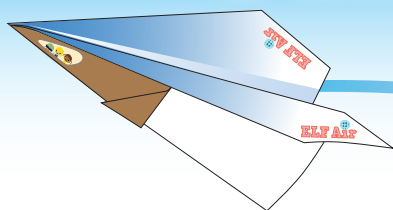


print & play **Take to the Air!**



Reach for the sky with ELF Air! Just like the friends in *Brownie Quest*, you can get a lift with this fun-to-make paper airplane! See next page for instructions.

Did you ever wonder how airplanes fly?
Or what exactly keeps them up in the air?

Gravity is the force that pulls objects in the air toward the ground. Gravity is balanced by **lift**.

Lift comes from the wings of the plane, which helps push the plane into the sky.

Thrust will move the plane forward.

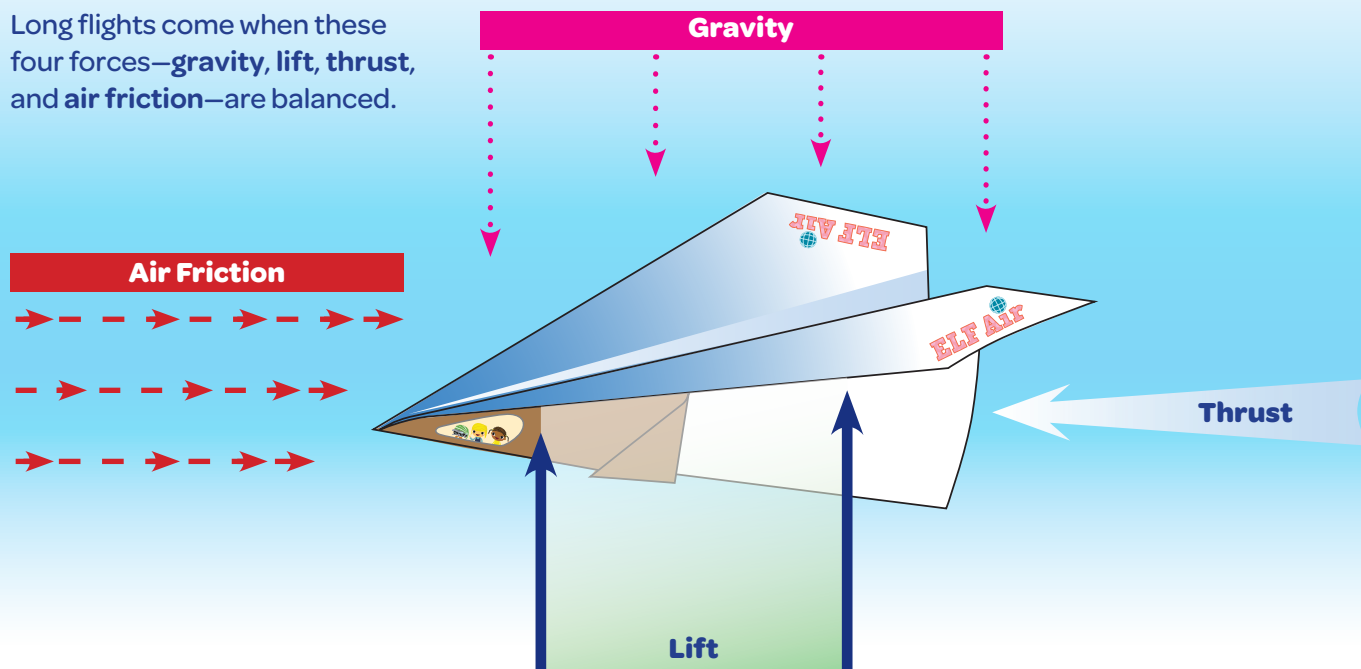
Air friction helps slow down the plane as it glides over the nose and wings.

Keeping these forces balanced will help your paper airplane take to the air—and stay there!



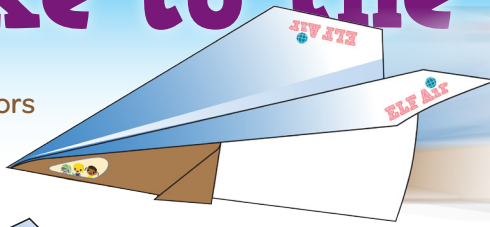
Tip: Remember, throwing your plane harder won't always make it fly farther. This plane is shaped like a dart, so it's built to fly a longer distance with just a little bit of **thrust**. Try throwing it a few times to find out the perfect amount of thrust to use to keep it in the air as long as you can!

Long flights come when these four forces—**gravity**, **lift**, **thrust**, and **air friction**—are balanced.

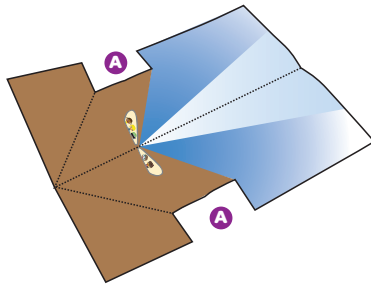


print & play **Take to the Air!** *Continued*

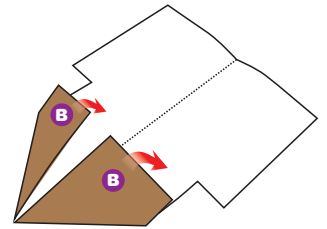
What you need: a printer, paper, and scissors



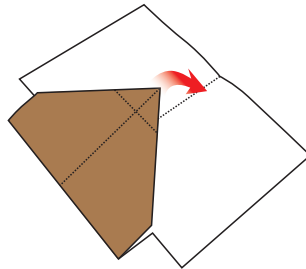
- 1** After cutting out the rectangles of part A, fold along the lines, down the center, middle, and front as shown.



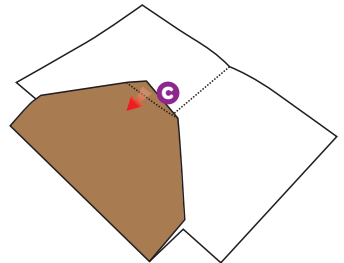
- 2** Lay the paper flat, blank side up, and fold the yellow dotted lines inward, so B corners touch.



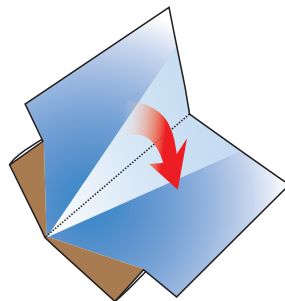
- 3** Fold up the resulting triangular side on the white dotted line to touch the blank side.



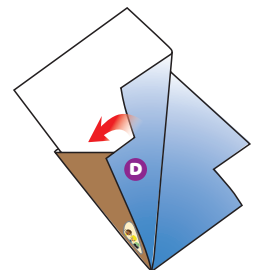
- 4** Fold on the pink dotted line near the tip of the triangular side to create a crease (be sure to unfold it again).



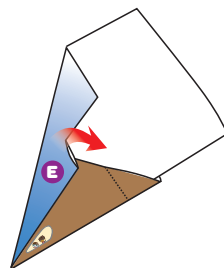
- 5** Turn over the paper and fold it in half so the blue sides are touching evenly.



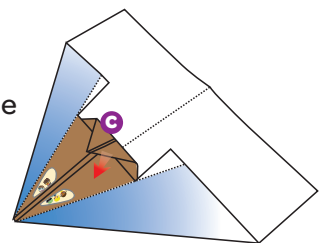
- 6** On the black dotted line, fold over the triangular area on one side (part D) so the girl and elf characters are visible.



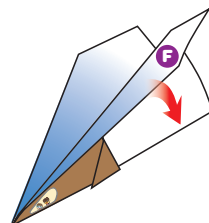
- 7** Turn the plane onto its other side and fold over the triangular area on the opposite black dotted line (part E).



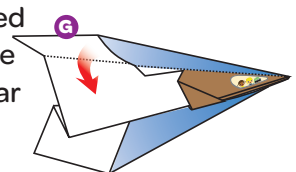
- 8** Lay the plane flat, then fold the small triangle (part C) over the middle crease.



- 9** Fold over the left wing on the blue dotted line (part F).



- 10** Fold over the blue dotted line on the opposite side (part G). Find some clear space, and let it fly!



ELLE AIR



ELLE AIR

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