Origami Cranes

Ages 8 and up

Activity Summary
Take to the skies with your own origami crane! Master the art of paper-folding while exploring shapes and sizes.

Learning Objectives
- Participants will discover the art of origami with its shapes, sizes, and symmetry.
- Participants will build their own origami crane using everyday materials.
- Participants will make and improve upon their paper crane.

Materials & Supplies
- Paper
- Scissors
- Optional extension: if a ruler or tape measure is on hand, challenge your child to track how the paper changes in size through the paper-folding process!

Setup
This activity can be done in any space, indoors or outdoors.
It is helpful to have a flat surface available, such as a table top, to help with paper folding.

Key Words
Geometry  Origami  Dimensions
Symmetry  Parallel  Perpendicular
Safety Precautions

Handle scissors with care.

Directions

1. Follow the step-by-step photos and instructions on how to build your origami crane on the pages below.
2. Invite children to make observations throughout the process by asking questions that invite dialogue:
   - What shape and size was the paper at the beginning of this activity?
   - What shape and size was the paper once we cut part of it away?
   - How many triangles are in our origami crane?
3. Try asking more open-ended questions too.
   - Where might your crane live? What do you think a crane’s natural habitat is like?
   - Notice how we took a flat, two-dimensional paper and transformed it into a solid (three-dimensional) object. What other three-dimensional structures might we create using paper?

Going Further

Interested in exploring more math in the making of origami? Check out this link to learn more about what paper-folding teaches us about math with a Modular Origami activity.

Adaptations

No traditional origami rice paper? No problem! Notebook paper, magazine pages, newspaper, and even gift wrapping paper can work as alternatives if they are cut into a square shape.

Clean up

Any excess paper can be saved and used for future activities. Once all the fun is done, origami cranes can also make a great gift or window decoration!

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1. No square origami paper? No problem! Take rectangular notebook paper and fold it so the shorter bottom width aligns with longer side length. Crease the right-angled triangle!

2. Fold the remaining top of the notebook paper over the triangle.

3. Unfold the notebook paper. Cut along the top crease to remove the excess paper.

4. You now have a perfect origami square!
5. Fold your square in half from top to bottom then side to side. Flip the square and repeat. Fold your square diagonally from the top left to bottom right, then top right to bottom left. Flip the square and repeat.

6. Bring the top corner down to the bottom, while also folding the left and right corners down to the center. This creates a stacked diamond shape with a vertical crease running down the center.

7. Take the top flaps of the stacked diamond and fold the left and right corners to align with the middle vertical crease.

9. Fold the top corner down, aligning it with the middle of the vertical line. Unfold the shape so there are 3 triangles surrounding the main triangle.

10. Take the bottom corner and peel one layer up towards the top corner. The creases from earlier will help the paper to fall into a long diamond shape. Push down with your palm to get the origami shape to hold.

11. Flip the origami over and repeat steps 9 and 10 on the other side. Once these steps are completed. Both sides of your origami will look identical.

12. Your origami shape should look like two diamonds with a triangle between. The middle is the body, the top of the diamonds will become wings, and the bottom of the diamonds will become the neck and tail.
13. Take the bottom corner of your diamond and fold it up to the side as shown above. Create an inside reverse fold by inverting the triangle so it folds into the main body. This will form the neck.

14. Repeat step 13 on the other side. This will form the tail.

15. Take the top corner of one diamond and fold it down, creasing it firmly so the wing is formed parallel to the body.

4. Repeat step 15 on the other side.
17. Create another inside reverse fold with the tip of the neck. Can you see the crane’s head?

18. Straighten out the wings, and your crane is finished!