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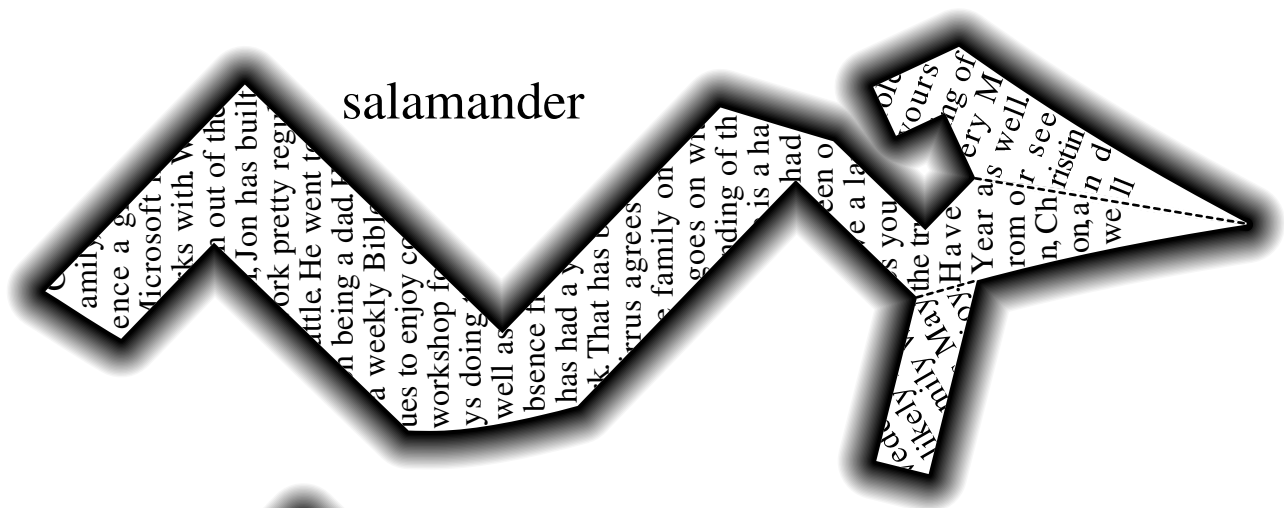
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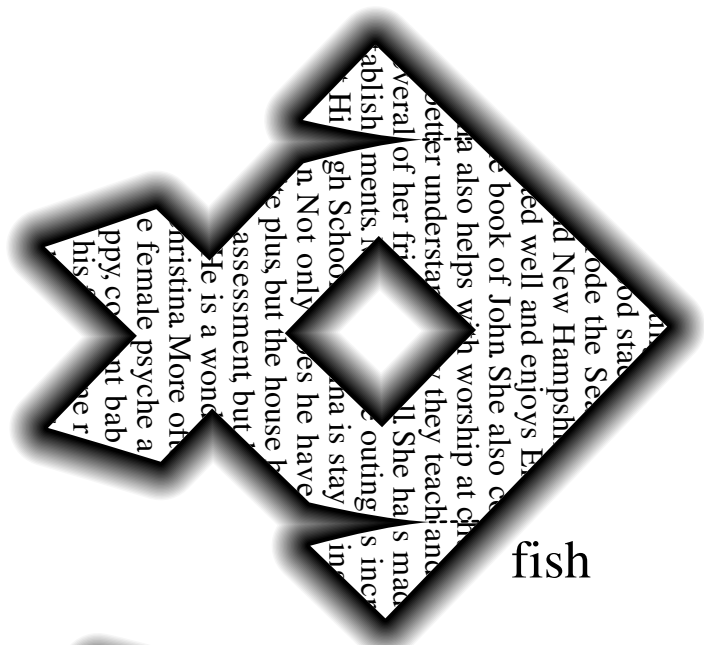
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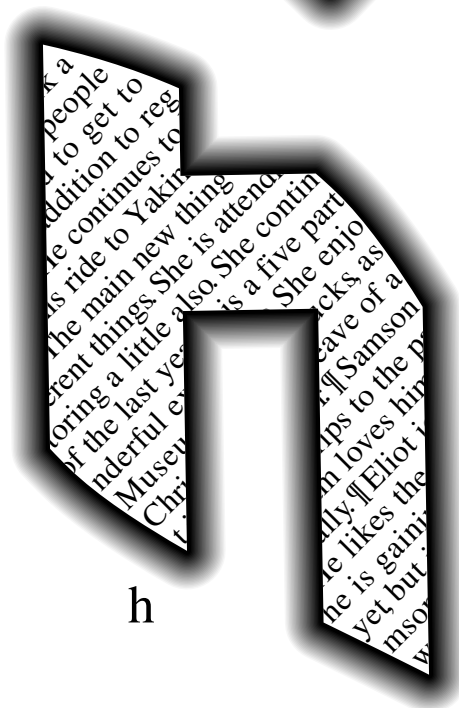
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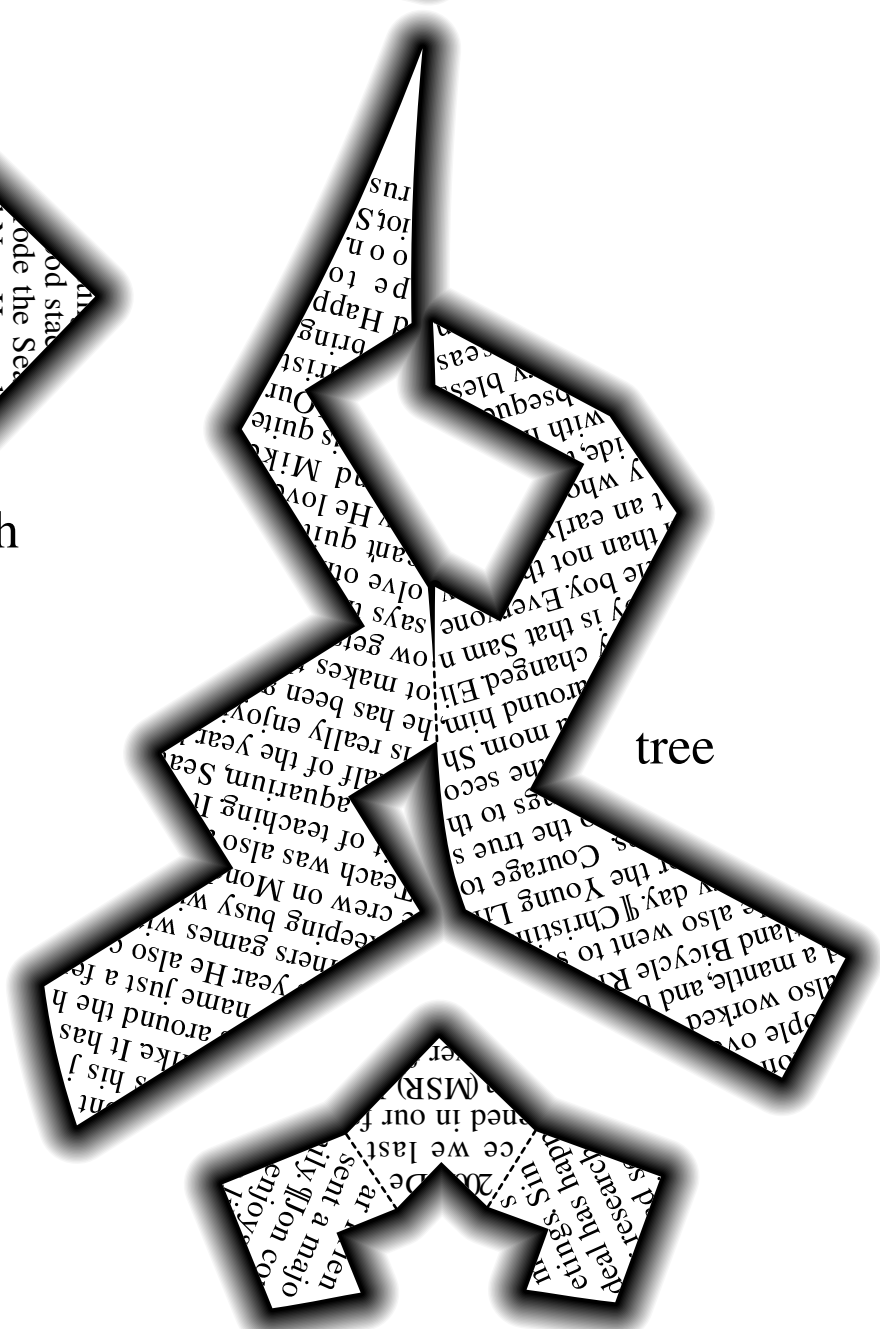
salamander



fish



house



tree

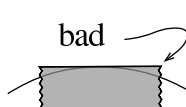
Overlays

crown

This is your 2002 Christmas letter. The letter is by Christina, the packaging is by Jon. Last year we sent dodecahedra. I understand that many of you read the letter *without assembling the dodecahedron*. That is *unacceptable*. As punishment, I have devised a more-robust ornament for this year. I think you will find it easier to assemble ... than to cheat. :v) You will need scissors, tape, and a pen or pencil.



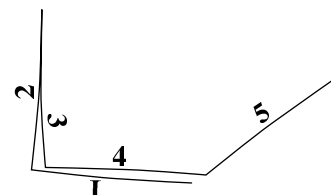
Cut out the figures. Cut away the black border. For best results, cut the borders as accurately as you can; if you leave too much black border, the ornament will be a little too big and the next layer will not fit right. Do not cut the dotted lines -----; they indicate where to fold and crease.



Use several narrow pieces rather than a few long pieces: the edge is curved, but the edge of a long folded piece of tape is straight.



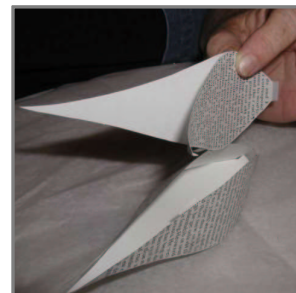
Fold panels **2** and **3** back-to-back. Tape the edge they share.



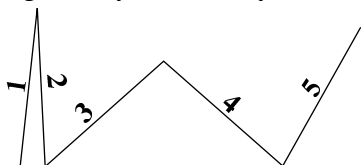
To remove the center from the fish without creasing his body, bend the fish in half without creasing, pinch his middle, and snip a hole in it. Then flatten him out and cut out his middle.



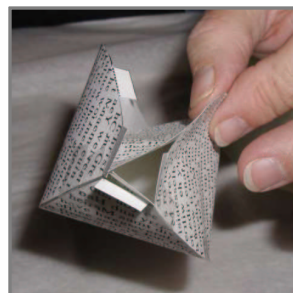
Pop panel **3** out; now the first three panels will have a three-dimensional shape. Fold panels **4** and **5** together and tape the edge they share.



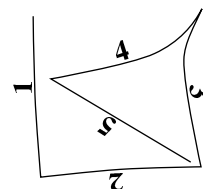
Pick up the base. Fold the grey rectangles at the top of each panel forward to keep them out of the way. Fold panels **1** and **2** back-to-back, and line up the edge they share by touch.



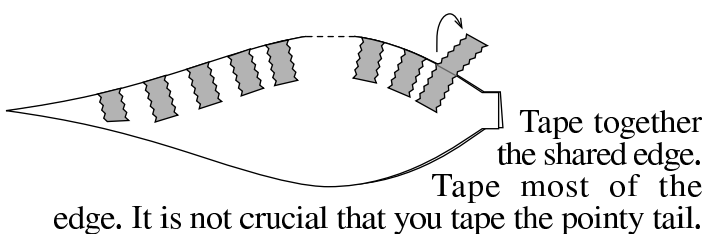
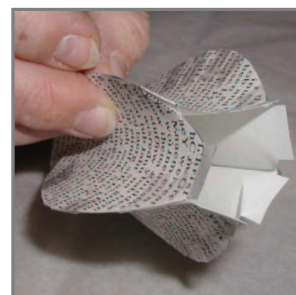
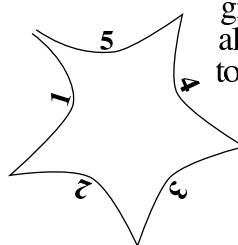
Getting the edge lined up precisely is the key to making the overlays fit well, so spend a moment feeling the edge. Pinch panels **1** and **2** together to keep them aligned as you tape.



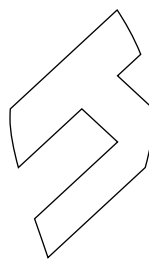
Tuck the **4-5** pair inside the **1-2-3** group. Buckle panels **3** and **4** lengthwise to make the edges they share lie flat alongside each other. Tape together panels **3** and **4**.



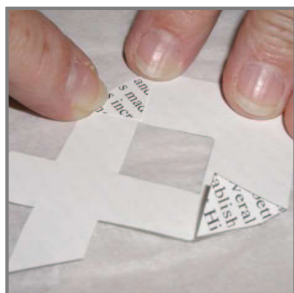
Buckle all five panels lengthwise so that you can line up panels **5** and **1**. Tape together the edge they share. Use the gray circle to align the edges top-to-bottom.



Unbuckle each panel by poking a pen through the neck of the ornament.



Tilt the **h** overlay to the right forty-five degrees. Place it on panel **5**, and slide it around to align it. It sits entirely on panel **5**; its curved edges line up with the sides of panel **5**. Tape it into place.



Now you are ready to attach the overlay pieces. First, fold the fins on the **fish**. Line up the tip of each fin with a corner of the hole in the middle of the fish. Crease the fold.

Hold the fish pointing up (tail down), and place it over panel **2**. The fins should wrap around to panels **1** and **3**. Slide the fish

up and down until the words line up and make sense. (The phrase "Many of these" on panel **2** shows through the middle of the hole in the fish.)

You will notice that the words flowing across the edges of the fish now make sense; fine-tune the position to line the letters up well. Then tape the mouth of the fish down to panel **2**. Use a pen inside the ornament to provide pressure to make the tape stick. Now tape the tail down. Curve the fins into place on panels **1** and **3**, align the words, and tape the fins down.

Fold and crease the **crown**. Line up the corners of each vee before creasing the fold. Hold the crown so that it looks like three vees, and line the middle one up at the very top of panel **3**. Line up the words and tape it into place. Then line up and tape the two side vees onto panels **2** and **4**.



Fold and crease the **salamander** in the two places indicated. Hold the main part of it with the arrowhead pointing down and place it over panel **1**. Line it up and tape it down. Tape down the two flaps onto panels **5** and **2**.

Fold and crease the **tree** along the single marked line, down its middle. Line up the fold by keeping the two big bottom branches parallel. Hold the tree upright, and place it over panels **3** and **4**. Align the text and tape a little of the overlay to each panel first to fix the basic alignment. Tape the tree down to each panel.

Congratulations! Your letter is complete. You may clean your ornament with a damp rag and mild detergent; avoid bleach. Periodically grease all moving parts. For warranty service, call our 800 number, printed on the page we didn't include. If you manage to destroy your ornament, you may download a new PDF file to print out:

<http://www.jonh.net/~jonh/christmas-2002.pdf>

If you decide to give up, you may supplicate us for a copy of the unmangled text. Cheater.

Email: [jonh@jonh.net](mailto:jonh@jonh.net), [cjchowell@yahoo.com](mailto:cjchowell@yahoo.com)

Photo album: [www.jonh.net](http://www.jonh.net)