

Parents and Students

Welcome to UC Irvine and El Sol Academy's Family Science Night

Please use the following instructions to guide your building and learning experiences together.



Document your hypothesis, claims, evidence, and observations together when you see the pencil.

Today you are going to build a drone that flies...

- What are 3 things that fly?

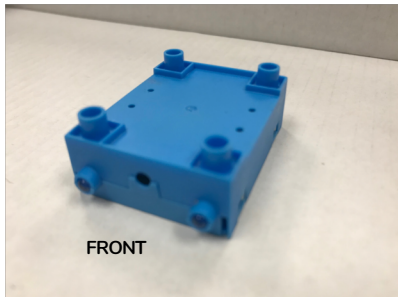


- 1. _____
- 2. _____
- 3. _____

- How do you think they are able to fly?

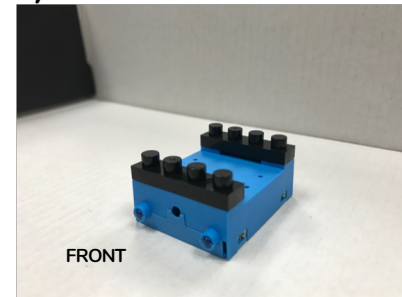


1) Make sure the lights of the blue box is facing towards you



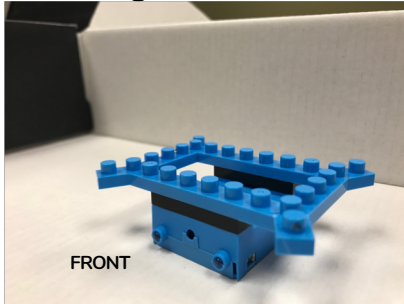
FRONT

2) Get two 1x4 black Lego pieces and attach them horizontally (one in the front and one in the back)

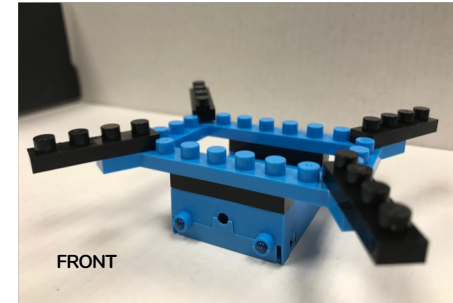


FRONT

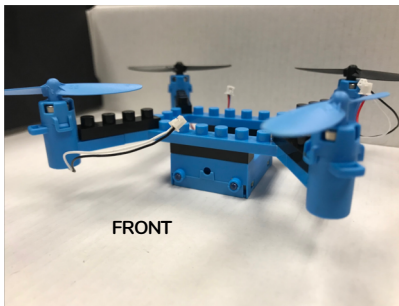
3) Attach the blue rectangular Lego piece on top. The blue rectangular Lego piece should have arms sticking out at each corner.



4) Attach one 1x4 black Lego piece on top of each corner



5) Add the propellers. Two blue propellers should be in the front and two black propellers should be in the back.



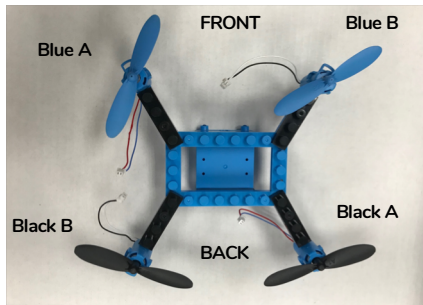
Why do you think the drone needs four propellers?



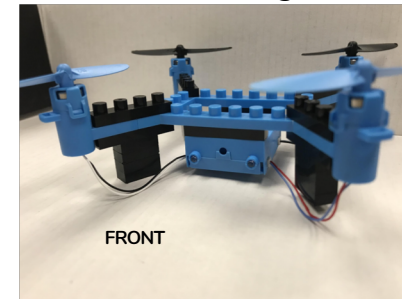
What do you think will happen if it has less or more?



6) Ensure that two blue propellers should be in the front and two black propellers should be in the back. Make sure the letters on the propellers match as well. Plug in the propellers.



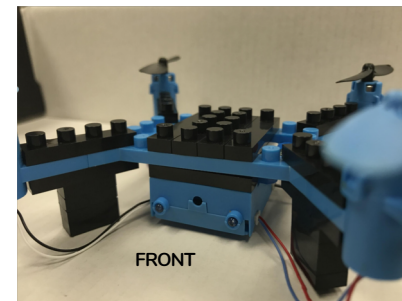
7) Add a 1x4 black Lego piece to the bottom of each propeller. Then stack four 1x2 Lego pieces on top of each other until you have four stacks. Attach one stack on each leg.



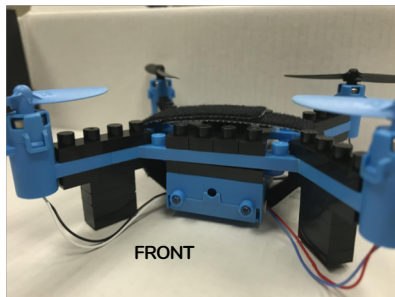
8) Place the battery in the center and plug it into the back. The drone should start flashing.



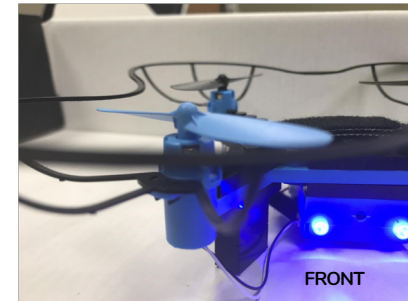
9) Secure the battery by placing four 1x5 Lego pieces on top, attaching/connecting the ends of the Lego pieces to the drone. These should be placed in the middle part of the center.



10) Secure the body with Velcro.



11) Attach shield to drone by using the hooks on the propellers



What do you think is the purpose of the shield?



Be sure to go downstairs and get batteries to pair your drone.

Try some of our obstacle courses downstairs

