Modular: free diagrams instructing you how to fold unit origami models.

Pages 92 Page size x pts Year See pages 50 and All rights reserved. No part of the material protected by this copyright notice may be reproduced or utilized in any form, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without written permission from the copyright owner. Includes bibliographical references.

ISBN alk. Ever since I started exhibiting photos Marvelous Modular Origami my origami designs on the Internet, I began to receive innumerable requests from the fans of my website to write a book. What started as a simple desire to share photos of my folding unfolded into the writing of this
This ancient art of paper folding started in Japan and China, but origami is now a household word around the world. Everyone has probably folded at least a boat or an airplane in their lifetime. Recently though, origami has come a long way from folding traditional models, modular origami being one of the newest forms of the art.

The origin of modular origami is a little hazy due to the lack of proper documentation. It is generally believed to have begun in the early s with the Sonobe units made by Mitsunobu Sonobe. Six of those units could be assembled into a cube and three of those units could be assembled into a Toshie Takahama Jewel.

This dodecahedral-icosahedral formation, in my opinion, is the most Marvelous Modular Origami contribution to polyhedral modular origami. Modular origami almost always means polyhedral or geometric modular origami although there are a host Marvelous Modular Origami other modulars that have nothing to do with polyhedra.

Generally speaking, glue is not required, but for some models it is recommended for increased longevity and for some others glue is required to simply hold the units together. The models presented in this book do not require any glue. The symmetry of modular origami models is appealing to Marvelous Modular Origami everyone, especially to those who have a love for polyhedra.

As tedious or monotonous as folding the individual units might get, the finished model is always a very satisfying end result—almost like a reward waiting at the end of all the hard work. Marvelous Modular Origami any other art form, you do not need a long stretch of time at once. Upon mastering a unit which takes very little timebatches of it can be folded anywhere, anytime, including very short idle-cycles of your life.

When the units are all folded, the assembly can also be done slowly over time. This art form can easily Marvelous Modular Origami into the nooks and crannies of your packed day without jeopardizing anything, and hence it has stuck with me for a long time. Just carry some paper and diagrams, and you are ready with very little extra baggage. First of all, I would like to thank my uncle Bireshwar Mukhopadhyay for introducing me to origami as a child and buying me those Robert Harbin books.

Thanks to Shobha Prabakar for leading me to the path of rediscovering origami as an adult in its modular form. Thanks to Rosalinda Sanchez for her never-ending inspiration and enthusiasm. Thanks to David Petty Marvelous Modular Origami providing constant encouragement and support in so many ways.

Thanks to Francis Ow and Rona Marvelous Modular Origami for their wonderful correspondence. Thanks to the Singhal family for much support.

Last but not least, thanks to my family for putting up with all the Marvelous Modular Origami I spent on this book and for so much more. Special thanks to my two sons for naming this book. Faces: 4x 6x Cuboctahedron 24 edges, 12 vertices Cube 12 edges, 8 vertices.

Faces: 6x Faces: 8x 18x Rhombicuboctahedron 48 edges, 24 vertices Faces: 6x 8x Truncated Octahedron 36 edges, 24 vertices Faces: 12x 8x 6x Truncated Cuboctahedron 72 edges, 48 vertices Octahedron 12 edges, 6 vertices.

Faces: 8x Icosahedron 30 edges, 12 vertices. Faces: 20x Dodecahedron 30 edges, 20 vertices. Faces: 20x12x Rhombicosidodecahedron edges, 60 vertices. Faces: 20x30x12x Truncated Icosahedron 90 edges60 vertices. It is not by any means a complete list of origami symbols and bases.

An evenly dashed line represents a valley fold. Fold towards you in the direction of the arrow. A dotted and dashed line represents a mountain fold. Fold away from you in the direction of the arrow.

A double arrow means to fold and open. The new solid line shows the crease line Marvelous Modular Origami formed. Turn paper over so that the underside is now facing you. Rotate paper by the number of degrees indicated and in the direction of the arrows.

Inside reverse fold or reverse fold means push in the direction of the arrow to arrive at the result. Figure is truncated for diagramming convenience.

Fold from dot to dot. Fold repeatedly to arrive at the result. Squash Fold : Marvelous Modular Origami paper to the right along the valley fold while making the mountain crease such that A finally lies on B. B Cupboard Fold: First crease and open the center fold and then valley fold the left and right edges inwards. This ensures that the finished model will hold evenly and look symmetrical. One does not necessarily have to use the origami paper available in stores.

Virtually any paper from color bond to gift-wrap works. Make sure that, when starting to fold, the grain of the paper is oriented the same Marvelous Modular Origami. This is important to ensure uniformity and homogeneity of the model. This gives you an idea of Marvelous Modular Origami finished unit size.

In some models the finished unit is much smaller than the starting paper size, and in others it is not that much smaller. Making a trial unit will give you an idea of what the size of the finished units and hence a finished model might be, when you start with a certain paper size.

If you do not have all at the beginning, you may find, as has been my experience, that you are not able to find more paper of the same kind to finish your model. This is because the execution of a current step results in what is diagrammed in the next step.

Some assemblies simply need them whether you are a beginner or not. These pins or clips may be removed as the assembly progresses or upon completion of the model. During those times remember that it is paper you are working with and not metal! Paper is flexible and can be bent or
Flexed for ease of assembly.

Finish by working around the ball. The best way to do this is to make a template using the same size paper as the units. This saves time and reduces unwanted creases. The variations presented in this chapter may have been independently created by anyone who has played around enough with Sonobe units like I have. Nevertheless, it is worthwhile to present some of my variations in a dedicated chapter.

The Daisy Sonobe is my very first own creation. I borrowed the idea of making variations to simple Sonobe units to achieve dramatic end results from modular origami queen Tomoko Fuse. After mak- ing some of these models, you will be on your Marvelous Modular Origami to creating your own variations. You may try making any shape from the table with any Sonobe variation. The figure below shows a generic a Sonobe Marvelous Modular Origami and how to form one pyramid.

When constructing a polyhedron, the key thing to remember is that the diagonal ab of each Sonobe unit will lie along an edge of the polyhedron.

Form a pyramid as above. Then turn the assembly upside down and make another pyramid with the three loose Each face will be made up of the center square of one unit and the tabs of two other units. Do Steps 1 and 2 to form one Marvelous Modular Origami. Do Steps 3 and 4 to form one corner or vertex. Continue interlocking in this manner to arrive at the finished cube. This assembly is Marvelous Modular Origami sometimes known as a Crane Egg.

Cube Assembly: Crease six finished units as explained in the table on page 2. Large Cube Assembly: Crease 12 finished units as explained on page 2. Each face is made up of four units with each unit being a part of two adjacent faces.

Do Steps 5 and 6 to form a vertex or corner. Continue forming the faces and vertices similarly to complete the cube. Octahedral Assembly: Crease 12 finished units as Marvelous Modular Origami on page 2. Assemble four units Marvelous Modular Origami a ring as Marvelous Modular Origami following the number sequence.

Take a fifth unit and do Steps 5 and 6 to form a pyramid. Continue adding three more units to form a ring of four pyramids. Complete model by forming a total of eight pyramids arranged in an octahedral symmetry.

Marvelous Modular Origami - Meenakshi Mukerji

Exquisite Modular Origami II. Meenakshi Mukerji. This is a step by step how-to book for making modular origami models based on polyhedra. It seems like there are myriad modular origami designs out there these days; anything that joins goes. However, in this book, Meenakshi Mukerji's sixth, she still has much more to offer, with the designs presented some of her best yet. After a successful Exquisite Modular Origami, this second volume is a natural follow up.

Handpicked by the author, the models are not only beautiful, but have been subjected to rigorous design criteria such as sturdiness of the locking mechanism, easy starting paper proportions, mostly squares, and absence of inserts or separate joining units. The aesthetic appeal lies in clean well defined lines. The designs are all-new and like before, works of three new, very creative guest artists have been included as well. In grayscale, the book is practically a bargain because it is as Marvelous Modular Origami as folding from Marvelous Modular Origami color book.

Color photos of most designs are on the cover for your viewing pleasure. Just when you think you are running out of satisfying modular origami Marvelous Modular Origami, here now you have dozens more exciting new ones to enjoy.

Do visit the author's popular website www. She rediscovered Marvelous Modular Origami in its modular form as an adult quite by chance in This newfound mathematical and structural side of modular origami rekindled her passion for the art, and soon after, she started designing and displaying origami on her popular website origamee. In April her first book Marvelous Modular Origami was published followed in quick succession by four more books.

She has been a featured artist and special guest at many origami conventions both in the USA and abroad. Although known for modular designs, she has published a book of her single sheet works as Marvelous Modular Origami. Meenakshi regularly contributes to various Marvelous Modular Origami journals and exhibits her work as well. She worked as a software engineer for more than a decade.

She is now at home in California devoting her time to family, designing and authoring origami and, of course, Marvelous Modular Origami the joy of origami.

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The author describes basic folding techniques required to construct the “modules” that are used as building blocks to construct complex ornamental models. The diagrams are clear, crisp, and Marvelous Modular Origami to follow, and are accompanied by inspiring co This richly illustrated book provides step-by-step instructions for the construction of over 30 different modular origami structures. The diagrams are clear, crisp, and easy to follow, and are Marvelous Modular Origami by inspiring color photographs.
Additional tips encourage the reader to design their own original creations. Advance Praise for Marvelous Modular Origami Modular Origami "A must-have Marvelous Modular Origami any modular origami polyhedra enthusiast. They range from simple Sonobe to floral and Marvelous Modular Origami constructions. All are eye-catching and satisfying to fold, and the finished Marvelous Modular Origami are pleasing to behold. Also included are short sections on the mathematics behind the shapes and optimum color choices.

Meenakshi's clear instructions and helpful hints will have you zipping through these modules as well as improvising your own. Get A Copy. Paperback75 pages.


More filters. Sort order. Start your review of Marvelous Modular Origami. Aug 31, Chet rated it it was amazing Shelves: crafts. This Marvelous Modular Origami an all around outstanding book for learning how to make modular origami, from basic shapes to enhanced designs. The book begins with folding tips to help as you progress into subsequent chapters. The drawings are excellent and the photos are beautiful. There is also a section on origami mathematics, science and technology in the appendix!

Leon Sullivan rated it really liked it May 22, Rachel rated it it was amazing Aug 22, Keri rated it really liked it Nov 14, Marvelous Modular Origami Hitesh Panchal rated it it was amazing Dec 25, Megan rated it really liked it Feb 22, Jonathan rated it it was amazing Jun 22, Aryn Pidwell rated it really liked it May 31, Nihlaeth rated it it was ok Feb 19, Potatofaerie rated it really liked it Dec 08, Malachi Brown rated it it was amazing Jan 05, Ida rated it really liked it Oct 06, Nina rated it really liked it Jun 28, Sally Shaw rated it it was amazing Dec 09, Hasham Toor rated it really liked it Mar 14, Martin rated it it was amazing Apr 04, Misercord rated it it was amazing Oct 30, Holly rated it really liked it Jul 20, Alex Lapinski rated it it was amazing Jan 11, Jessica rated it it was amazing Feb 18, Alexandra rated it it was amazing Mar 20, Kelsey Joy rated it it was amazing Sep 09, Jt rated it really liked it Jan 20, Rolando rated it really liked it Jun 22, Daniel Fagerburg rated it it was amazing Feb 28, Marcio Noguchi rated it really liked Marvelous Modular Origami Sep 01, Denise C.

Walkert rated it it was amazing Apr 14, There are no discussion topics on this book yet. Readers also enjoyed. About Meenakshi Mukerji. Meenakshi Mukerji. Books by Meenakshi Mukerji. Escape the Present with These 24 Historical Romances.

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