

# THE GREAT ORIGAMI GEODUCK

(please read all the instructions!)

ORIGAMI is a true art, and has its standards. The most severely orthodox school would require always starting from a square, no cutting at all, and no pasting. Other schools use various base shapes of paper, some cutting and even gluing. But all schools would insist in their aesthetic standards —

— the art tends towards abstraction. Representational models should represent the essential characteristics of the subject, but without over-fussy details.

— as in mathematics the elegant solution is most admired. The model should involve only the minimum number of folds for completion, and who folds the most direct and simple possible. Over-folding, twisting, jamming, prying, and crumpling are all signs of a poor design.

— the essential characteristics of the "basic fold" — its points and flaps — must <sup>all</sup> be used in the completed model — none of them just tucked away and hidden inside the model

— the various steps in the folding procedure should involve "surprises." It is particularly delightful for a fold that seems absurd to result in an important element of the finished model, and for important elements to "appear" where needed without conscious plan.

By these standards the two Geoducks that

follow are fair-to-middling. I invite <sup>②</sup>  
your improvements.

Origami is a PARTICIPATION ART. One folds models; one doesn't just look at others' completed models. Indeed much of the art, and the pleasure it gives, is in the process of folding itself.

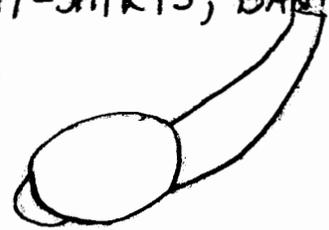
THEREFORE

## GEODUCK #1

(THE EVERGREEN GEODUCK)

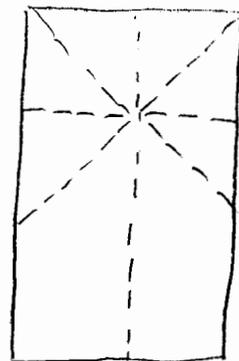
THIS MODEL IS CLOSELY PATTERNED ON THE GEODUCK WHICH APPEARS ON SWEAT-SHIRTS, BANNERS, PLAQUES, DECALS, AND BOOK COVERS

FOLD IT FROM A LEGAL-SIZE SHEET OF PAPER, OR AN  $8\frac{1}{2} \times 11$ , with one side cut to REDUCE THE PAPER TO  $7 \times 11$



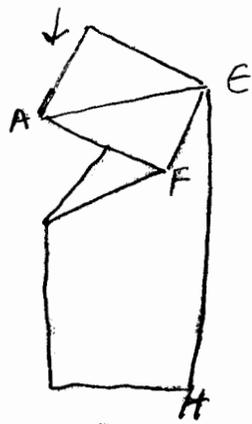
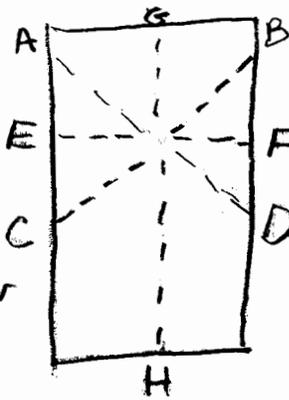
①

PRELIMINARY FOLDS:  
FOLD THE PAPER LENGTHWISE, ACROSS AND ALONG THE DIAGONALS SHOWN, CREASE WELL, AND FOLD BACKWARDS AND FORWARDS. OPEN FLAT.

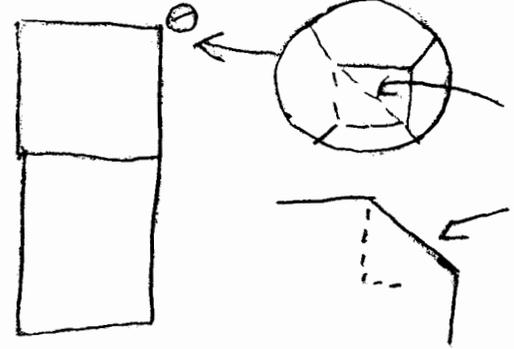


②

FOLD BASIC FOLD'  
FOLD MODEL ALONG GH,  
AND BRING A, B, C, and D  
together. The two triangular  
flaps, E and F, are folded  
down to the folded side  
of the model.

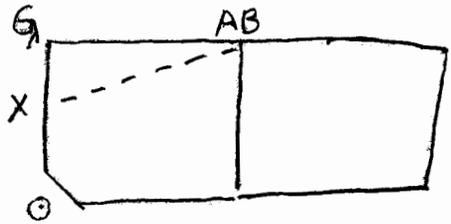


FOLD POINT  $\Theta$  down to the  
DIAGONAL, ALONG A LINE ABOUT  $\frac{1}{2}$ " from  
the point. CREASE HARD, BACKWARDS  
AND FORWARDS. OPEN MODEL AND  
SINK POINT  $\Theta$  INTO THE MODEL.  
REFOLD.



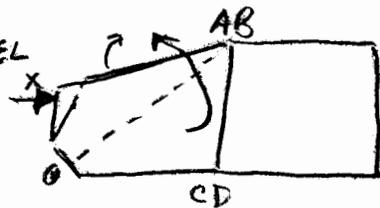
③

FOLD FLAP G-AB OVER TO THE  
DIAGONAL ALONG X-AB. CREASE  
HARD, OPEN and reverse FOLD INTO  
THE MODEL



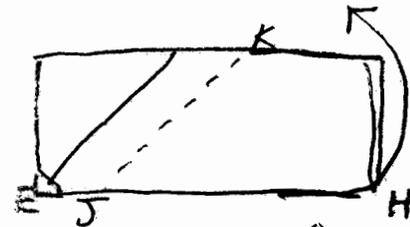
④

FOLD X OVER, CREASE HARD. OPEN  
MODEL AND SINK X INTO THE MODEL  
REFOLD MODEL. FOLD FLAPS C AND  
D TEMPORARILY UP.



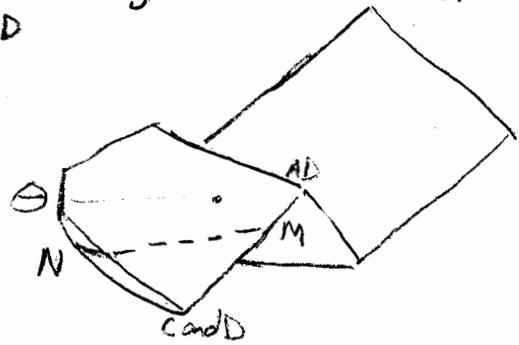
⑤

MAKE A PRELIMINARY FOLD ALONG  
JK. THIS WILL CONTROL THE  
ANGLE, LENGTH, AND WIDTH OF THE  
SIPHON, REVERSE FOLD JKIT INTO  
THE MODEL. LOWER FLAPS C AND  
D.

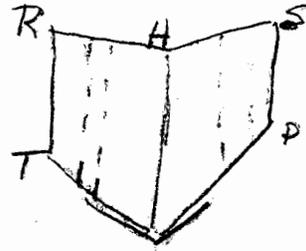


⑥

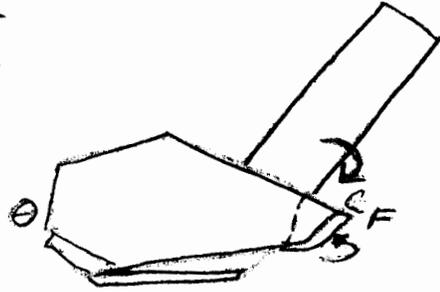
FOLD FLAP C ALONG MN THIS  
IS THE LOWER EDGE OF THE SHELL  
FOLD TO REVEAL AB-MUCLI GEODUCK  
OVERHANG as you like, BUT KEEP  
THE SHELL WIDE. REVERSE FOLD INTO MODEL REPEAT BEHIND



- ⑦ OPEN BOTTOM OF SIPHON  
 FOLD RT IN ABOUT  $\frac{1}{2}$  RH,  
 FOLD AGAIN INTO THE CENTER,  
 TO NARROW THE SIPHON. REPEAT  
 WITH SP. CLOSE MODEL



- ⑧ SHAPE SHELL BY FOLDING  
 POINTS C AND F UNDER.  
 CONTINUE TO SHAPE SHELLS  
 TO TASTE WITH SIMPLE FOLDS AND SINKS AROUND THE  
 EDGES, ESPECIALLY AT  $\Theta$ .



- ⑨ SHAPE SIPHON, BY OPENING, FOLDING  
 R and S OVER TO T AND  
 CREASING ONLY ABOUT  $\frac{1}{2}$  DOWN  
 THE SIPHON. FOLD TIP OF SIPHON  
 OUT, ALONG UV. (THE FOLD XY IS  
 ON AN ANGLE SO THAT THE NECK OF THE  
 SIPHON NARROWS.)

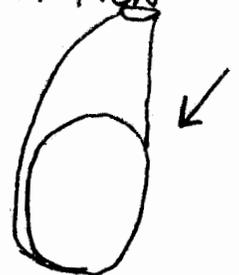


⑩ VOILA!



## GEODUCK II (THE TRUE GEODUCK)

OUR MASCOT IS, TO MY REGRET, A GROSS DISTORTION  
 THE TRUE GEODUCK LOOKS LIKE THIS:  
 NOTE THAT THE SIPHON LINES UP STRAIGHT  
 ON THE BACKSIDE.  
 A MUCH HARDER FOLD!

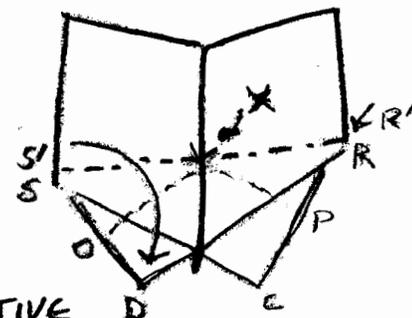
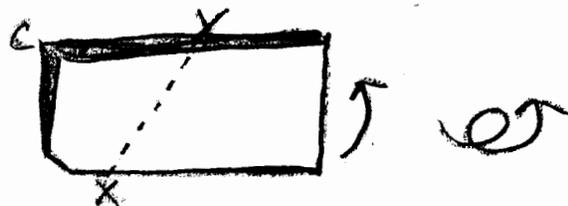


COMPLETE STEPS 1 - 2 OF GEODUCK I

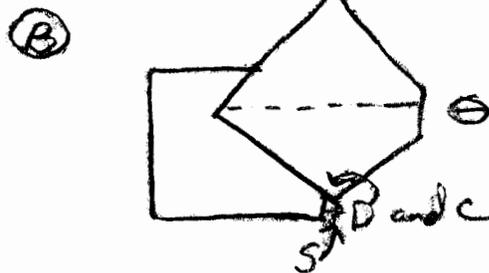
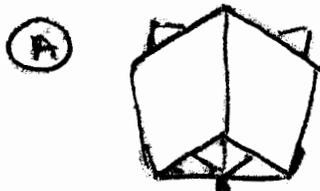
- ① Complete steps 1-2 of Geoduck I  
Fold flaps C and D up.



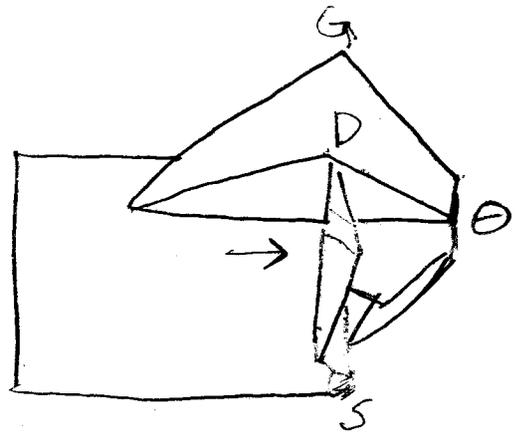
- ② Make a preliminary fold along  $zy$ , so that the folded edge of the siphon lines up with point C. Reverse fold the siphon. Lower flaps D and C. TURN model over, and open the inside of the siphon.



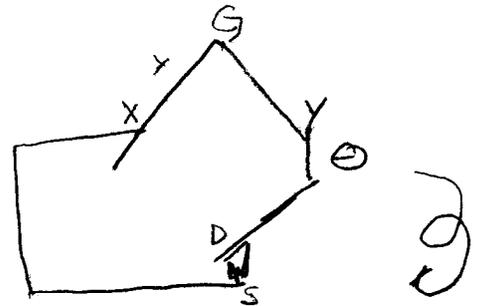
- ③ Choose a point (X) on the center fold, about 2" from sharp angle at the bottom of the siphon. MAKE TENTATIVE folds along  $OX$  and  $OP$ ,  $SX$  and  $SR$ , bringing points S and R in and over until they line up exactly with points C and D. Note: that the crease  $S'X$  and  $R'X$  are actually about  $\frac{1}{4}$ " short of points S and R. Carefully fold model flat again. The center crease of the siphon must run parallel to the diagonal in the shell flaps. When all the folds are aligned properly, press flat and crease.



- ④ CAREFULLY LIFT FLAP D. THE INTERIOR FOLD WILL LIFT AND BEGIN TO MOVE TO THE REAR. REVERSE FOLD THIS ENTIRE FOLD TO THE REAR, THE ENDS OF THE CREASE MUST COME EXACTLY TO D AND TO S. DO NOT FORCE, FOLD D BACK DOWN, AND PRESS. REPEAT WITH A BEHIND.

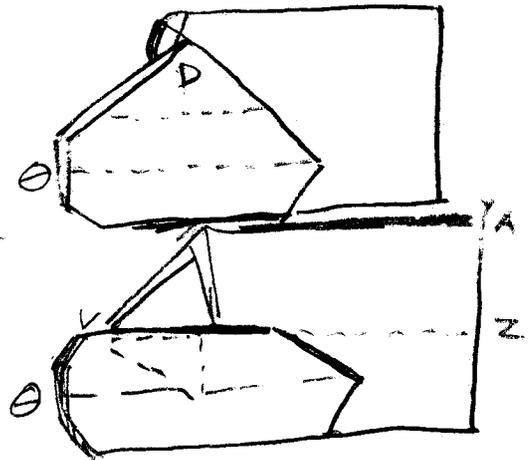


- ⑤ YOU ARE NOW READY TO SHAPE THE SHELL. MAKE PRELIMINARY FOLDS  $ZY$  and  $XY$ . ( $ZY$  lies exactly along the center crease of the siphon.)



Fold  $XY$  down into the model, on either side of the siphon, so that  $ZY$  is parallel to the crease in the siphon and  $GY$  lies flush on top of the siphon. TURN MODEL OVER.

- ⑥ Fold flap D down AS FAR AS IT WILL GO, then reverse fold into the model. Repeat Behind. Open flap. A large triangular fold is revealed inside. Reverse fold this triangle down into model. Repeat behind.



FOLD the free flap of the siphon down into the center of the model along  $VZ$ .  $VZ$  is not exactly parallel to the center crease of the siphon, the end of the fold should press tightly against the center fold of the model.

⑦ Now shape the shell.

Fold flap B

Along XY into the model.

It fits neatly into the

pockets formed by the interior

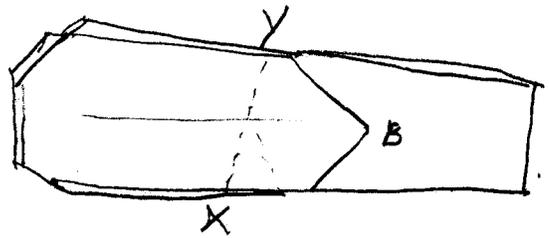
folds. Note that X is exactly at the edge of

one of these pockets, and that XY slants slightly to the right. Repeat Behind.

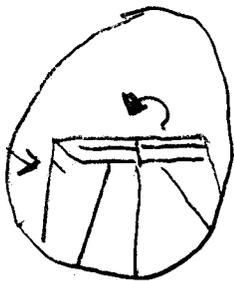
Using sink folds and folds in, shape the shells to your taste

A fairly large portion of the siphon can appear from between the shells. Shape the siphon

by folding T' and T'' into the model on a long angle.



⑧ Open the model and fold the lip of the siphon out, about  $\frac{1}{4}$ " from the end. Refold and shape to your desire.



By carefully spreading the sink fold at  $\theta$  The Geoduck can be made to stand upright.

WE'VE SEARCHED THE WORLD OVER TO FIND

EMBLEMS OF ANDROGYNOUS MIND.

THE GEODUCK'S FINE;

IT'S A TRUE ANDROGYNE

BUT ITS SHAPE PUTS US INTO A BIND.

