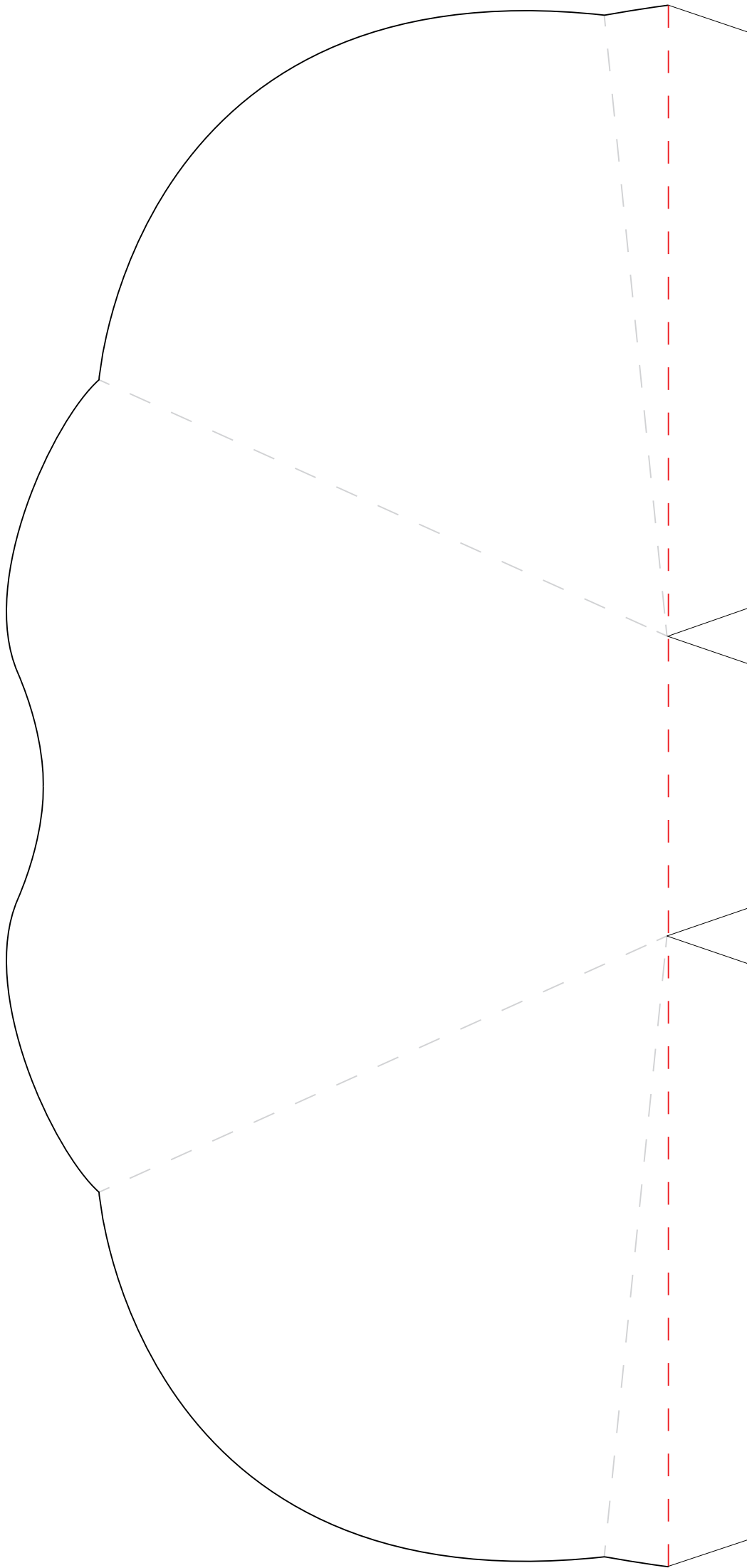
With the ghost it's easy! Use the purple mode with a remote control to control your ghost and scare your neighbours! If you don't have a remote control you can still program it to create your own behavior.

2x

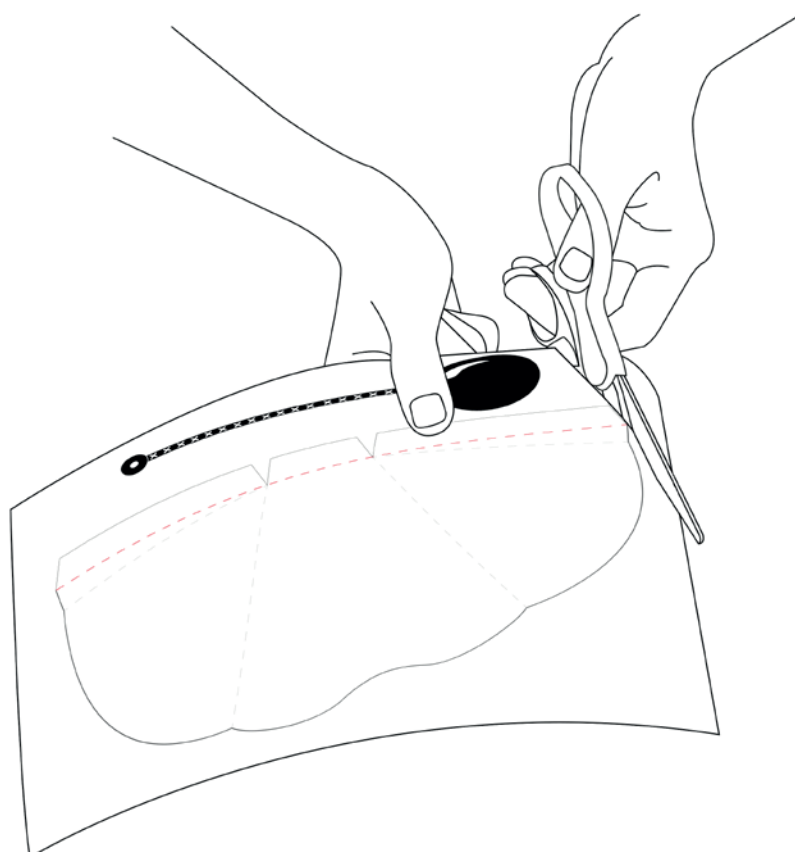
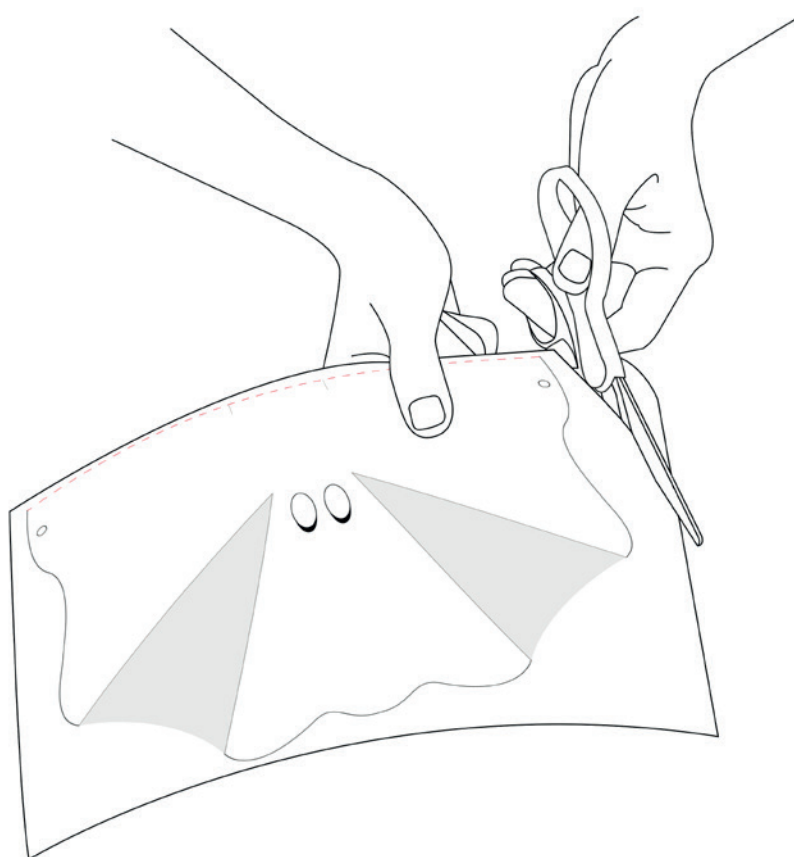


A



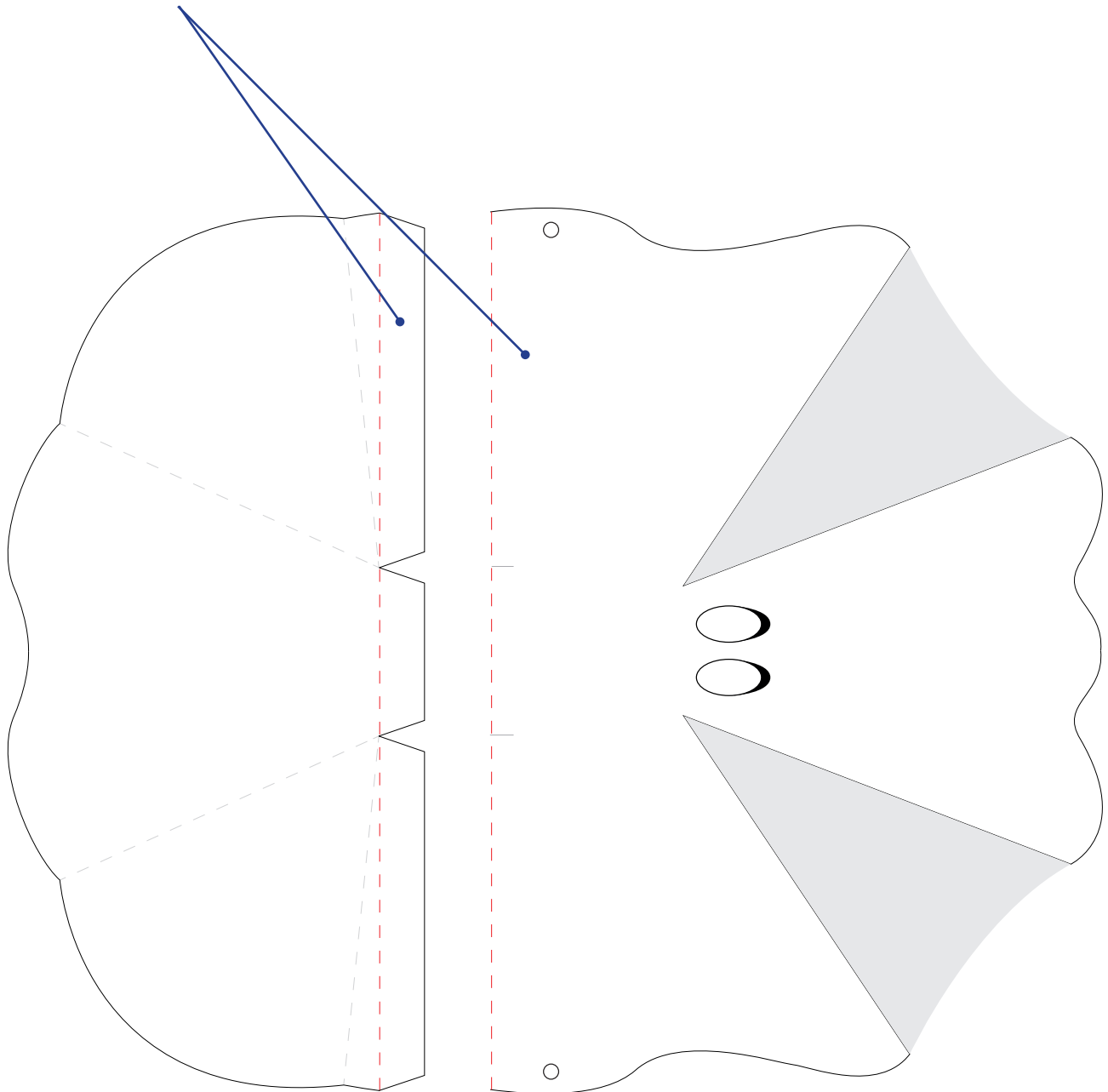


1



2

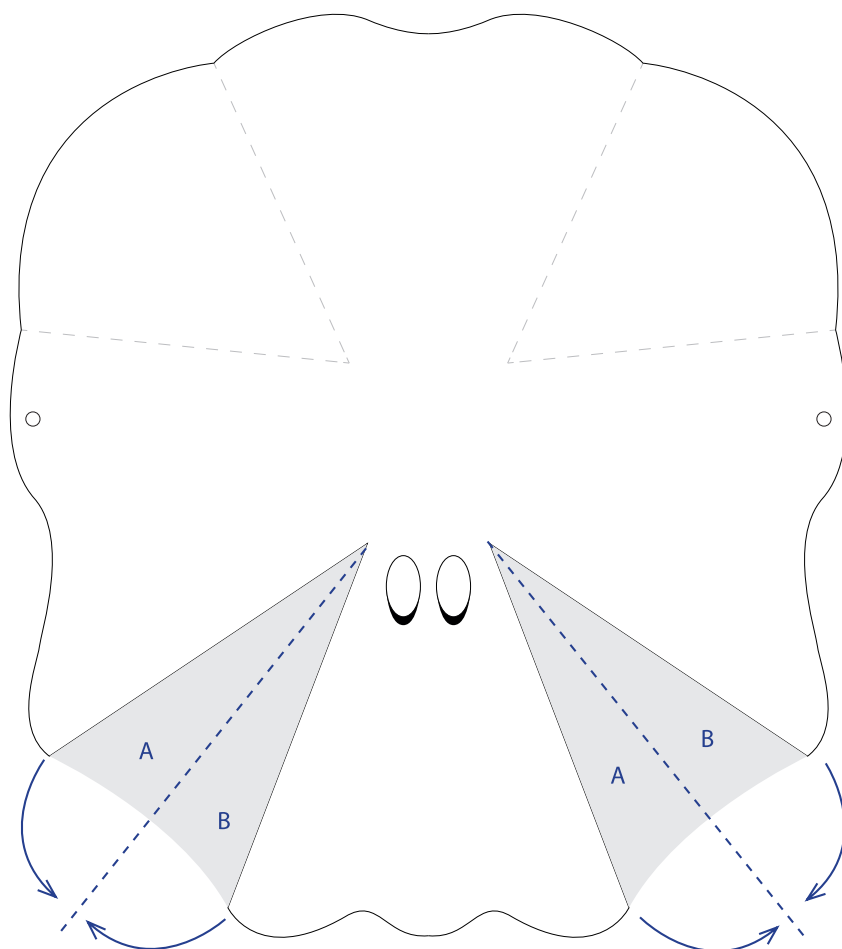
Assemble the 2 parts of your ghost. Use the red lines to align it.



3

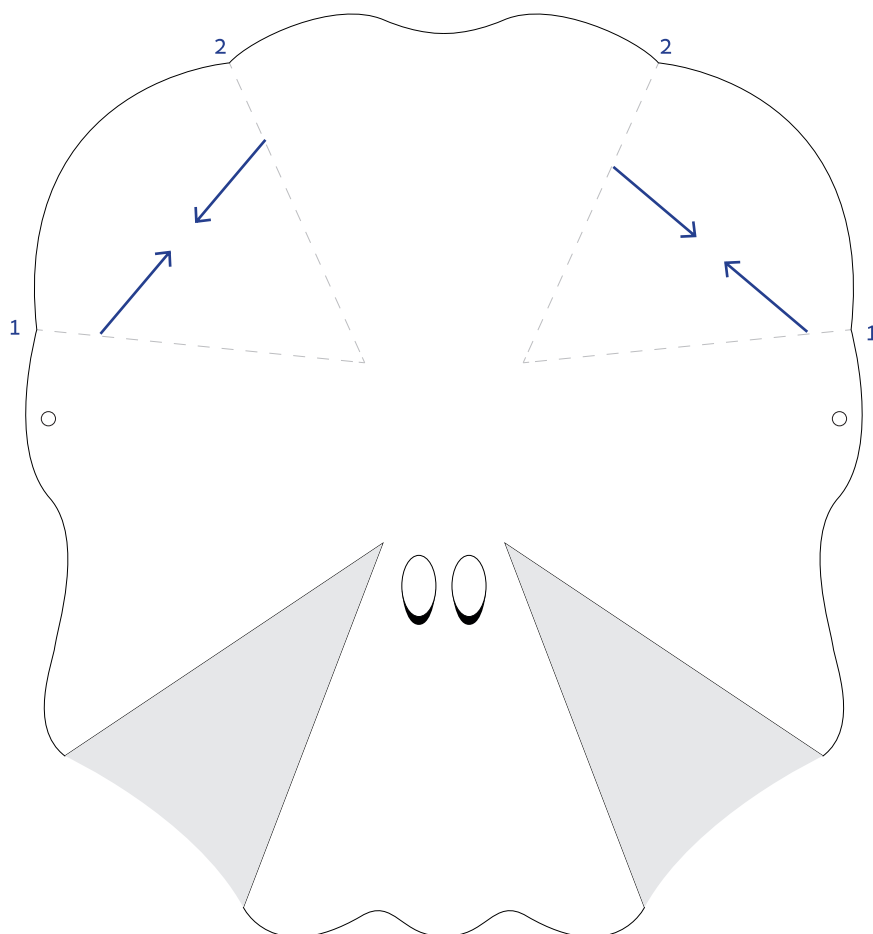
To give volume to your ghost, you're going to have to bend it in two ways.

1. Gathers parts A and B by bending in the center the grey part (dotted line). Stick them on.

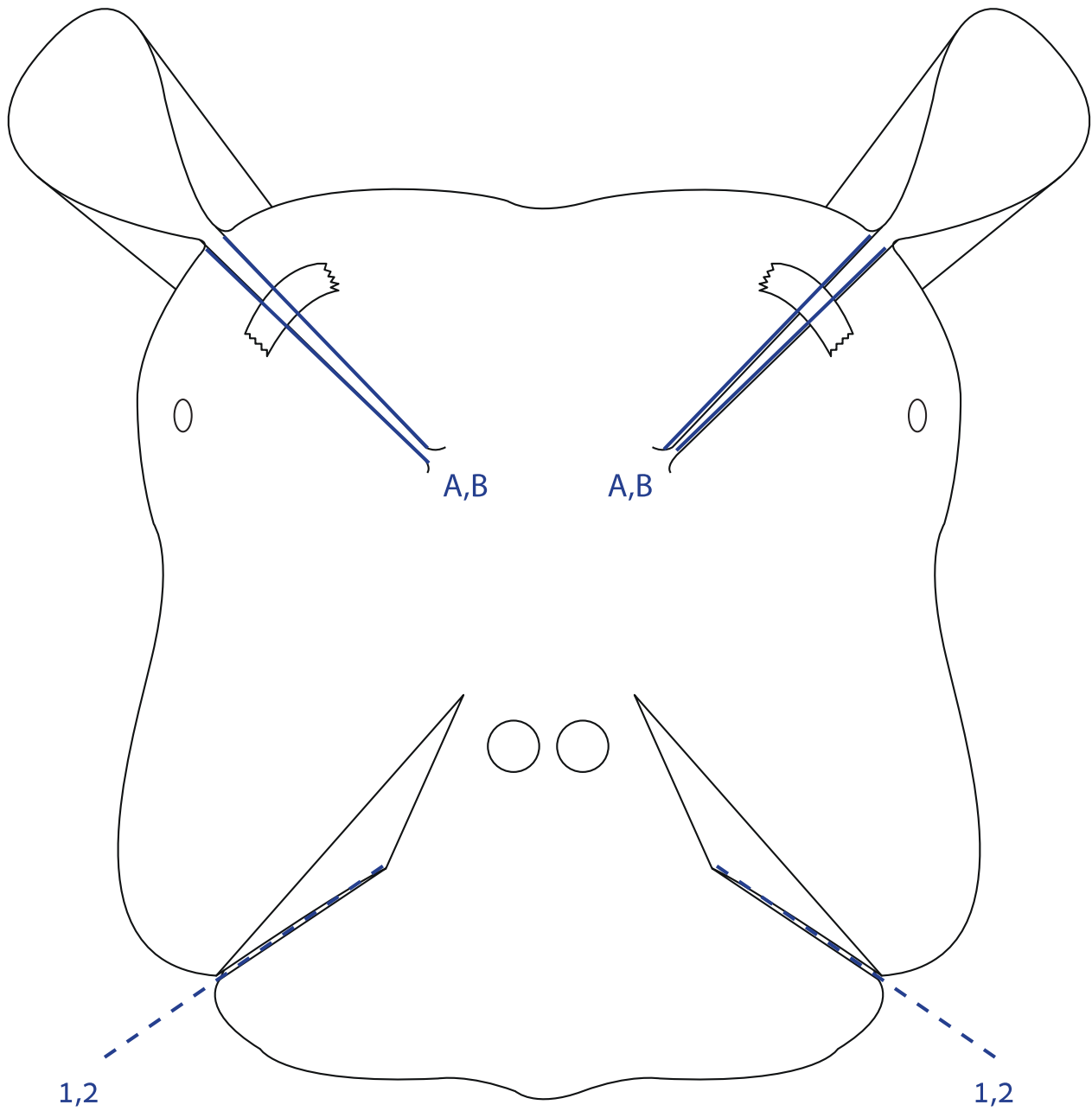


4

2. Put lines 1 and 2 together with tape, without folding the paper. Let it pass over the latter on the outside of the ghost.



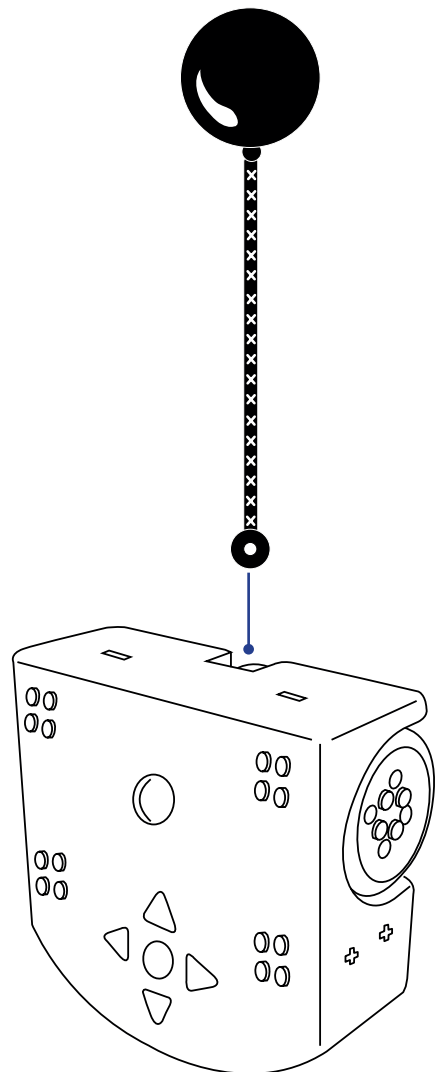
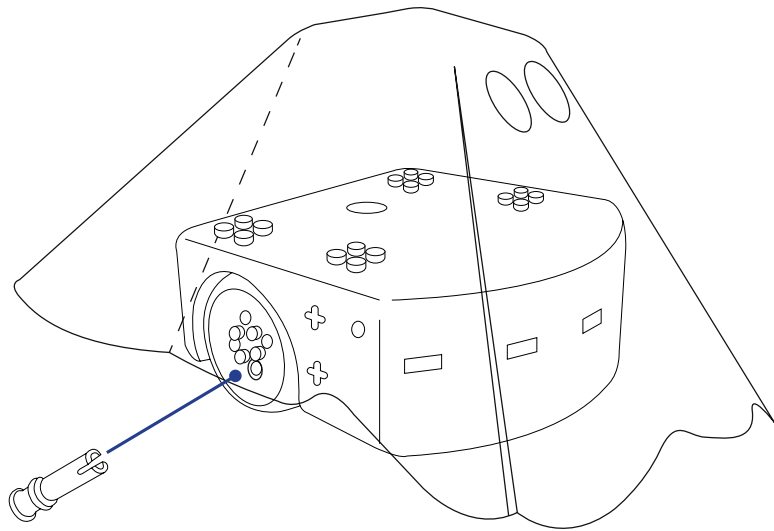
Seen from below, your
ghost should look like this:



5

You can now fix your ghost on the Thymio!

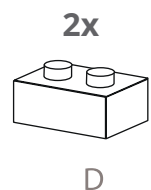
To do this, use the parts A, pass them through the two holes provided for this purpose on the phantom and fix them on the wheels.

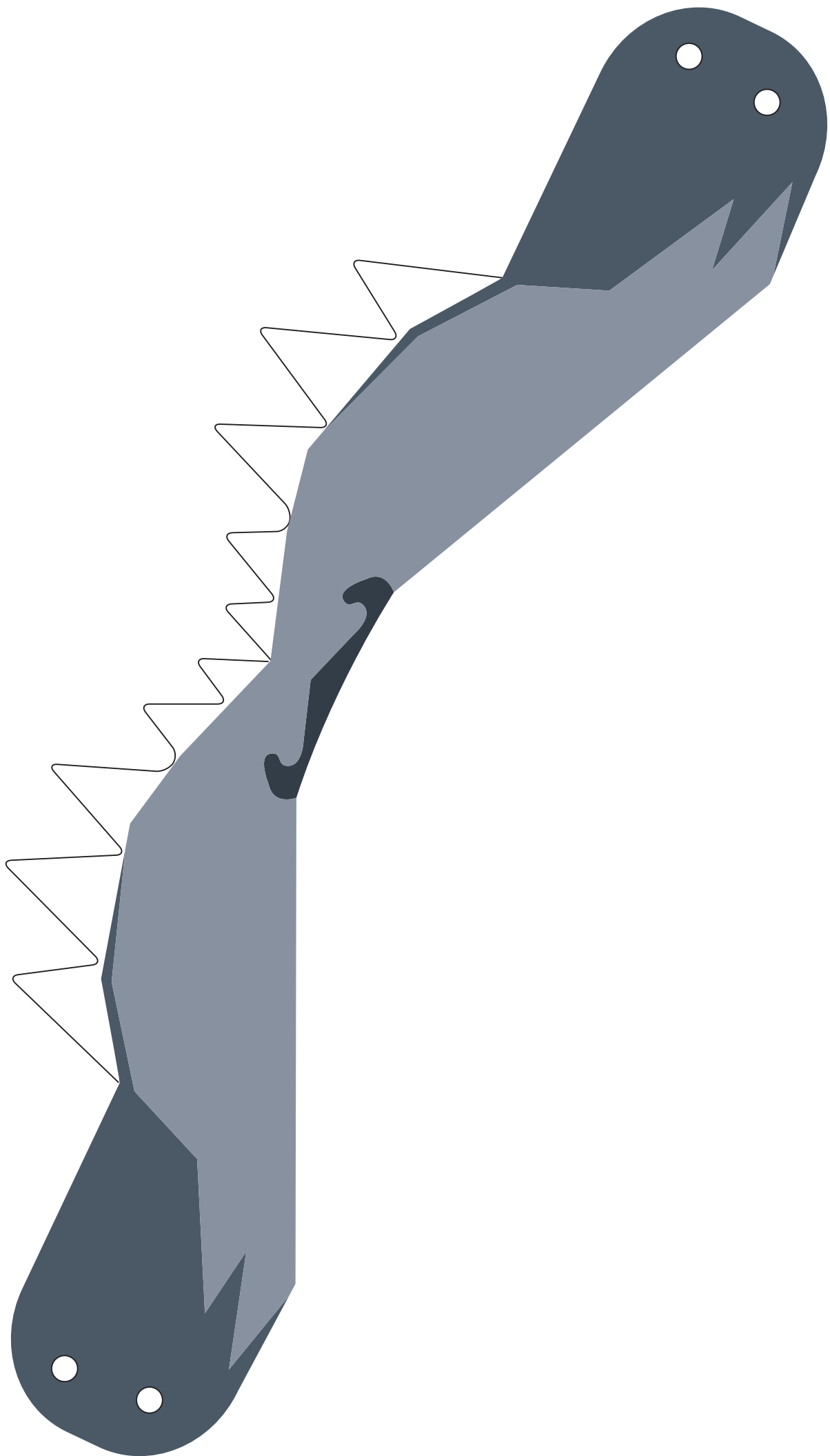


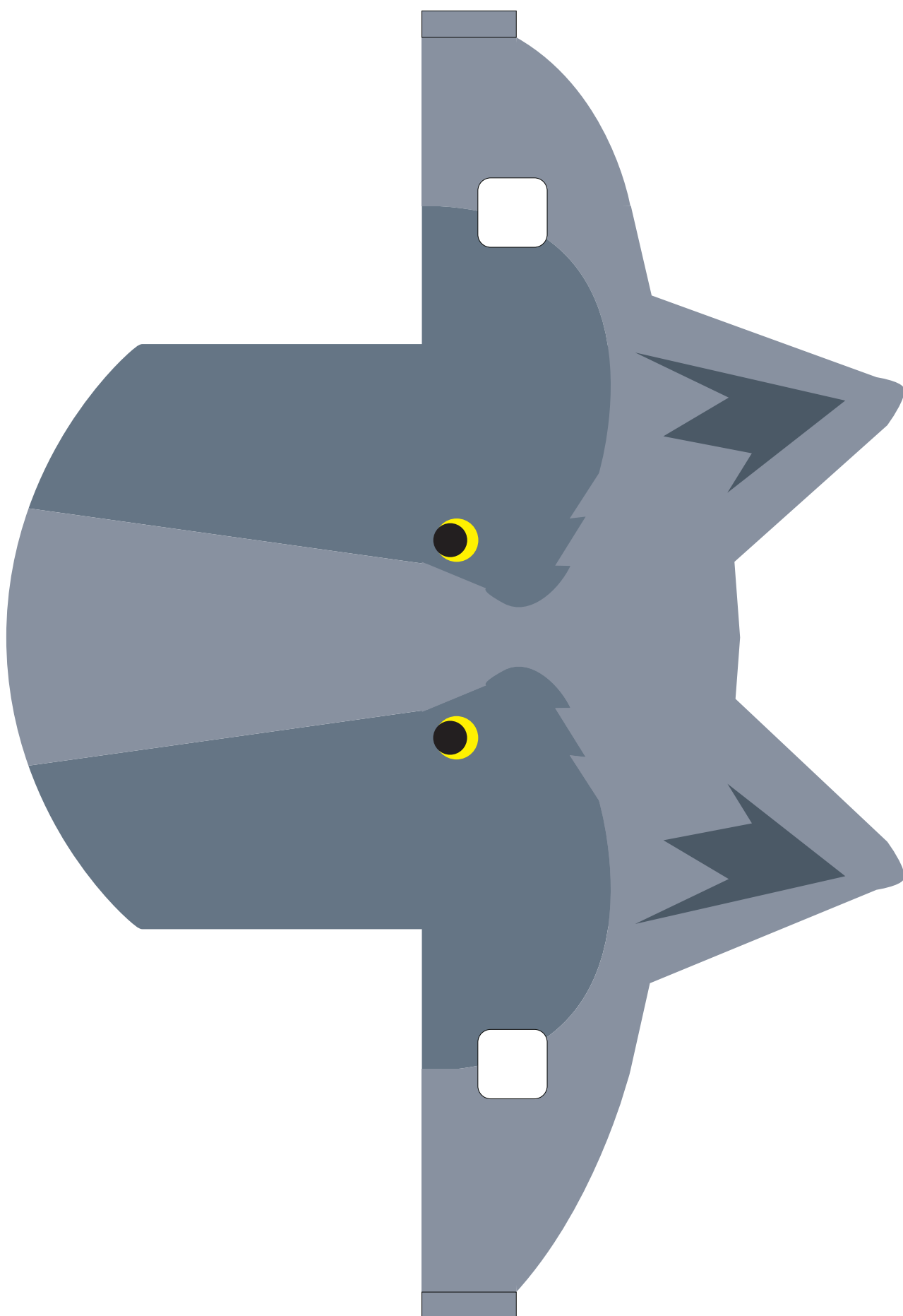
LOU



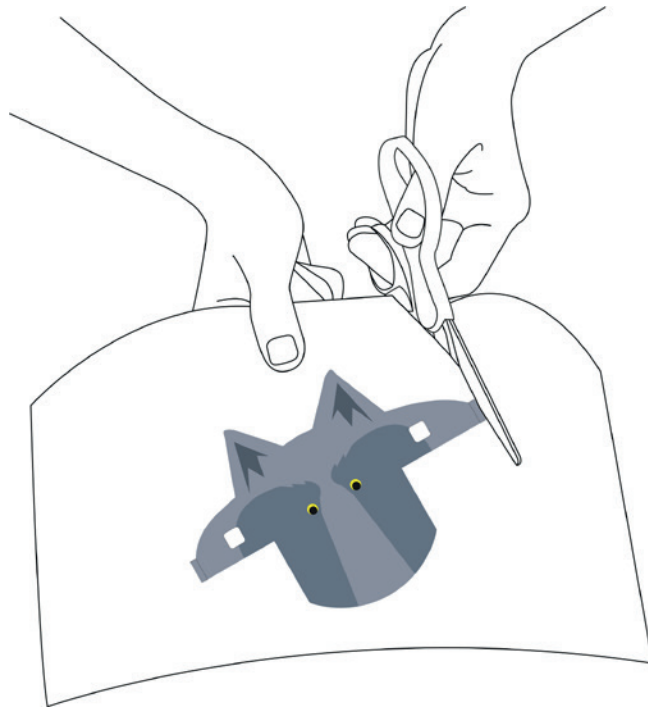
Watch out werewolf ! When you put the green mode on your robot, the usual friendly mode will turn into an aggressive mode... Raise your wolf's jaw so that his teeth are not in front of the sensors. Then try to get your hand close if you dare!





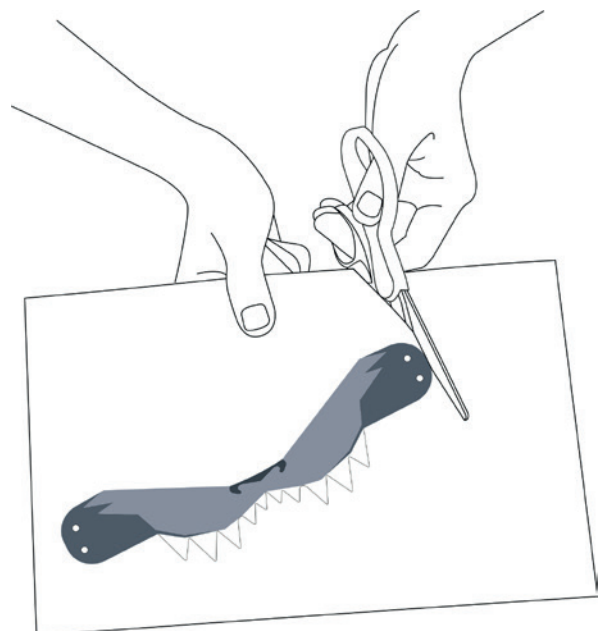
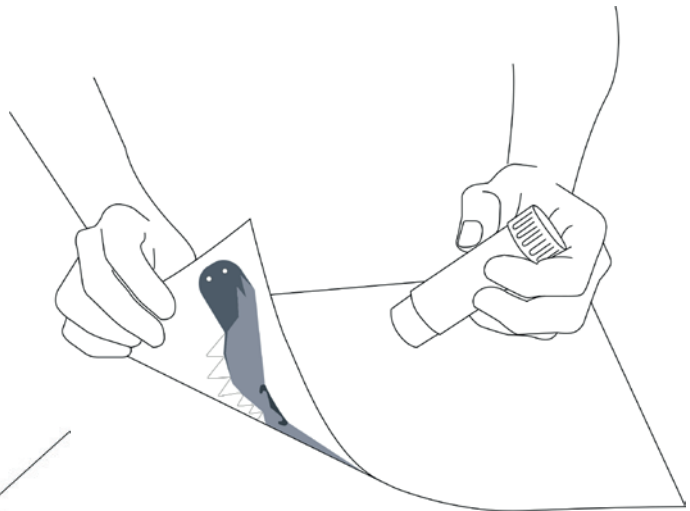


1

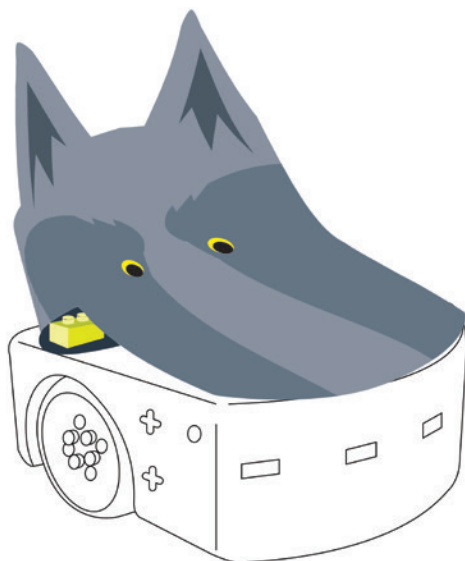
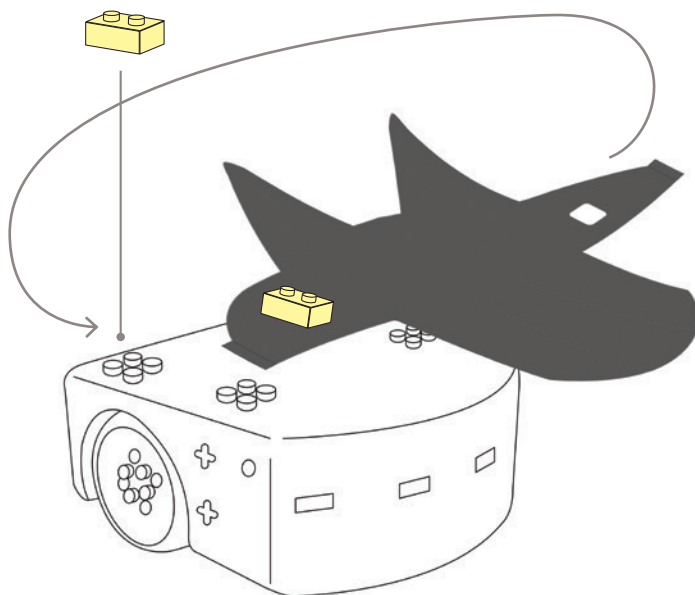
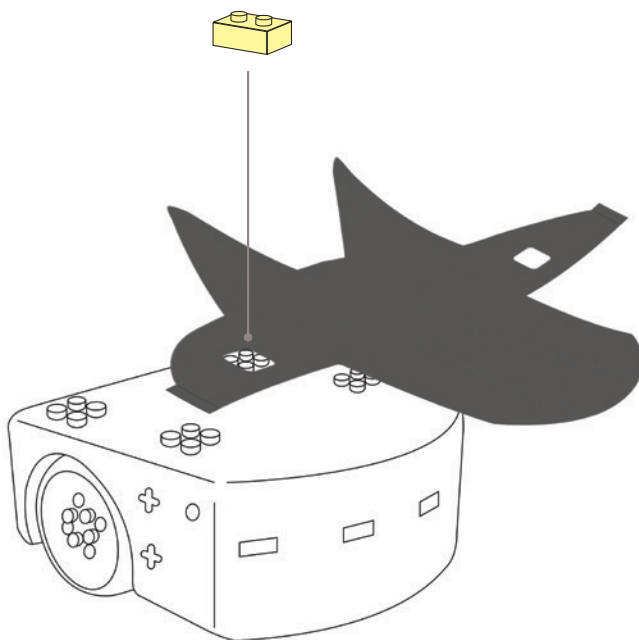


2

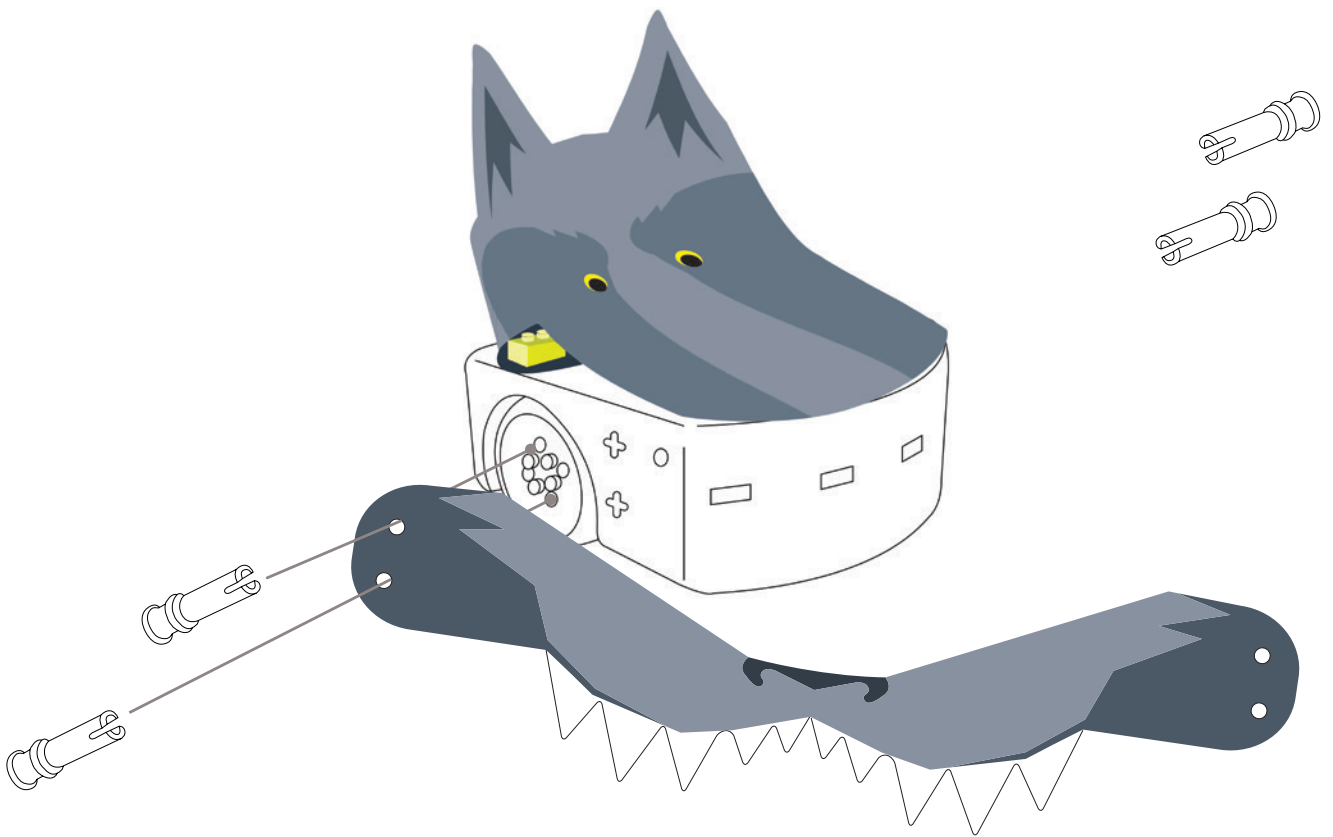
For the jaw, stick it on cardboard, and cut it out.



3



4



RENÉ



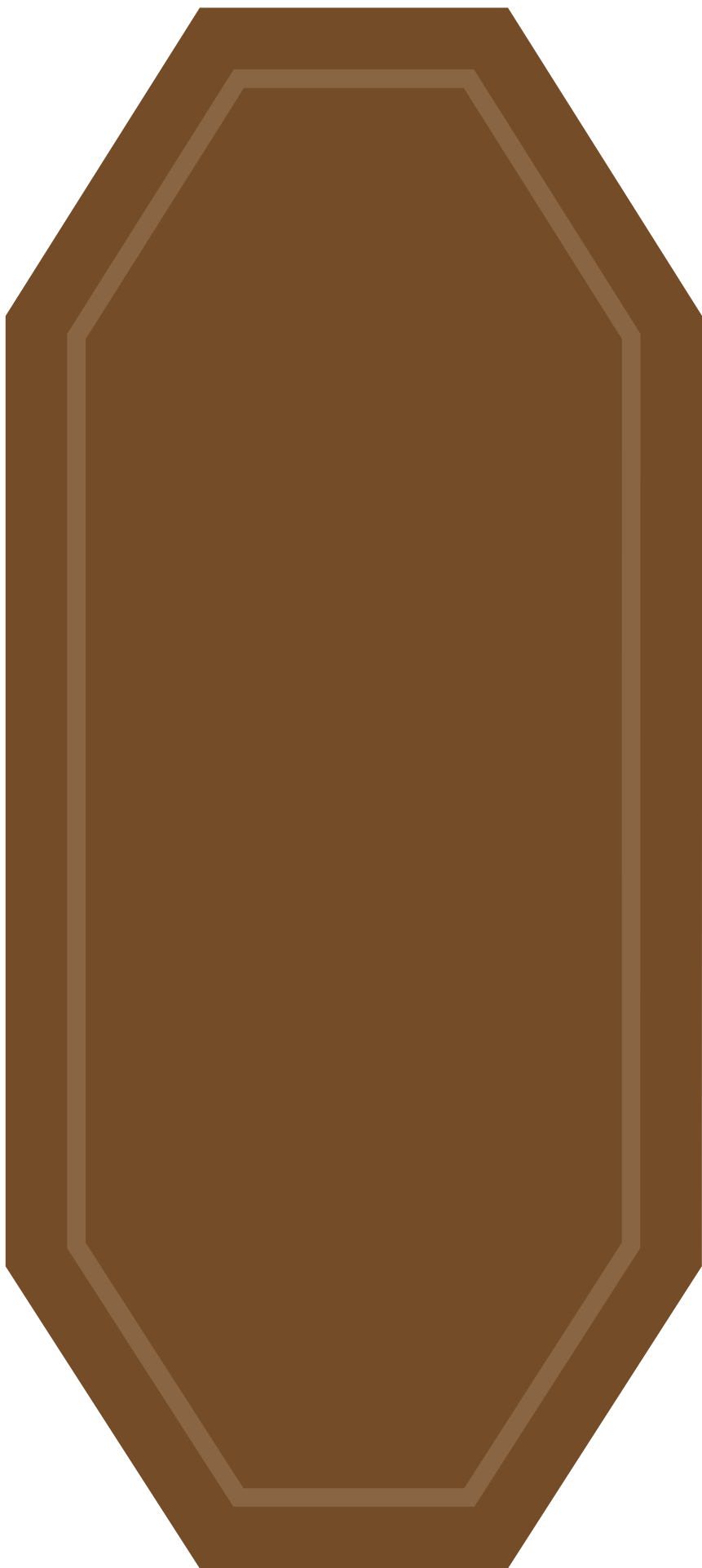
René sleeps in his coffin. With advanced VPL, find a way to wake him up when you hit the lid!

4x



A





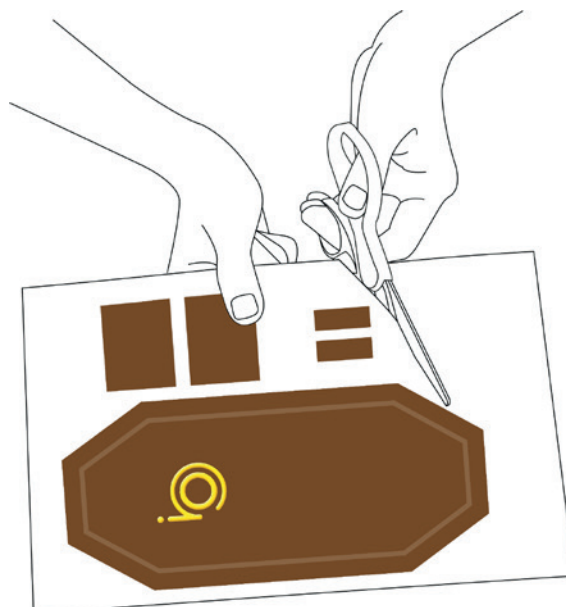
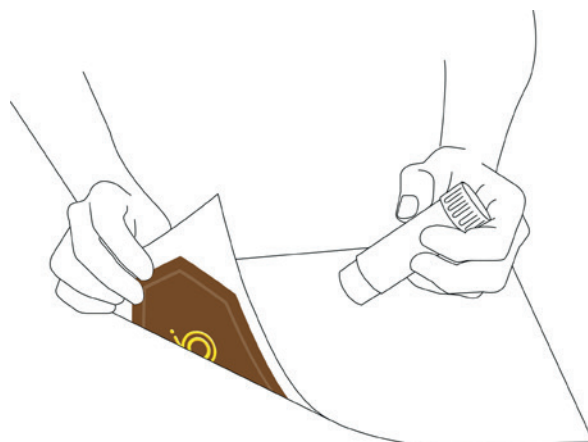


1



2

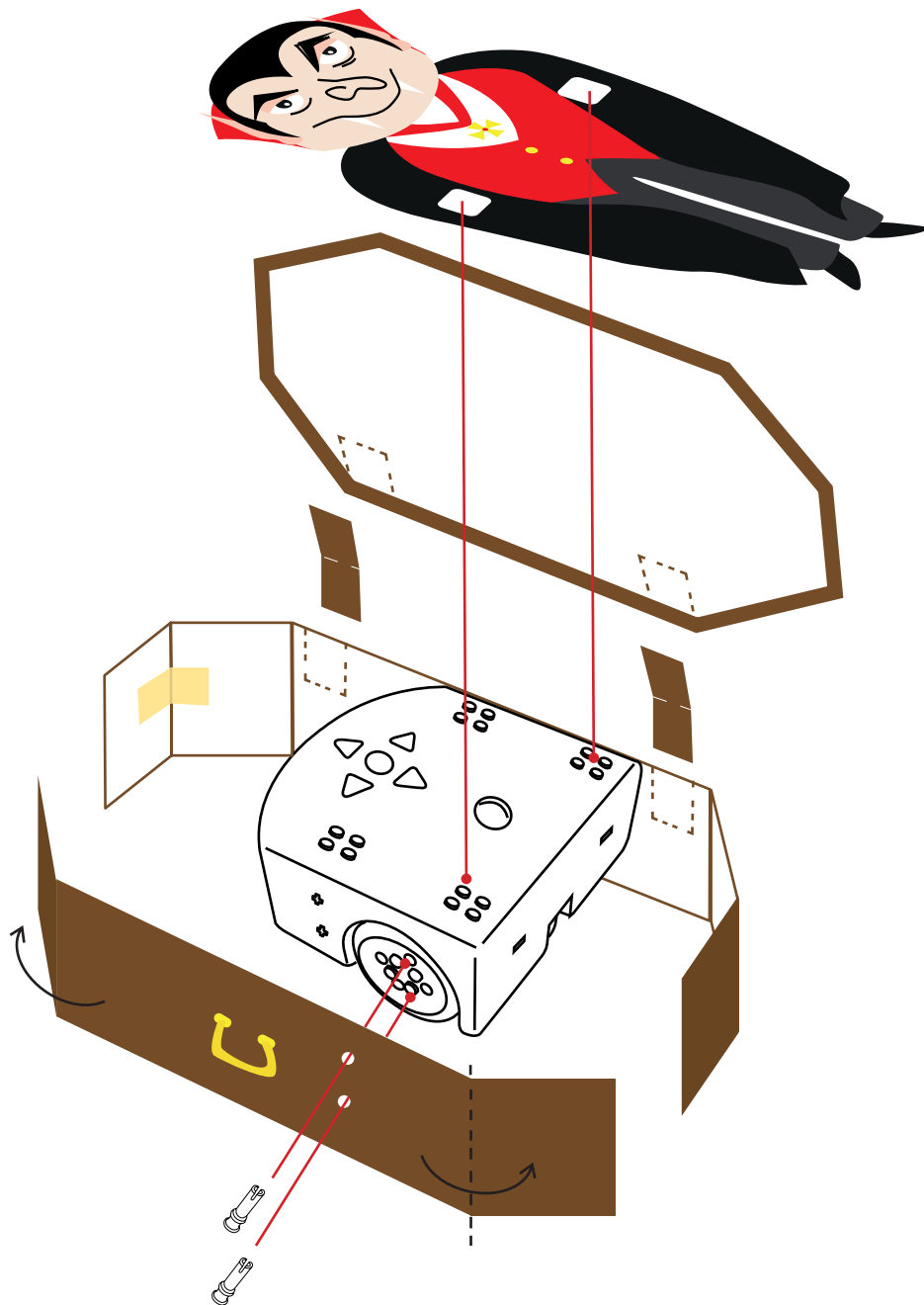
Glue the other two pages on cardboard and cut them out




3

Now you have to assemble your vampire. To do this, start by assembling the coffin as shown below. Attach it to the Thymio using the lego parts A.

All you have to do is hang the «vampire» cache on your Thymio and it's up to you!

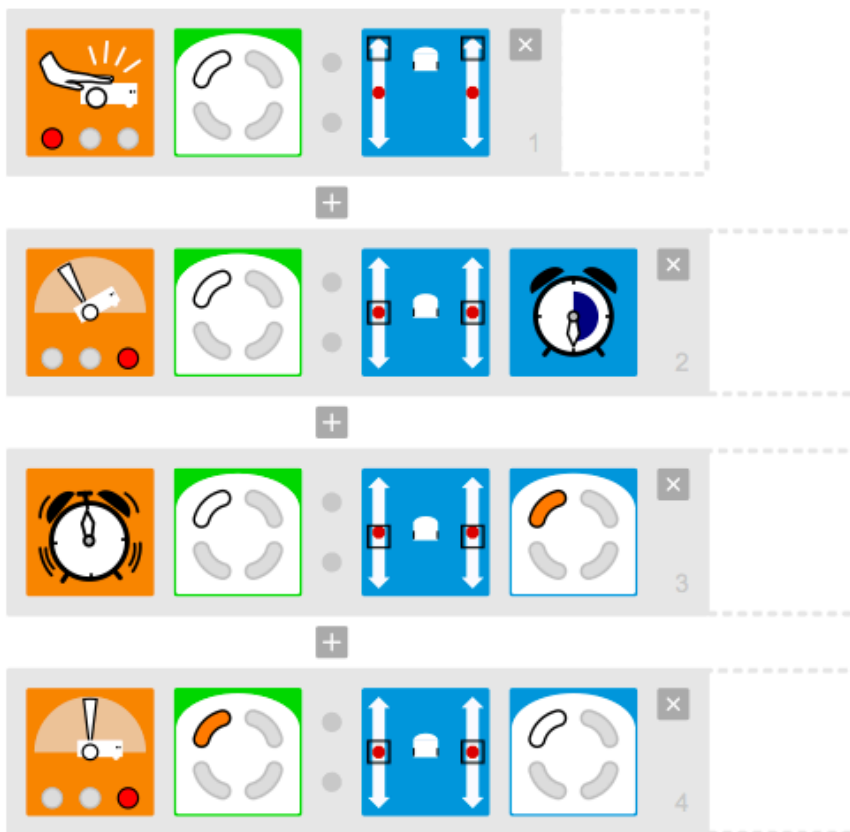


Solution

Before Starting: click the  button to access the advanced mode.

line 1: If the first state [0] is inactive AND a tap is detected, set both motors forward. That will activate the mechanism to wake the vampire up.

line 2: When Thymio is in a certain angle and if the first stop both motors and start a timer when



TOM



Program with VPL to move forward when the zombie is standing and to stop when he falls on his back.

2x

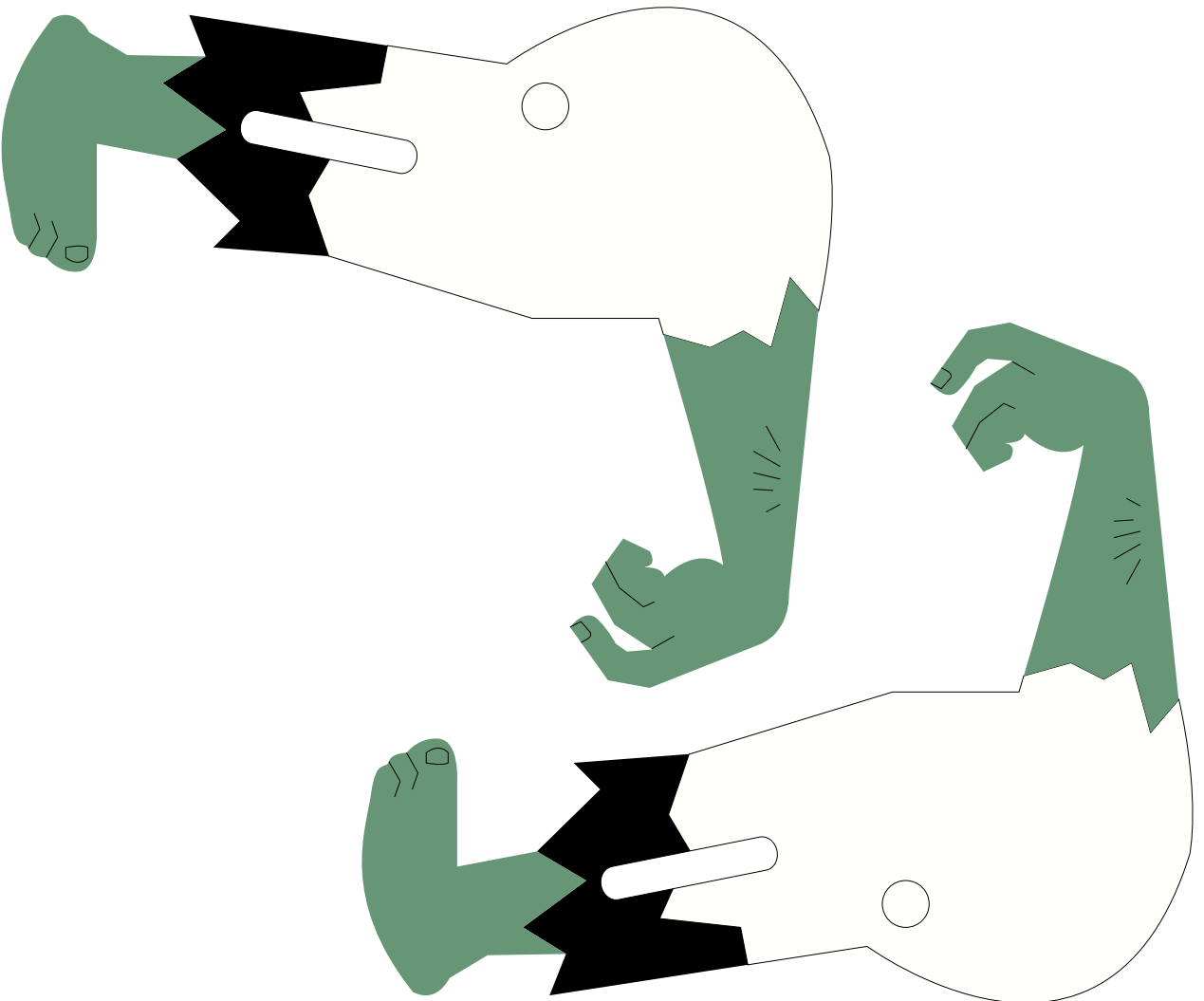
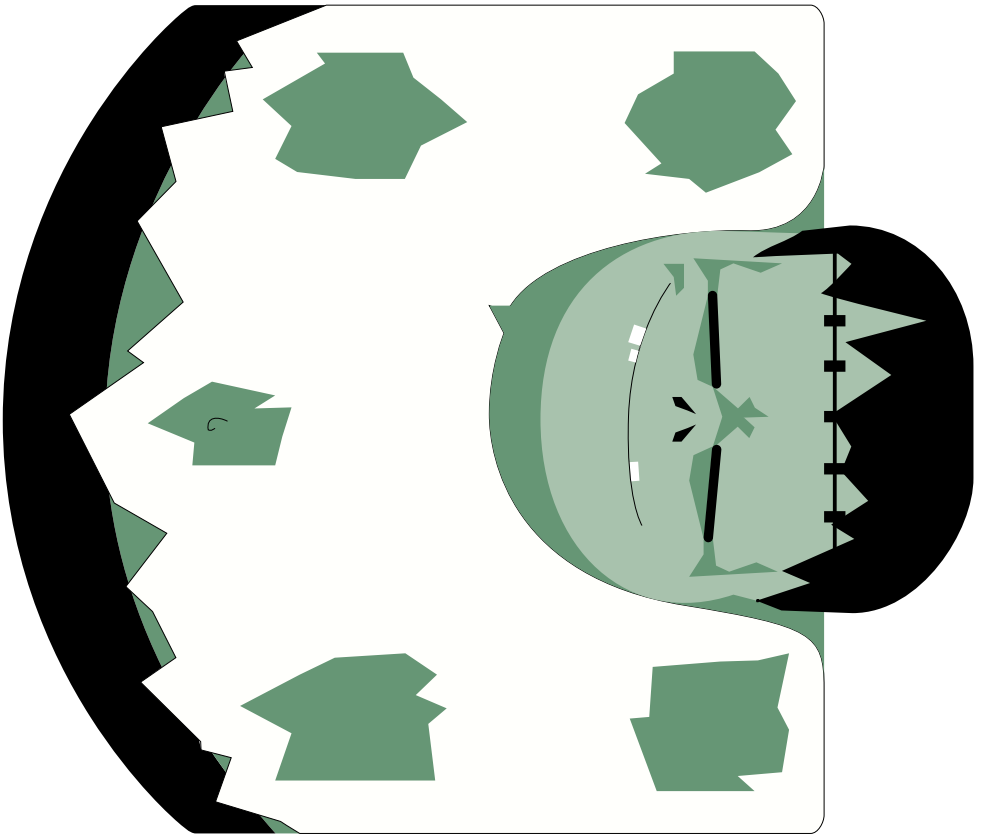


A

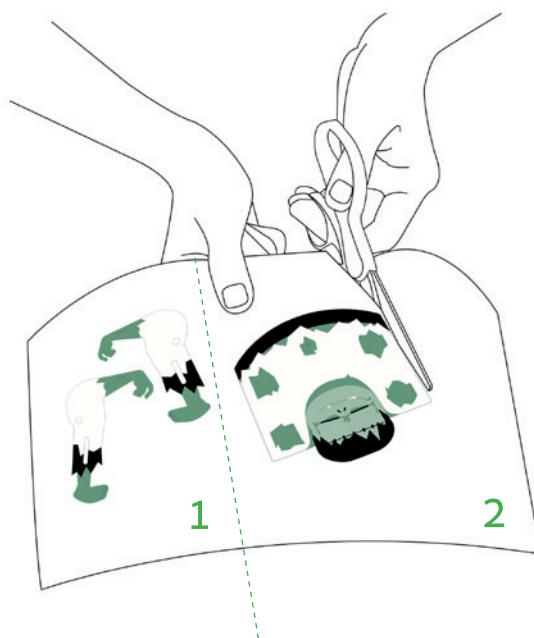
2x



B

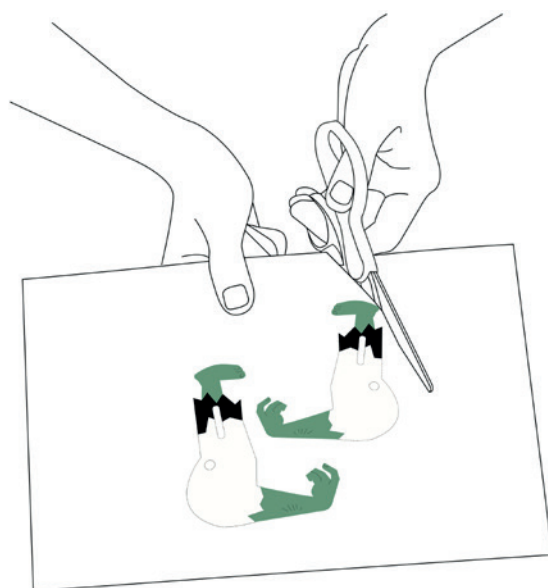
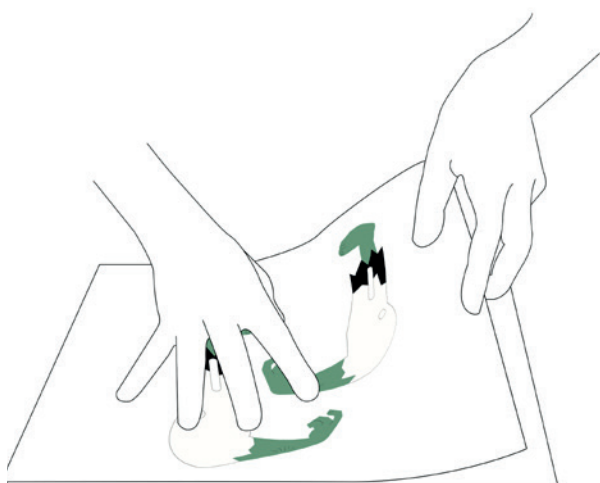
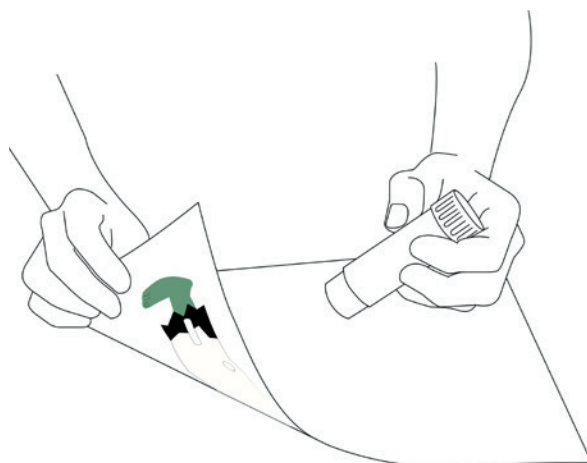


1



2

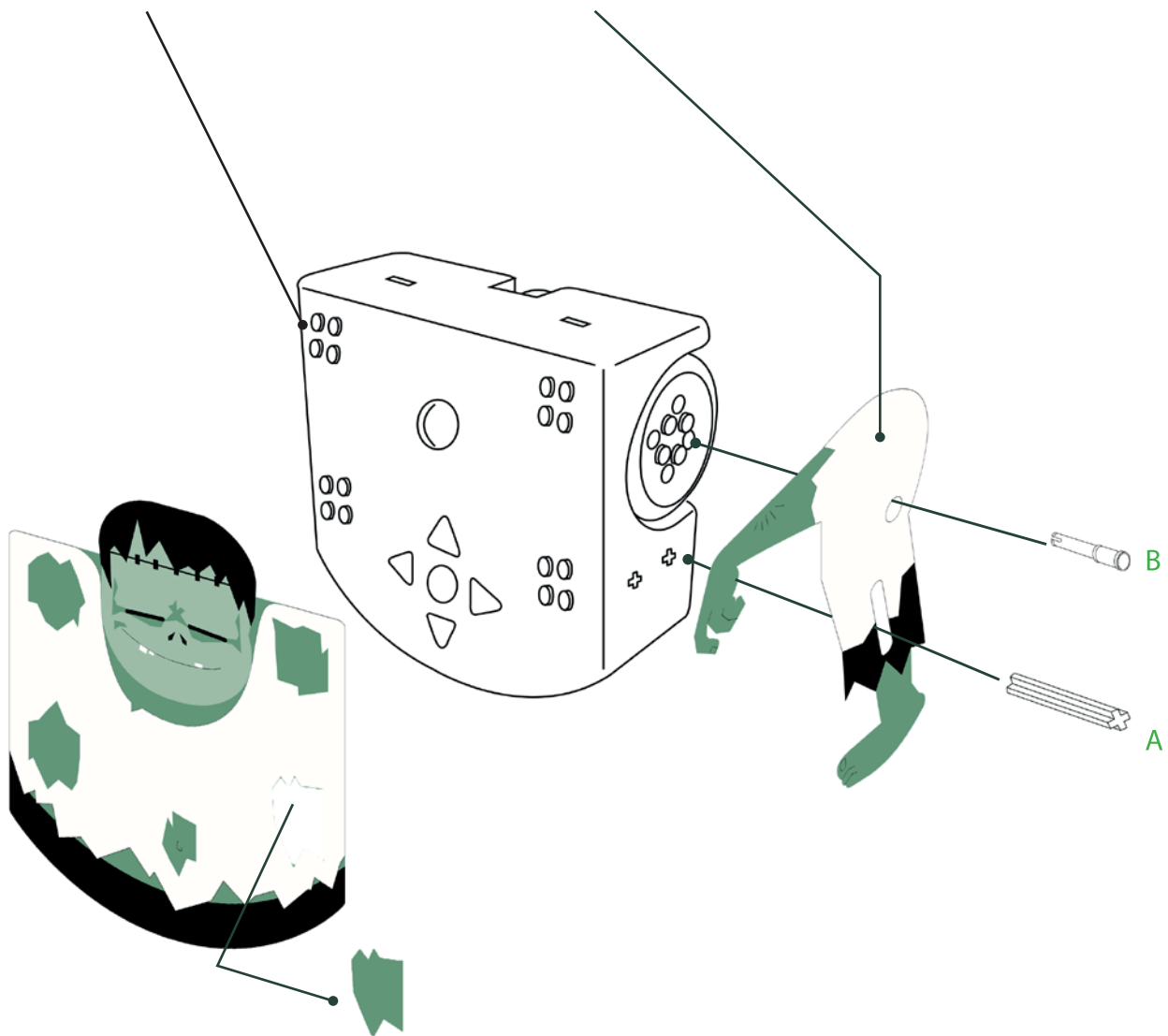
Paste the part 1 (the legs) on cardboard and cut it out.



3

You can now assemble your zombie! Glue the front panel to the tape, or cut out the torn parts of the zombie's t-shirt to hold it in place with the lego slots.

For the arms and legs, you will use a lego part A through the slot and connected to the «cross» hook, and a lego part B through the hole and connected to the wheel, as shown below.



Solution

