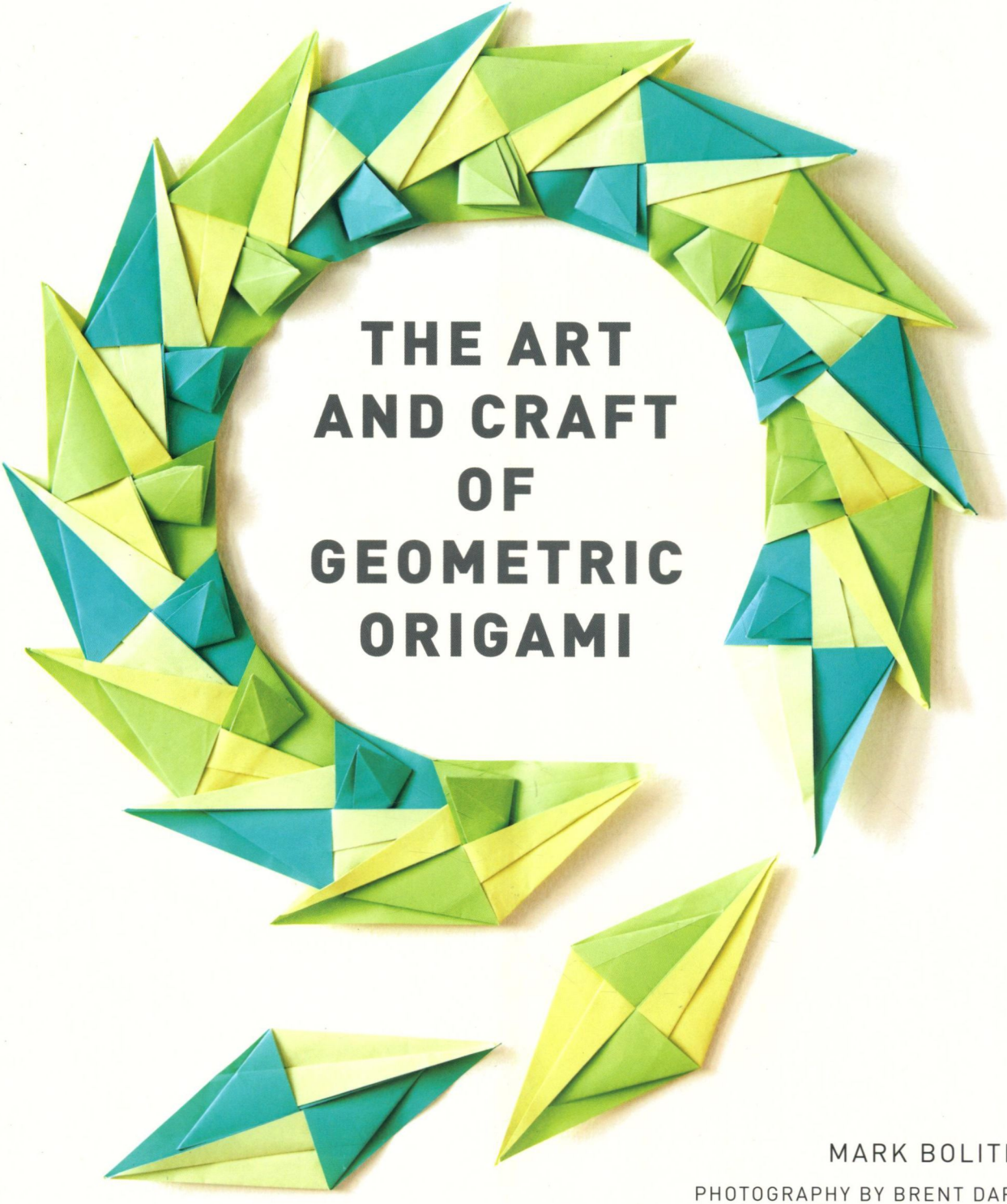
PERFECTLY MINDFUL ORIGAMI

THE ART AND CRAFT OF GEOMETRIC ORIGAMI



MARK BOLITHO

PHOTOGRAPHY BY BRENT DARBY

This mind-bending collection of geometric origami includes twenty-seven inventive shapes, from simple one-piece pyramids to beautiful and complex starbursts, each carefully designed and explained with illustrated step-by-step instructions. Also included are thirty sheets of origami paper to get you started on this relaxing and creative activity.

US **$19.95**
ISBN 978-1-61689-634-8

Princeton Architectural Press
www.papress.com

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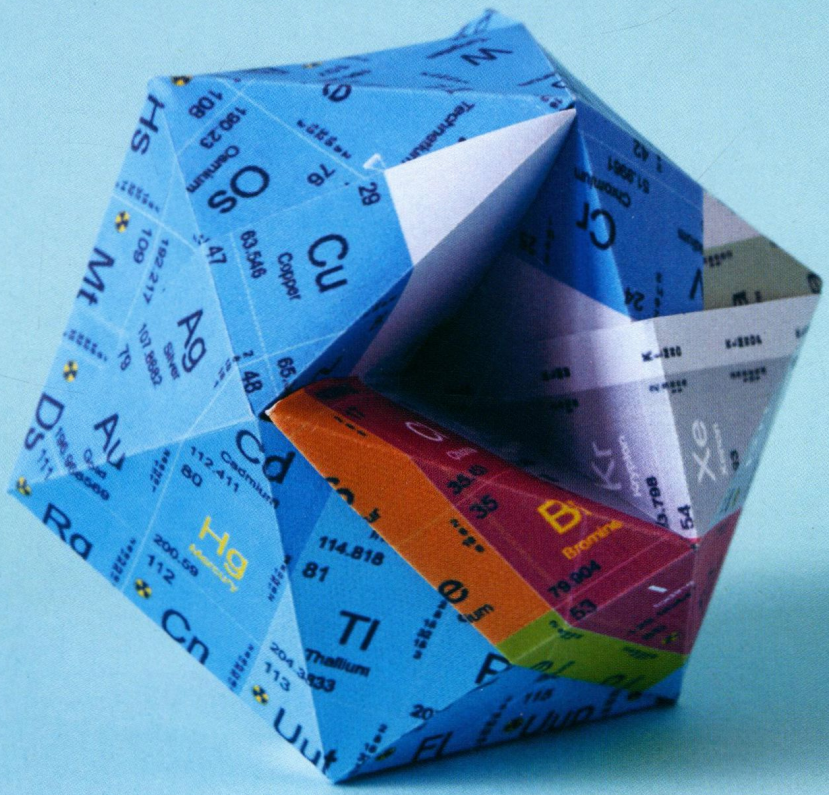

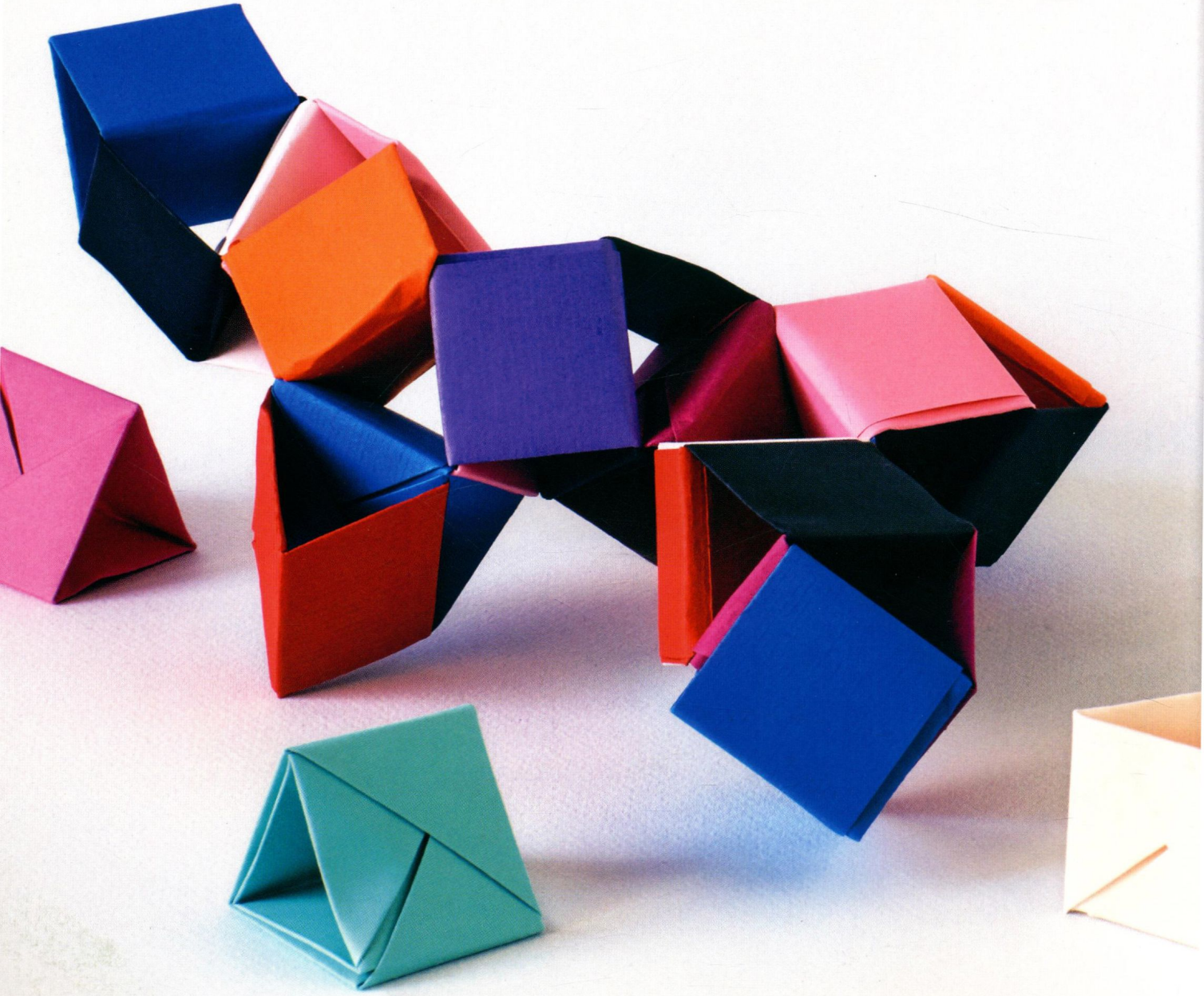

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PRINCETON ARCHITECTURAL PRESS · NEW YORK

Princeton Architectural Press
A McEvoy Group company
37 East 7th Street, New York, NY 10003
202 Warren Street, Hudson, NY 12534
www.papress.com

This book has been produced by
Jacqui Small LLP
74-77 White Lion Street
London, UK N1 9PF

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Project Editor: Barbara Darko

ISBN 978-1-61689-634-8

20 19 18 17 4 3 2 1

Printed in China

Scaling and Sizes

Each project is accompanied by a scaling diagram that shows the size of the final model compared to the starting sheet of paper. The diagram is based on a square sheet with dimensions of 7 × 7 in. (18 × 18 cm), or an equivalent rectangle. However, larger or smaller models can be made. The size of the final model can be scaled up or down by comparing the dimensions of the paper used to the sheet used in the scaling diagram.

Complexity Ratings

The projects in this book have been given a rating based on their complexity, which appears beneath the title of each project.

Easy *

Intermediate **

More Challenging ***

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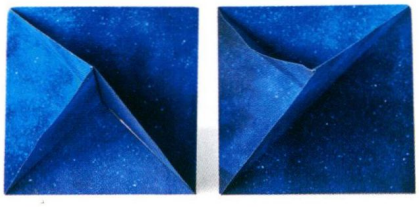
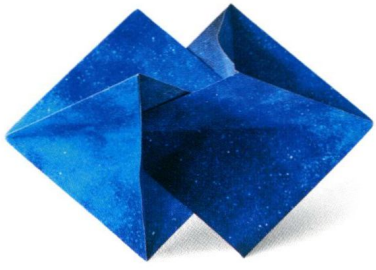
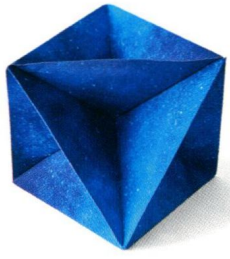






MINDFUL ORIGAMI

Welcome to the world of origami—the art of paper folding. At its heart it is the transformation of a sheet of paper into a finished model. However, it's not only a matter of creating a finished model, but also a journey of paper folding that involves creativity and contemplation along the way to produce your finished piece of work.

The word *origami* comes from the Japanese word for "paper folding." In the East the craft developed based on standard forms and traditional designs, and it now has many enthusiasts around the world.

The internet has enabled the sharing of ideas and led to a collective enthusiasm for developing more beautiful and complex designs. In the chase for complexity, however, some of the beauty of the craft has been overlooked. This is a discrepancy I hope to redress with this book by presenting mindful finished works in appropriate colors and compositions.

The paper-folding process can be a contemplative one; over time a plain sheet of paper is transformed into something wonderful. The satisfaction of origami comes not only from creating interesting designs, but also from following the folding journey and seeing your model evolve at your fingertips. Origami offers a perfect way to explore your mindful creativity in the colors and paper choices you use. In addition, you can explore and consider the nature of paper itself and the final composition of groups of complementary models.

The projects in this collection have been selected based on the aesthetic quality of the final model and the folding processes. They are explained with step-by-step diagrams that show the sequences needed to produce the final design.

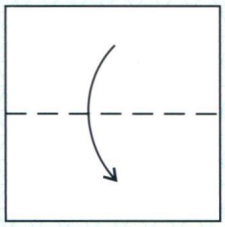
At the start of the collection I have included instructions for the Fortune Teller. This is an opportunity to gain familiarity with the diagrams and symbols used to explain the folding sequences. Some models are more complex than others and we have given a rating to each project as a guide (see page 4).

If you are new to origami, try starting with the easier models and working up to more complex projects. I hope you enjoy folding these projects as much as I enjoyed designing them.

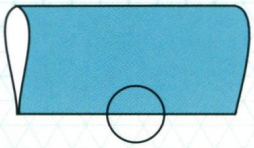
GETTING STARTED

Here are the basic folding techniques and symbols you will need to complete the projects in the book.

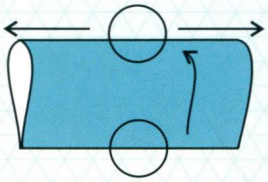
FOLDING IN HALF



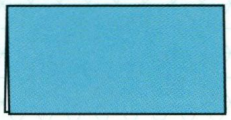
1 The step indicates that the paper should be folded in half.



2 First of all, line up the opposite sides of the paper and hold the edges together.



3 When the two layers are aligned, pinch the middle to hold them together. Then make the crease.



4 The paper is accurately folded in half.

ARROWS AND FOLDS

Paper-folding instructions explain the folding process with a series of steps leading to a finished model. Each step explains one or two folds in the process. Steps should be followed in order, and when a step is completed it should resemble the image shown in the next step.

The transition from one step to the next is shown by a series of lines and arrows indicating where folds should be made. The lines show where to fold and the arrows show how the paper should be moved to make folds.

Folds are described as either Mountain Folds or Valley Folds. These names refer to how the surface will look after the fold has been completed. A Mountain Fold will fold toward the observer, forming a mountain shape, while a Valley Fold will fold away, forming a *V* or valley shape. They are represented by differing dotted-line symbols.

ARROWS

Fold

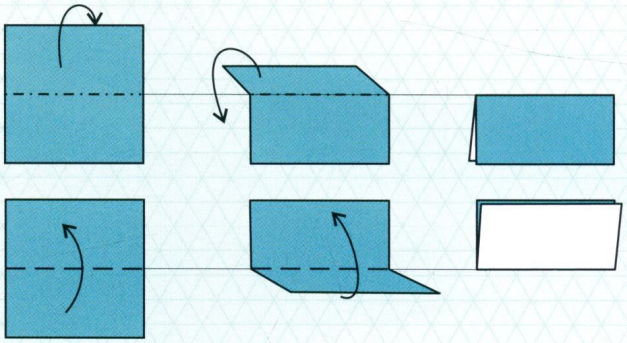
Fold and unfold

(2)
Fold over 2 layers

FOLDS Description In Progress Completed

Mountain Fold

Valley Fold



ORIGAMI SYMBOLS

Various symbols are used to explain the folding process, such as turning the model over, rotating the model, or repeating a step. The symbols on the right are the ones used in this book.

Follow the instructions in numerical order. After completing the folds in any step, look ahead; the model you have should look like the diagram in the next step. If not, undo the folds and try again. Each step is self-contained, with additional information in the caption below each diagram.

Cut

The next step will show the model turned over top to bottom

The next step will show the model turned over left to right

Repeat folds

(5–8)
Repeat steps 5 to 8

×2 Repeat twice

Unfold to step 8

Inflate the model

Squash or sink the paper inside itself

Viewpoint

90° Rotate the model 90°

This symbol is used to highlight a reference point in the folding process

X-ray view

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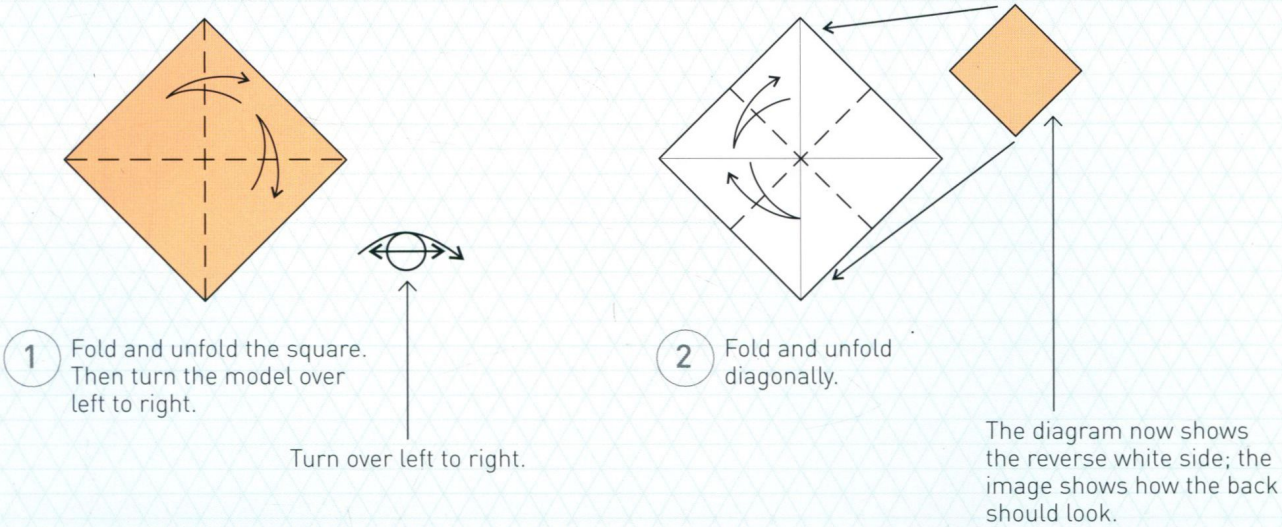
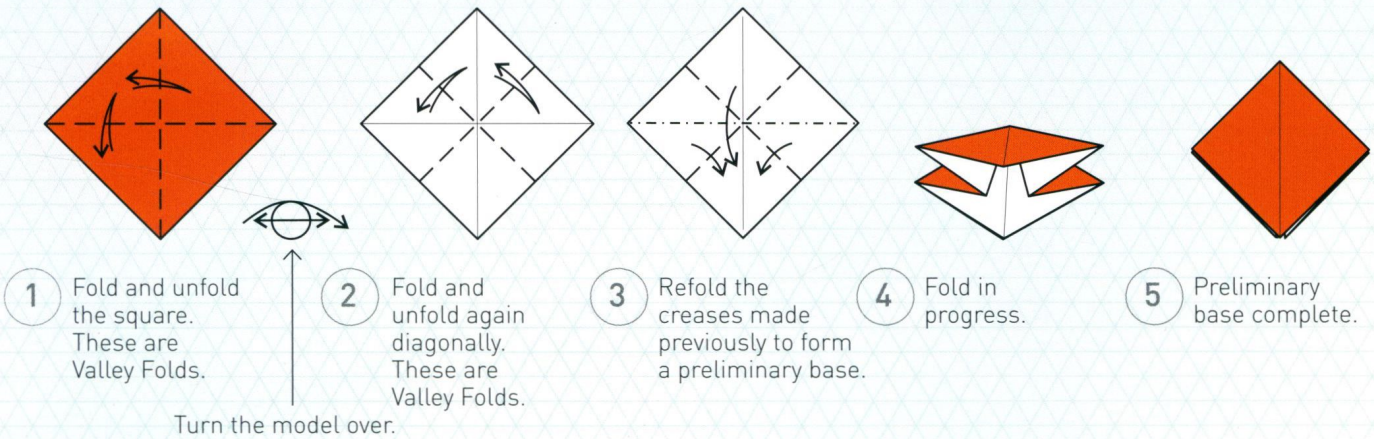
DIAGRAMS

The diagrams are shown in two colors, with the colored side being the front and the white side being the reverse. This should make the step-by-step instructions easier to follow.



THE FOLLOWING IS A LONGER SEQUENCE TO MAKE A PRELIMINARY BASE.



Origami instructions take you through a step-by-step process from start to finish. Symbols are included to explain the transition from one step to the next. Each step shows how the folded project should look and shows the folds that should be applied to progress to the next step.

When approaching a step, look ahead to the next diagram to see how the model should look when the fold has been applied. Then check and make sure that the paper model you are making resembles the step diagram. Look out for reference points to compare your model with the instructions to make sure you remain on the right track.

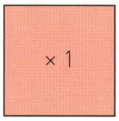
If your model doesn't resemble the step you are on, unfold the last step and work back until it does.

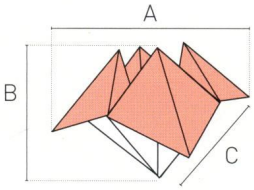
Fortune Teller

*

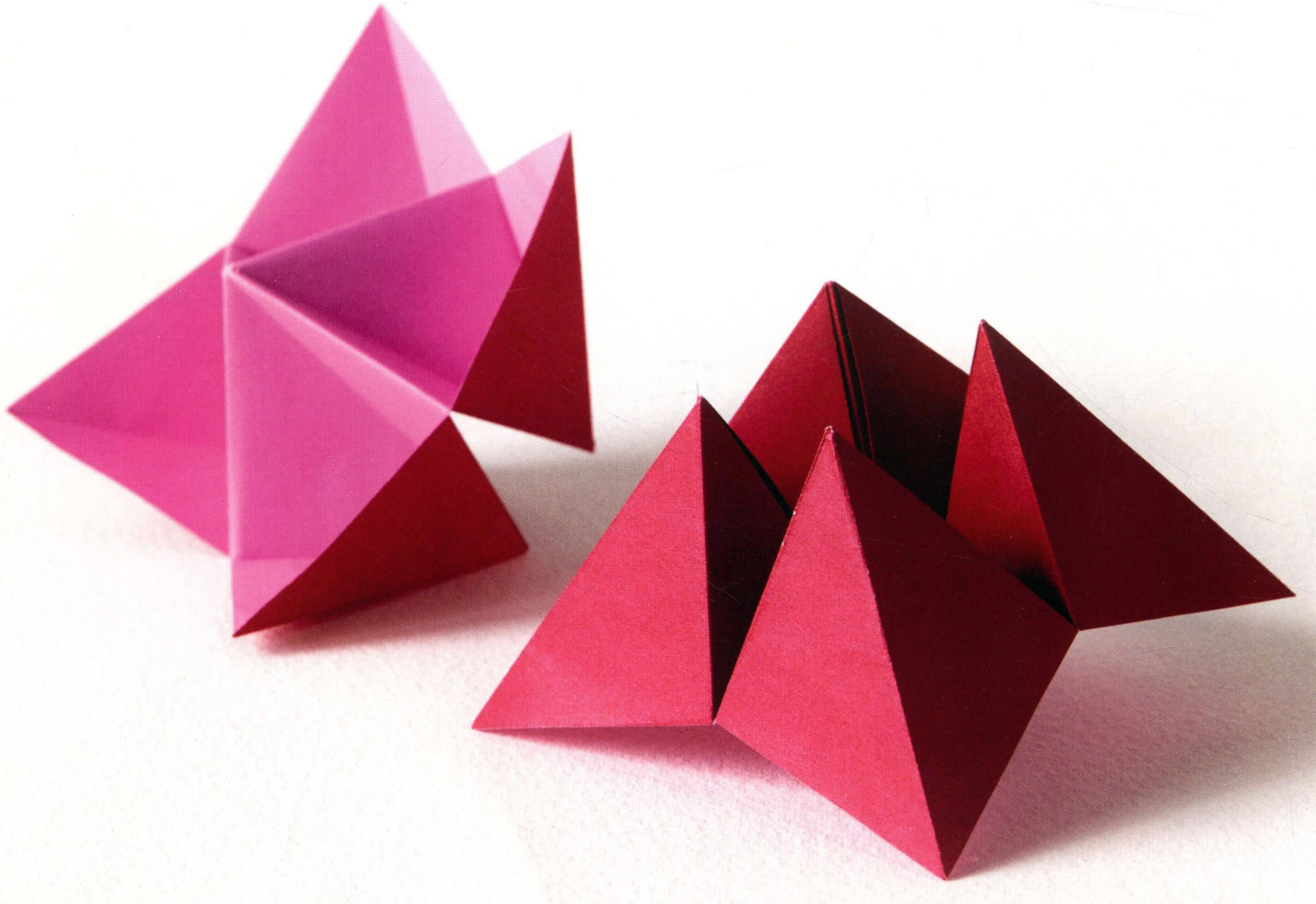
The classic fortune teller is an introductory model included to enable familiarization with the diagrams and symbols used. The asterisk (*) indicates that this is an easy model.

7 × 7 in. (18 × 18 cm)

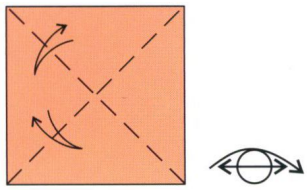




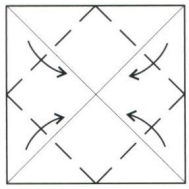
A 5 in. (12.6 cm)
B 2 1/8 in. (5.4 cm)
C 5 in. (12.6 cm)



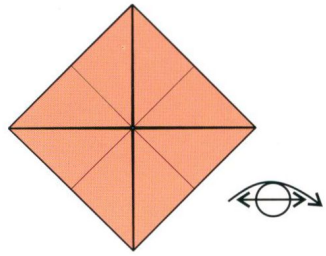
START WITH A SQUARE, COLORED SIDE UP.



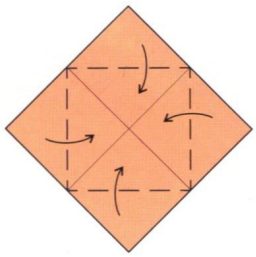
1 Fold and unfold the square in half diagonally. Then turn the model over left to right.



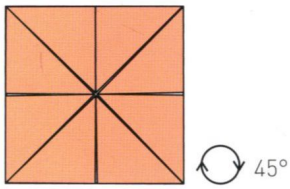
2 Fold the corners into the center.



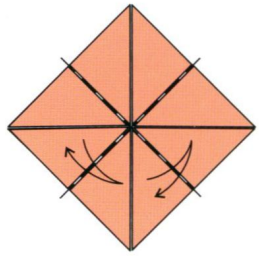
3 Turn the model over left to right.



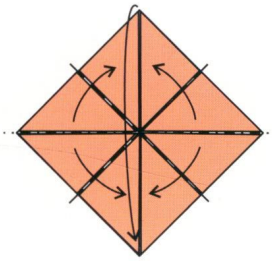
4 Fold the corners into the center.



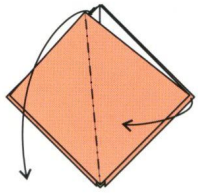
5 Rotate the model 45°.



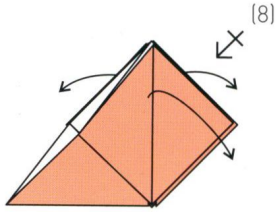
6 Fold and unfold along the diagonals as shown.



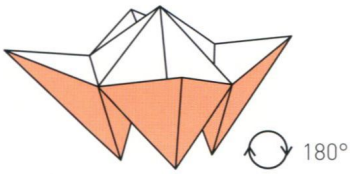
7 Fold the top section down. At the same time, fold in the corners and make a preliminary base shape.



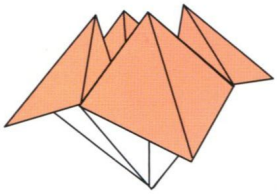
8 Fold one side over and fold out the top layer.



9 Repeat step 8 on the other three sides.



10 Rotate the model 180° top to bottom.



11 Complete.

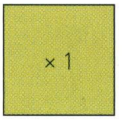
ONE-PIECE PROJECTS

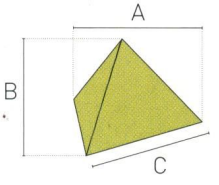
Tetrahedron

*

The tetrahedron is formed by dividing the paper into three, then folding four equilateral triangles to become the faces of the assembled tetrahedron. The final look is subtle but holds firm. The tetrahedron is the first of the platonic solids and in early writings is associated with fire.

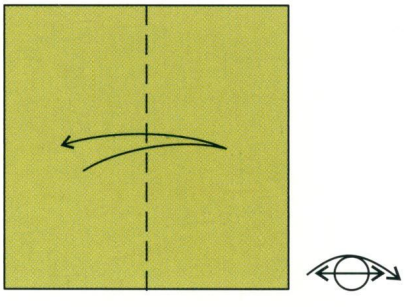
7 × 7 in. (18 × 18 cm)

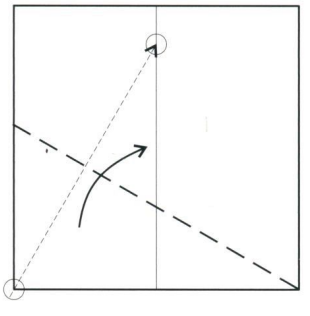


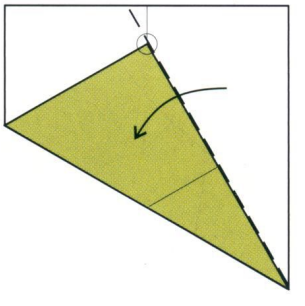


A 2 ¾ in. (7 cm)
B 2 ¼ in. (5.7 cm)
C 2 ¾ in. (7 cm)

START WITH A SQUARE, COLORED SIDE UP.







1 Fold and unfold the square in half lengthwise. Then turn the model over left to right.

2 Fold the bottom left corner up to touch the center crease.

3 Fold the opposite side over.

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