

CREATE PRISMS WITH SQUARE PAPER



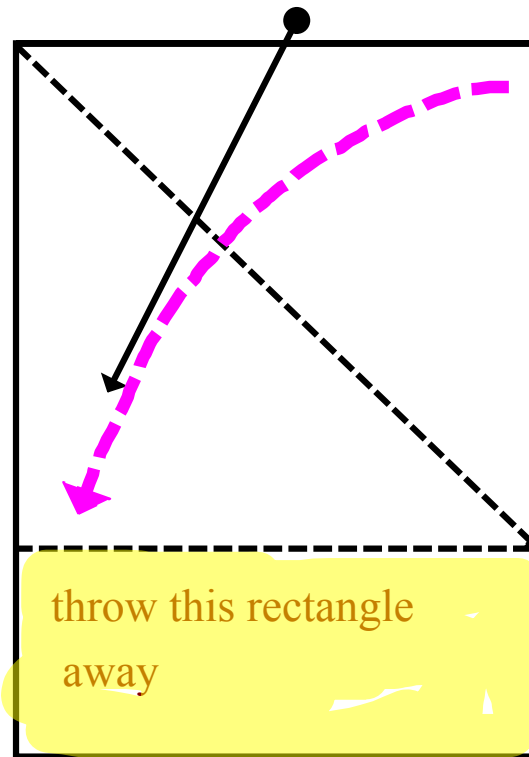
a purple dashed line with an arrow means that we are folding from the beginning of the dashed ray to the arrow.



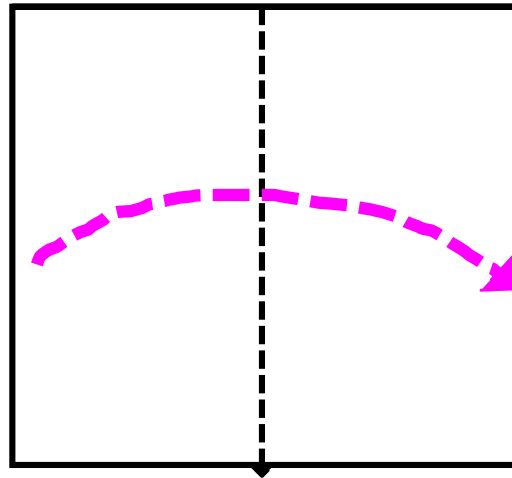
a straight dashed ray means that there is a crease at that location.

1) START WITH A SQUARE PIECE OF PAPER; IF YOU DO NOT HAVE A SQUARE, FOLD ONE CORNER OF THE RECTANGULAR PIECE OF PAPER DOWN TO OPPOSITE SIDE FORMING AN ISOSCELES RIGHT TRIANGLE.

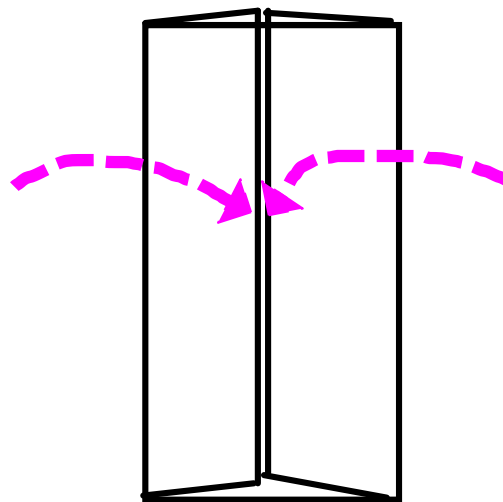
crease here; wet with
your lips and rip excess
rectangle away from
square.



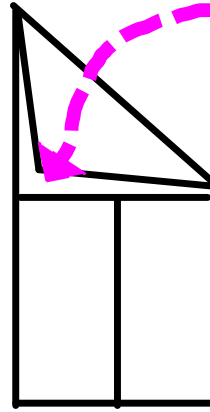
2) FOLD THE SQUARE IN HALF AND OPEN.



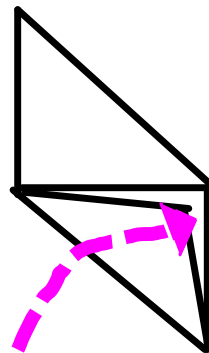
3) FOLD ENDS INTO THE MIDDLE CREASE.



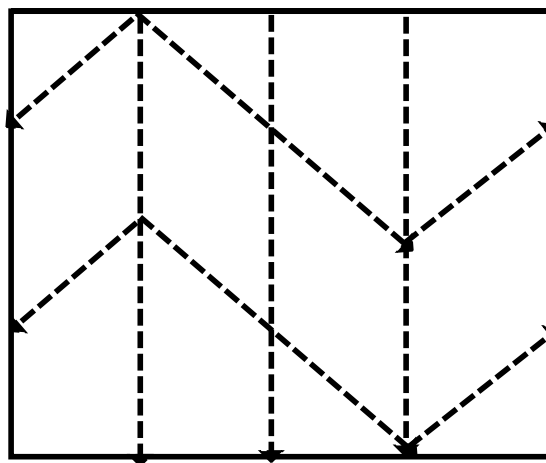
4) FOLD UPPER RIGHT CORNER DOWN TO THE LEFT.



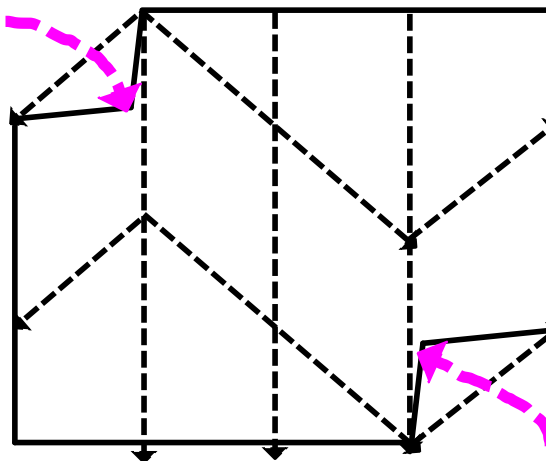
5) FOLD LOWER LEFT CORNER UP AND TO THE RIGHT.



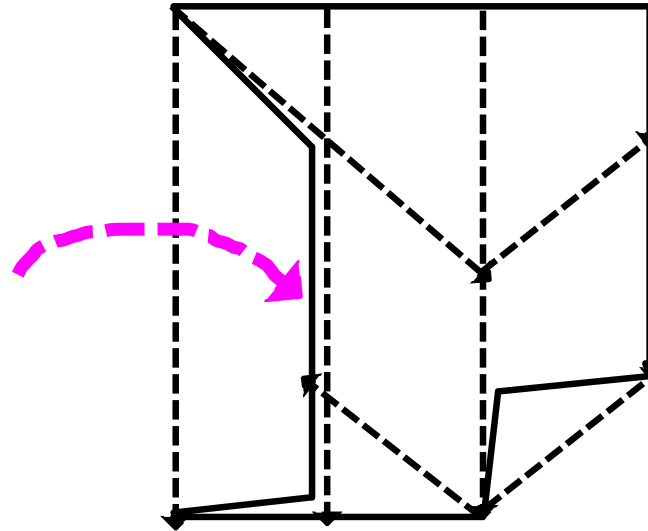
6) OPEN UP COMPLETELY.



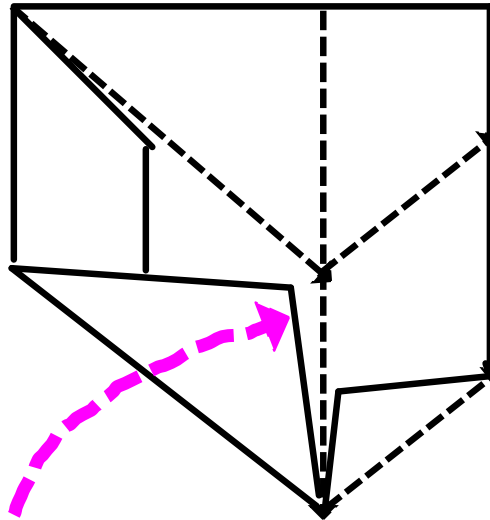
7) FOLD DOWN UPPER LEFT HAND CORNER AND FOLD UP LOWER RIGHT HAND CORNER ON THE ORIGINAL CREASES.



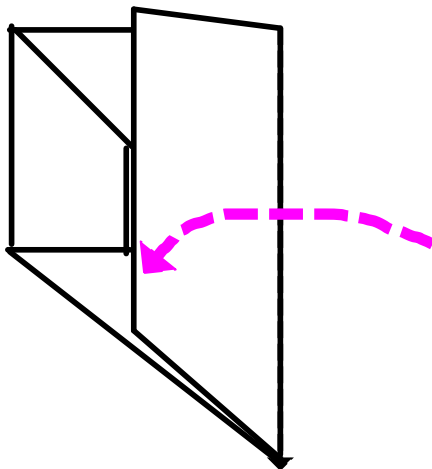
8) FOLD LEFT SIDE TO THE CENTER OF THE SQUARE.



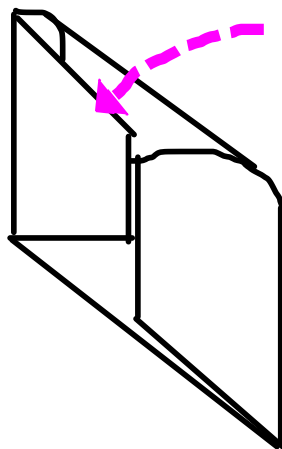
9) FOLD LOWER LEFT CORNER UP TO THE RIGHT.



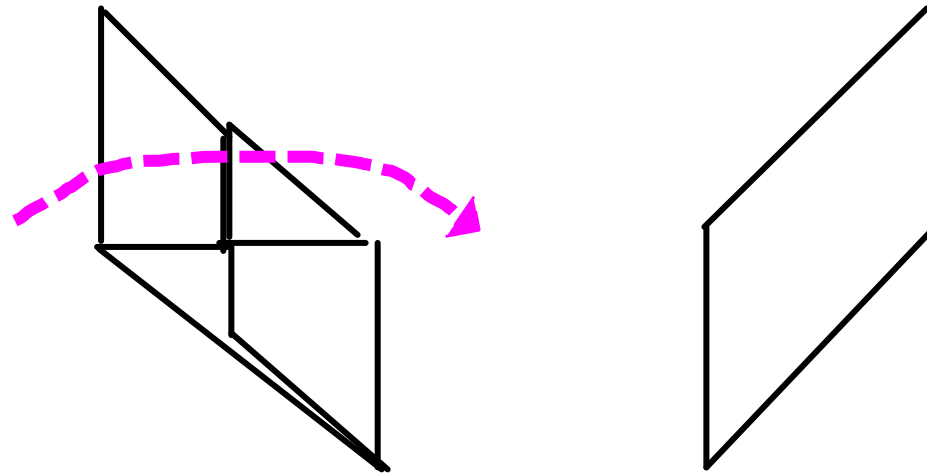
10) FOLD RIGHT SIDE TO THE LEFT.



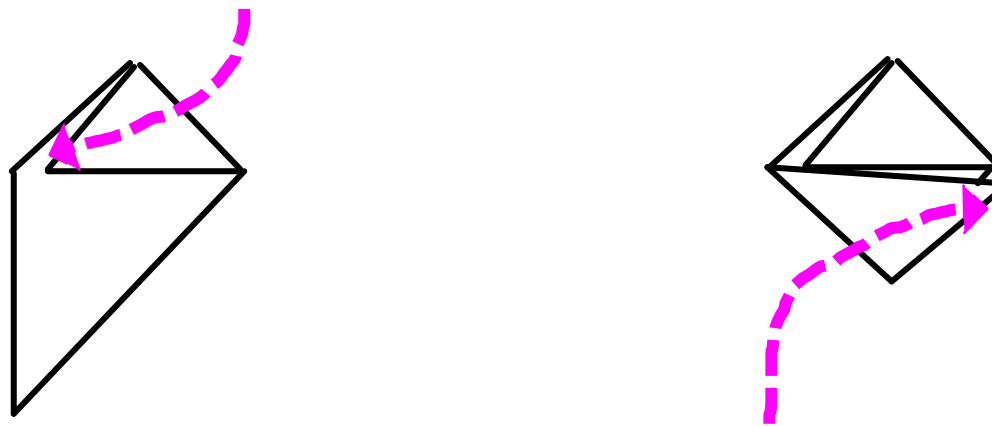
11) FOLD UPPER RIGHT HAND CORNER DOWN TO THE RIGHT INTO THE POCKET ON THE UPPER LEFT PANEL.



12) FLIP PAPER OVER TO THE OTHER SIDE



13) FOLD TOP RIGHT POINT TO THE LEFT; THEN, FOLD LOWER LEFT POINT TO THE RIGHT.



14) CREATE 6 PIECES IN ORDER TO MAKE A SINGLE CUBIC UNIT. TO MAKE LARGER CUBES (OR AS THE GREEKS CALLED THEM, "HEXAHEDRONS"):

Dimensions of Cube	Number of Cubic Units	<i>number of pieces of paper needed to make this cube</i> Number of Square Units (Surface Area)
1 x 1 x 1	1	6
2 x 2 x 2	8	24
3 x 3 x 3	27	54
4 x 4 x 4	64	96
5 x 5 x 5	125	150

15) EACH PIECE IS LINKED AT A 90 DEGREE ANGLE INTO THE OTHER PIECE UNTIL THE PRISM IS COMPLETED. HINT: IF YOU CREATE LARGER CUBES, CONSIDER NOT FOLDING BOTH OR ONE OF THE POINTS IN STEP 13 TO MAKE THE CUBE MORE STABLE.