

VIRTUAL STEM EDUCATION SERIES

POST YOUR DESIGNS
ONLINE USING THE HASHTAG
#SOXSTEM

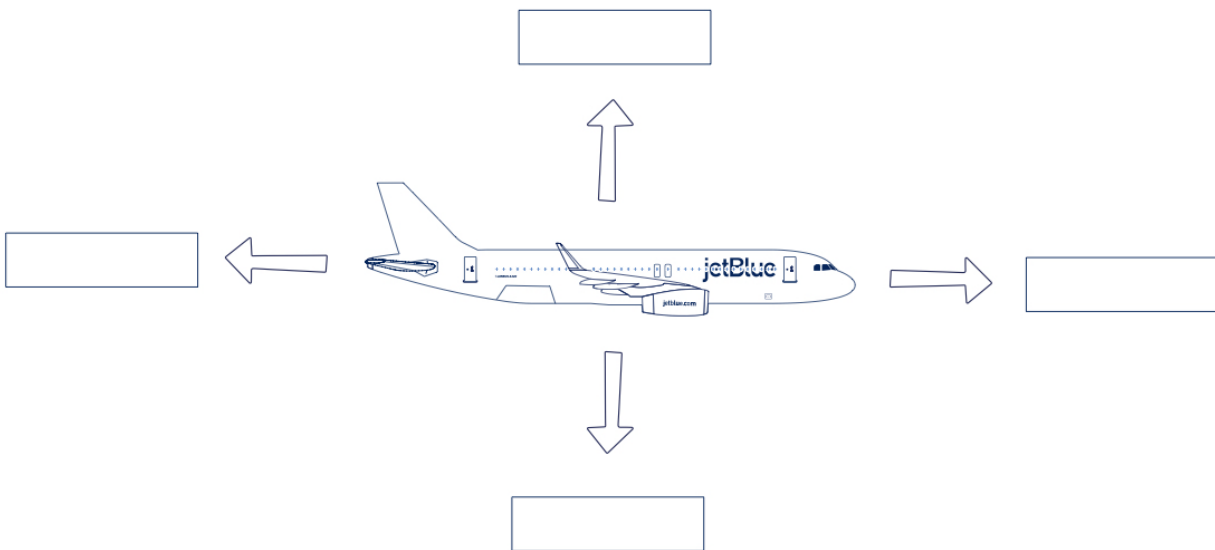


PRESENTED BY **moderna**

JetBlue Presents: HOW PLANES STAY FLY Activity Sheet



Activity 1: Label the four main forces acting on a plane when in the air.



Activity 2: Answer the following questions with the four forces you labeled the plane above.

1. Which force pulls a plane towards the center of the Earth?
2. Which force opposes thrust and makes it harder for a plane to fly forward?
3. Which force allows a plane to climb or stay in the air, rather than fall to the ground?
4. Which force helps move a plane forwards through the air?

Good work! Check your answers and learn how to fold other styles of paper planes on the JetBlue Jr. blog.

PLANE 1

2. Cut out your plane along this line 



4a. Fold here

4b. Fold here

5a. Fold here

5b. Fold here

6a. Fold here

6b. Fold here

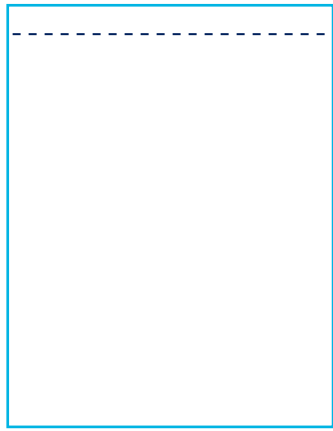
3. Fold paper in half along this line so you can't see the printed side

1. Name your paper plane

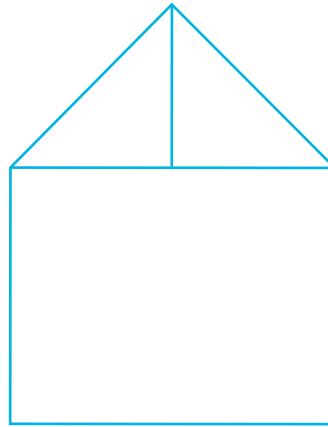
Hello my plane is:



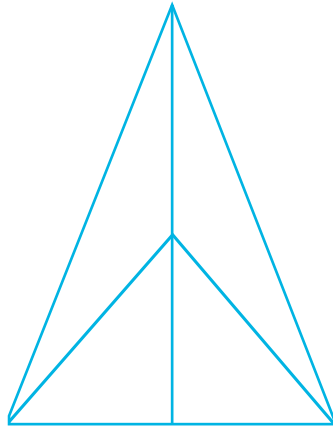
PLANE 1



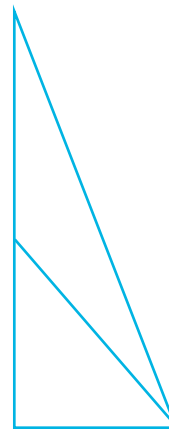
A. Take an 8x11 sheet of paper and cut along top line.



B. Pull the top left and right corners down to the center towards you.



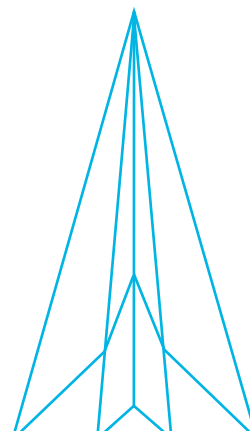
C. Fold both left and right sides down along lines 2.



D. Fold the plane in half along line 3.



E. While on it's side, fold both wings down along lines 6a and 6b.



F. Flip back over, pinch in the middle, and let it fly!

PLANE 2

2. Cut out your plane along this line 

1. Fold here

1. Fold here

2. Fold here

2. Fold here

3. Fold here

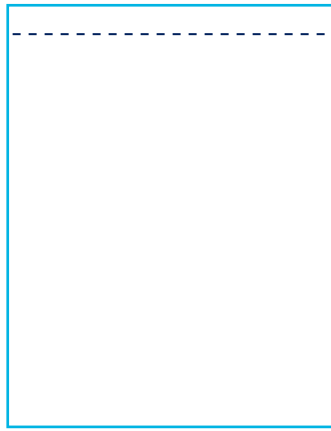
4. Fold here

4. Fold here

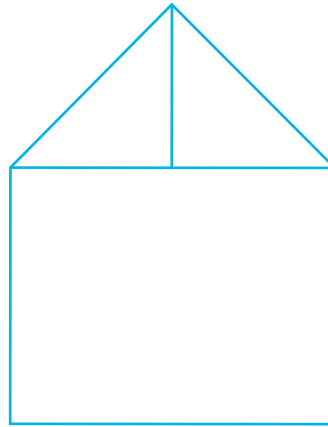
jetBlue®

Hello my plane is:

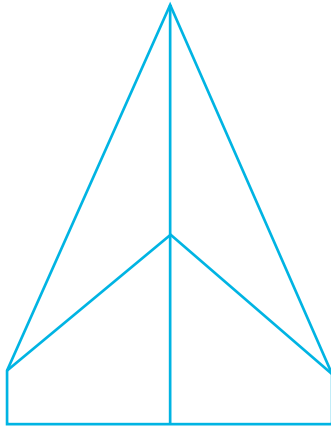
PLANE 2



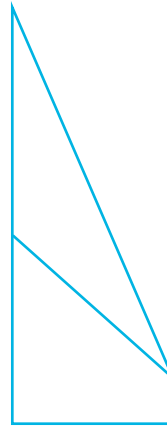
A. Take an 8x11 sheet of paper and cut along top line.



B. Pull the top left and right corners down to the center towards you.



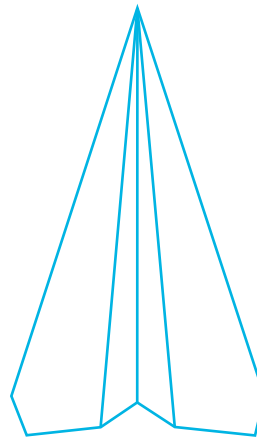
C. Fold both left and right sides down along lines 2.



D. Fold the plane in half along line 3.

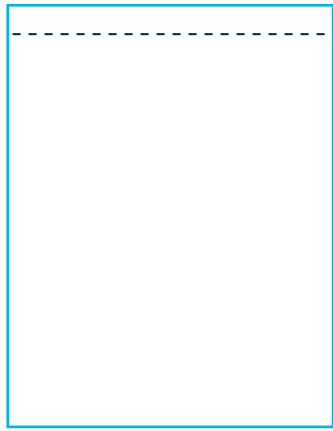


E. While on it's side, fold both wings down along lines 4.

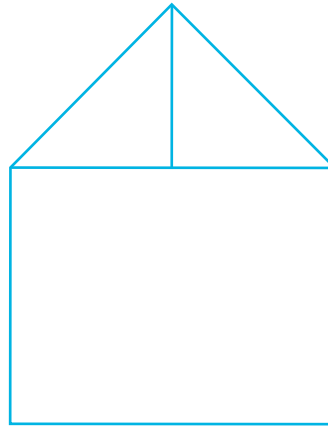


F. Flip back over, pinch in the middle, and let it fly!

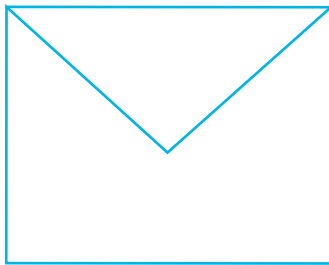
PLANE 3



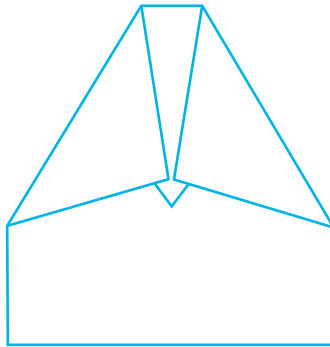
A. Take an 8x11 sheet of paper and cut along top line.



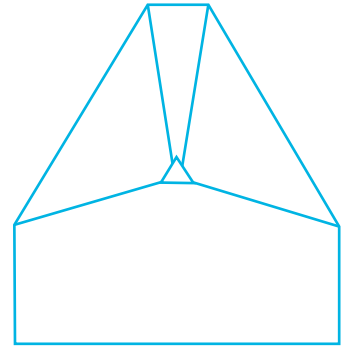
B. Pull the top left and right corners down to the center towards you.



C. Fold the top point down along line 2.



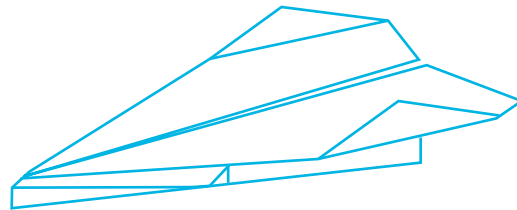
D. Fold the top left and right corners down along lines 3.



E. Fold the tip up along line 4 to secure the corners in place.



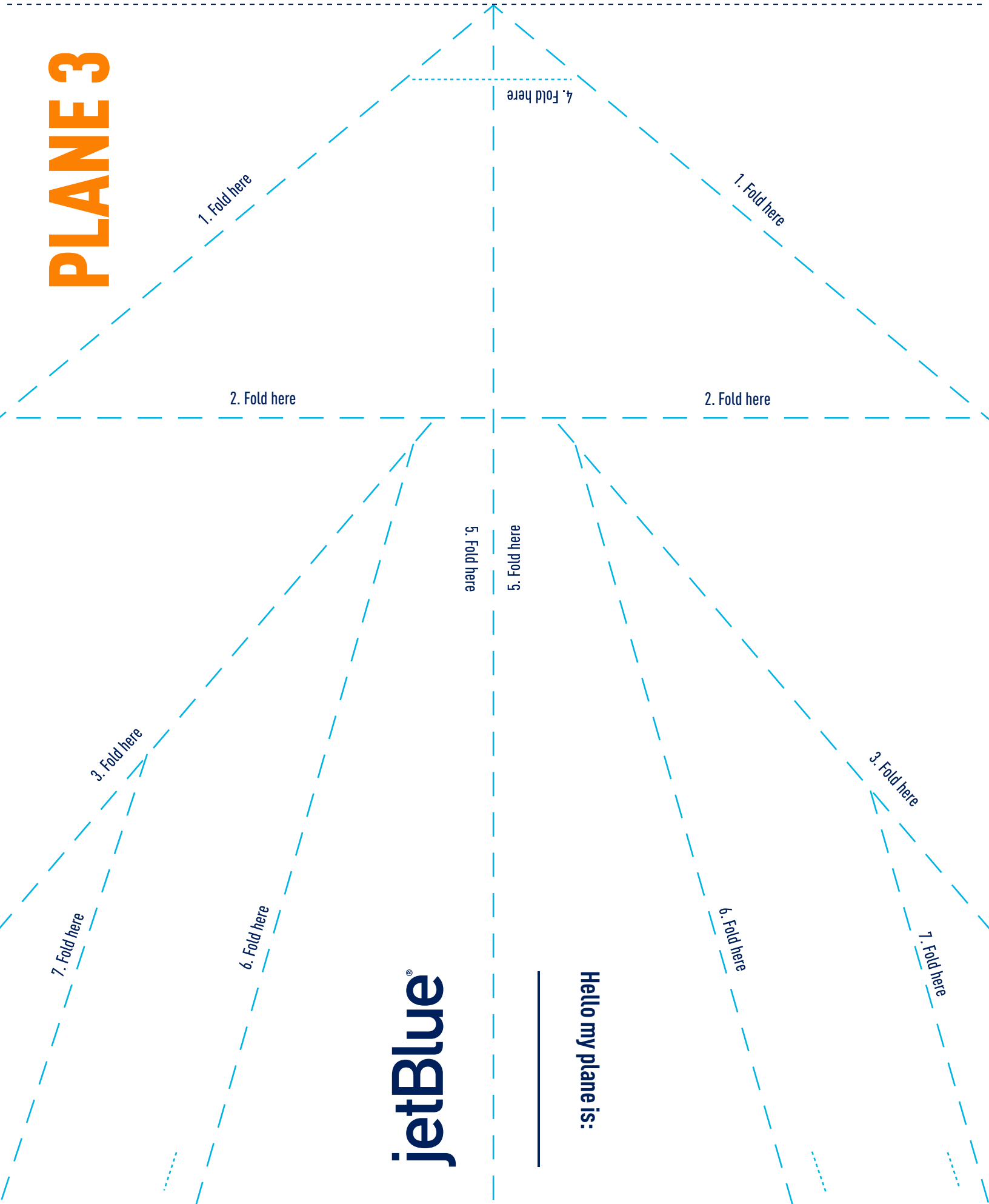
F. Flip the plane over and fold the right side over onto the left along vertical line 5.



G. Fold the wings down along lines 6 and winglets up along lines 7. It's ready for takeoff!

2. Cut out your plane along this line 

PLANE 3



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Hello my plane is:

2. Cut out your plane along this line 

PLANE 4

1. Fold here

2. Fold here

2. Fold here

1. Fold here

3. Fold here

3. Fold here

4. Fold here

5. Fold here

5. Fold here

4. Fold here

6. Fold here

6. Fold here

7. Fold here

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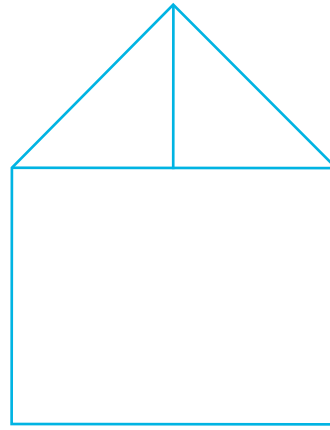
Hello my plane is:

7. Fold here

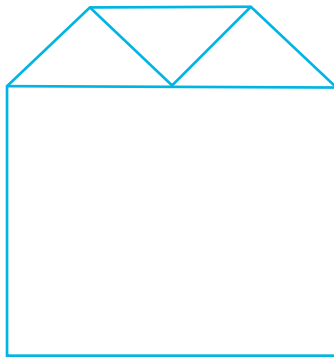
PLANE 4



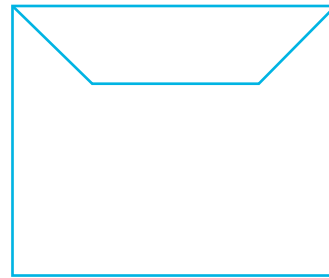
A. Take an 8x11 sheet of paper and cut along top line.



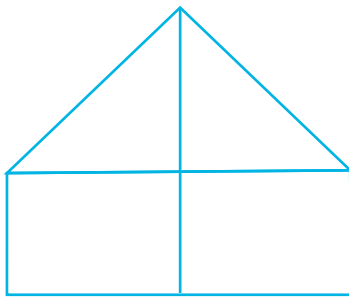
B. Pull the top left and right corners down to the center towards you.



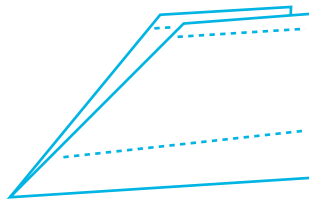
C. Fold the point down along line 2, so that the point touches line 3.



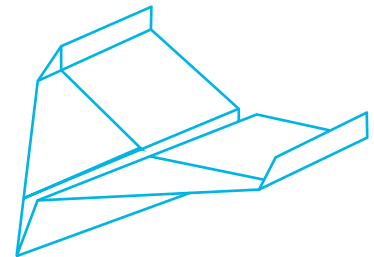
D. Fold the top down along line 3.



E. Now fold the top left and right corners down to the center, along lines 4.



F. Fold the plane in half, along line 5, then fold both wings down along lines 6.



F. Fold the wingtips up along lines 7 and you're done!