## Tyrannosaurus

Begin with a square, white side up, with both diagonals precreased.


Valley fold the top edges to the center line, creasing the angle bisectors.


Pull out the point (the one folded down in Step 2) hidden by the flaps folded down in Step 3. The next few diagrams are close-ups of the top of the model.


Petal fold the flap, leaving the petal pointing down.


Valley fold the point created by the petal folds up to meet the top of the model. This point will be the lower jaw. The next step returns to a full view of the model.


Valley fold the top point to the intersection of the angle bisectors created in Step 1.


Squash fold the point at the top to create a small preliminary fold.


Fold the left flap of the petal back over to the right.
11


Valley fold the lower right corner of the long, rectangular flap (from Step 3) up along the angle bisector. The next few steps are close-ups of this region.

3


Valley fold both sides of the new top edge and the attached paper below it to the center line.
6


Squash fold the right side of the preliminary fold.


Repeat Steps 6-8 in mirror image on the left side of the model.


Valley fold the sides of the small white triangle to its lower edge and unfold.


Rabbit ear the white triangle. The point created by the rabbit ear will become the first toe (see Step 65). The next step returns to a full view of the model.


Repeat Steps 12-13 on the left side of the model.


Turn the model over from side-to-side. The next diagrams are enlarged.


Valley fold the top point down such that the crease goes through the intersection of the angle bisectors (from Step 17) and unfold. Turn the model over from side-to-side.

## 21



Valley fold the top sides inward along the edge of the uppermost, triangular point and unfold. (These creases also happen to fall along the edges of the
rectangular flaps on the other side of the model.)

Valley fold the top edge down on the crease from Step 18, allowing the point with the lower jaw to swing up from behind.


Reverse fold the top sides inward along the creases from Step 21. The next diagrams are enlarged.

27a


Open sink the upper end and reverse fold the lower end of the inner edge of the rectangular flap using the creases from Step 26b. The next diagram shows the resultant crease pattern on the inside of the flap (which you would see if you opened the flap back up to Step 25).


Collapse the rectangular flaps with a rabbit ear at the top end, leaving the ears pointing up. These points will be the arms.


This is the crease pattern which will allow the sink to be performed. Note how the folds change around the upper end. The next diagram shows the rectangular flap in the process of being collapsed.


The result. The next few diagrams are close-ups of the right side of the model. again. Towards the arm point, the fold becomes increasingly difficult to do, and you won't be able to crease easily on the point itself.


Valley fold the two small, triangular points at the sides of the pleated top point inwards.

Valley fold the two rectangular flaps in half lengthwise and unfold.
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The result. The series of pleats created at the end of the rectangular flap will become the second, third, and fourth toes. The next diagram returns to a full view of the model.


Valley fold the lower edge to the vertical, center diagonal, bisecting the angles of the bottom point, and unfold.

33


Reverse fold the top sides in along the creases made in Step 32. The next diagrams are enlarged.

Repeat Steps 26b-28a in mirror image on the left side of the model.


Valley fold the top pointdown so that the endpoints of the crease connect the upper endpoints of the angle bisectors from Step 30.


Petal fold the preliminary form at the top of the model. Note that there is a hidden white flap under the topmost colored layer (indicated by the $x$-ray lines); this flap is not included with the top-most flap in the petal.


Turn the model over from side-toside.


Valley fold the top sides in to the vertical, center diagonal; this brings the two corners at the top in to meet the tip of the colored point. Unfold.


Reach inside the top of the petal and pull out the hidden lower jaw assembly (from Step 10), placing it on top of the layers currently covering it.


Turn the model over from side-toside.

Valley fold the right side in to the center line and unfold.


Fold the portion of the model with the white flap underneath and inside the model.


The next few diagrams detail the top of the model (where the head and lower jaw points are located).


Squash fold the right side on the crease from Step 37.


Fold the flap back over to the right, incorporating a rabbit ear in the large triangle.


Valley fold the short, broad, triangular point down as far as possible; simultaneously, pull out the loose flaps at the sides of the point.

44a

The result. Note the small, short, broad, downward-pointing, triangular point protruding from beneath the head assembly. This is the point referred to in Step 46. The next diagram returns to a view of the whole model.


Valley fold the entire model in half along the vertical line (right over left), and rotate the model $90^{\circ}$ clockwise. The next diagrams are enlarged.


Valley fold the arm point toward the legs and tail; repeat behind.


Outside crimp the head assembly upwards while swinging the arm points down. The mountain fold lines run alongisde the edges of the short, triangular point noted in Step 44a. The next diagram shows where these folds are if the model is opened up to Step 44a. (Remember that, since the next diagram shows the inside of this step, what you see in this step as mountain folds will appear as valley folds inside!)


The layout of the folds for the crimp in Step 44a. The next diagram returns to a view of the whole model.


Valley fold the hind leg down, squashing a tiny gusset where the leg meets the back; repeat behind. To make a walking stance, fold the leg behind down so that it is angled behind the other.


Outside reverse fold the flap forming the gusset so that the gusset is on the inside of the leg flap; repeat behind.


Mountain fold the top tail flaps inside to narrow the tail; note that the fold line goes from the top of the leg to a point close to, but not at, the tip of the tail. Repeat behind. Outside reverse fold the head. The next few diagrams are a close-up of the head region.


Pull out a single layer of paper from inside the head; this layer is attached to the outermost layer on the neck, which is also pulled out to cover the visible portion of the lower jaw complex (from Step 10). The layer is somewhat trapped so you may have to unfold part of the model to free it.


This is a difficult step. Grab the lower jaw point and the next 2 layers out from it (the three innermost layers) on both sides and pull them gently downward (it is easy to tear the paper if the paper is pulled too hard). As you do this, some paper will slide out from inside the head, and the central point on the top should collapse inwards a bit (lowering it between the points pulled out in Step 50; the fold is indicated by the $x$-ray line) and a bit of the tip of the snout will sink inwards to round out the snout. This move will create a fuller head for the model.


Reverse fold the tip of the lower jaw inside.

52


Pull the lower jaw down to open the mouth.


Mountain fold (more of a bend, really) inwards to create brow "horn"; repeat behind. Dent in some paper in the lower jaw and curl it slightly. The head is now finished; the next steps return to a full view of the model.


Between the arm and leg, along the lower edge of the belly, there is a thickness of paper which is connected to the toe assembly. Pull out the crimped layers underneath the surface layers to create a larger, rounder belly. Repeat behind.


Fold the tips of the belly underneath. Valley fold and unfold the back of the neck between the head and the arm point as far as it will easily go. Repeat both moves behind.


Squash fold the arm point as a preliminary base.


Petal fold the arm outward; note that the ends of the petal fold do not meet the tip of the point.


Reverse fold the tip of the arm inwards to create a two-fingered hand. The next steps return to a full view of the model.


Valley fold the tip of the arm point in, connecting the ends of the asymmetrical petal from Step 60.


Valley fold the top half of the arm point down, closing the petal fold.


Repeat Steps 59-63 on the remaining arm and hand.
The next steps focus in on the left foot.


Beneath the first layer is the first toe (the tiny rabbit ear from Step 13). Valley fold the point out as far as possible.


Valley fold the first toe in half (or as close as possible); this will result in an asymmetrical spread-squash of the base of the toe point. Make sure as you spread the point that none of the paper will stick out from inside the leg.

## 69



Valley fold the top layer so that the crease from Step 68 lies on the back edge (this is another angle bisector). Repeat on the flap behind.


Reverse fold on the next angle bisector (from Step 68); repeat on the remaining flap.


The result. Rabbit ear the toe downward.

70


Valley fold on an angle bisector so that the lower edge meets the crease from Step 68. Repeat on the flap behind.

73


Reverse fold on the remaining angle bisector (from Step 70); repeat on the remaining flap. This forms the second - fourth toes. The next step returns to a full view of the model.


Repeat Steps 65-73 on the right foot.


Reverse fold the tip of the innermost (second) digit to make a toe tip; repeat on the other third and fourth toes. This foot is on the tips of the toes because the left foot is in the process of stepping off the ground. The next diagram returns to a full view of the model.

Outside crimp the second-fourth toes as a single unit, distributing the layers evenly (three on each side, dividing the middle toe) on each side of the crimp.



As in Step 75b, outside crimp the second-fourth toes as a single unit, distributing the layers evenly, but this time make a much steeper crimp, so that the bottom of the foot is just below horizontal.


Make a shallow inside crimp to form the tip of the fourth toe; repeat on the second and third toes. The next diagram returns to a full view of the model.

75a


The next steps again focus on the left foot.

79


Shallowly reverse fold the tail; note that the upper end of the reverse fold is a little more than halfway down the tail point.


Pull out a single layer of paper from behind the back of the thigh; repeat behind.


Fold the corner of the paper pulled out from Step 80 to round out the thigh; repeat behind. The next diagram is enlarged.


Shape the legs by denting in some paper at the rear of the thigh and the front of the shin. Round the neck, belly, back, and tail.


FINISHED TYRANNOSAURUS

