



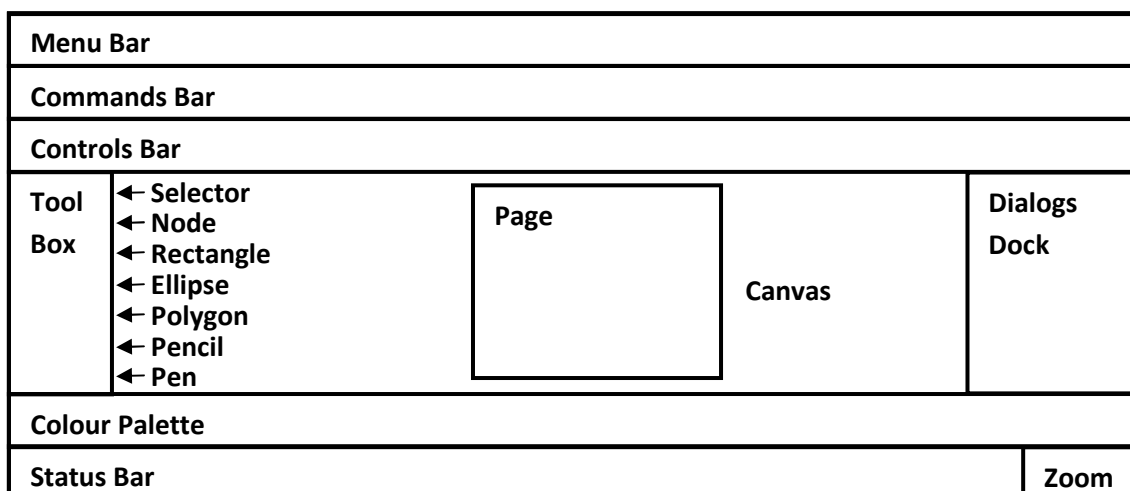
INKSCAPE 0.92

Tutorial 2

Paths

Cat Stretching

Inkscape Window:



A: Head Click Ellipse Tool and Click-Drag in the Page to draw a small flat ellipse.

Note: The ellipse Shape has a Width and a Height Handle plus two superimposed End Points.

Click Selector Tool and click on the shape to show its Scale Handles.

Click the Fill or Stroke notification advice in the Status Bar to open the Fill and Stroke Dialog.

Click the Stroke Style Tab, then type into Width and change the stroke width to 2mm.

Shift+Click the Swatch in the Colour Palette to change the shape's stroke colour to black.

Click the Swatch in the Colour Palette to change the shape's fill colour to none (transparent).

Click the Path Menu then the Object To Path Command to convert the ellipse Shape to a Closed Path.

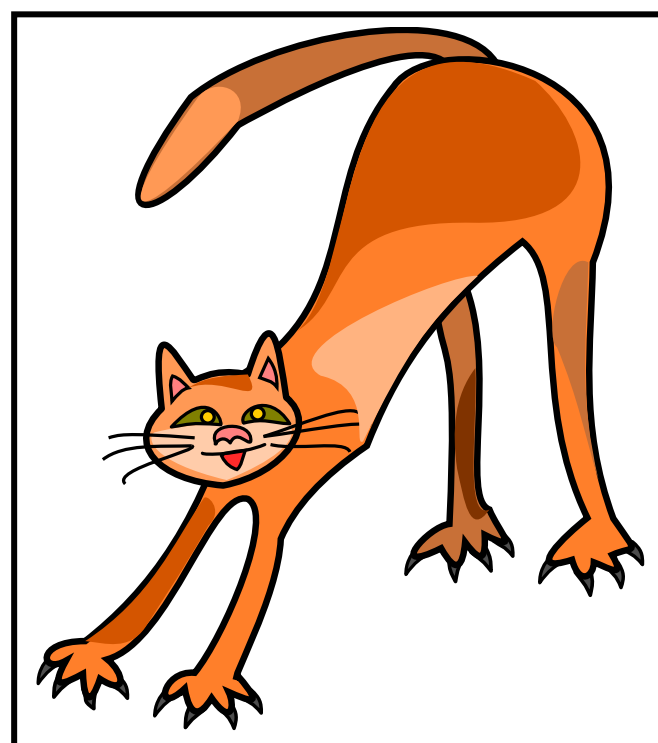
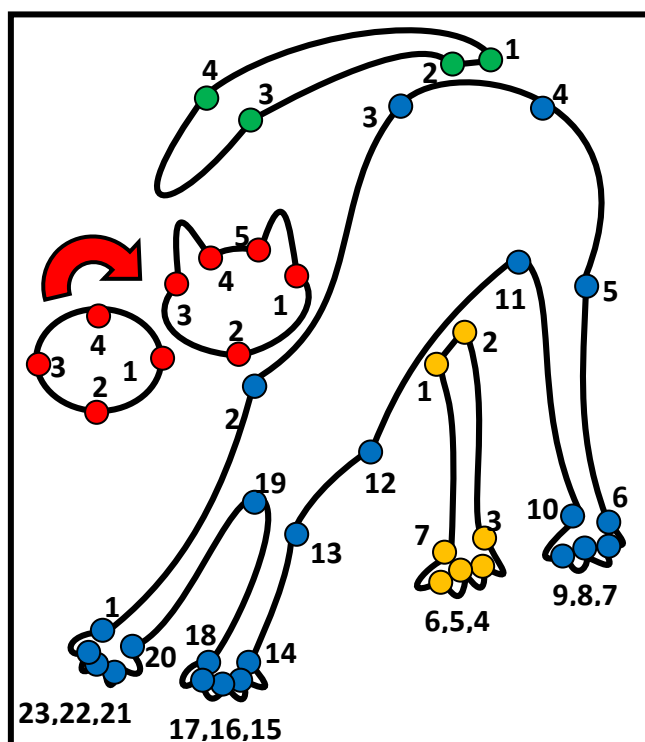
Click Node Tool.

Note: The cat's head Path now has four Nodes of Smooth Node type.

Shift+Click all four Nodes to group select them.

In the Controls Bar click the Make Selected Nodes Corner icon to switch from Smooth to Cusp Nodes.

Note: Smooth nodes are square and join in curves, cusp nodes are diamond-shaped and join in angles.



B: Head & Ears Press Esc Key to deselect nodes then Click-Drag Node 3 up and round to left side of left ear.

Click-Drag Node 4 round to right side of left ear then Click-Drag Node 1 round to right side of right ear.



Shift+Click Nodes 4 and 1 to group select them.

In the Controls Bar click the Insert New Nodes Into Selected Segments icon to create a new Node 5.

Press Esc Key to deselect nodes then Click the new Node 5 to select just it.

In the Controls Bar click the Make Selected Nodes Corner icon to switch Node 5 from Smooth to Cusp.

Click-Drag Node 5 round to left side of right ear.

Click-Drag the line Segment 3-4 to form the left ear, then Click-Drag Segment 1-5 to form the right ear.

Click-Drag Node2 down slightly and each of the three line Segments to properly form the face.

Technique: Adjust the Shape of a Path Segment:

Click Node Tool and click on the path segment to show its Nodes.

Click-Drag the segment to transform the scale and angle of the path's curve.

Or Click Node Tool and click on a path segment End Node to show its Node Handles.

Click-Drag a Node Handle co-linearly to the node to adjust the scale of a path's curve.

Click-Drag a Node Handle's orientation round the node to adjust the angle of a path's curve.

Technique: Draw a Closed Path of Straight Lines using the Pen Tool:

Click Pen Tool (Bezier Tool) to select it.

Click in the page to set the first node. **Note** A small square box shows this starting point.

Click elsewhere to set the second node. Click again to set any additional node.

Click directly into the starting point's square box to finish the closed path.

Technique: Draw an Open Path of Straight Lines using the Pen Tool:

Click Pen Tool (Bezier Tool) to select it.

Click in the page to set the first node. **Note** A small square box shows this starting point.

Click elsewhere to set the second node. Click again to set any additional node.

Double-Click to set the end node and finish the open path.

Note To extend the open path, Click into the starting or finishing box then Click to set the next node.
The extended path must finish with a Double-Click or else a Click into the path's other end box.

Note All nodes created are Cusp Nodes.

C: Main Body Click Pen Tool (Bezier Tool) to select it.

Click in the bottom-left of the page to set the first node (Node 1).

Click round the outline of the main body and finish with a Double-Click at Node 12.

Restart with a Click in the Path's end box at Node 12 then Click round the rest of the main body's outline.

Finish the outline with a Click in the Path's starting box at Node 1.

Click Node Tool and Click on the path Segment 2-3 to show its Nodes.

Click-Drag the upper part of Segment 2-3 to the left then the lower part to the right for a smooth curve.

Serially adjust all 23 segments by Click-Dragging each path segment for its proper outline curve.

Note now that Node 4 is unnecessary.

Click Node Tool and Click on Node 4 to select it.

In the Controls Bar click the Delete Selected Nodes icon to delete redundant Node 4.

Click-Drag the new path Segment 3-5 to adjust it for a smooth curve.

D: Rear Leg Click Pen Tool (Bezier Tool) to select it.

Click near other rear leg to set the first node (Node 1).

Click round the outline of the rear leg and finish with a Click in the Path's starting box at Node 1.

Click Selector Tool and Click the rear leg to select it.

Click-Drag the rear leg to fit with a slight overlap of the main body.

Click the Object Menu then the Lower to Bottom Command to send the rear leg to the bottom level.

E: Tail Click Pen Tool (Bezier Tool) to select it.

Click just above the main body to set the first node (Node 1).

Click round the outline of the tail and finish with a Click in the Path's starting box at Node 1.

Click Selector Tool and Click the tail to select it.

Click-Drag the tail to fit with a slight overlap of the main body.

Click the Object Menu then the Lower to Bottom Command to send the tail to the bottom level.



- F: Head, Body, Leg & Tail** Click Selector Tool then Click-Drag the head into position to overlap cat's shoulder.
Open the Fill and Stroke Dialog then Click on the head path to select it.
Click the Stroke Style Tab, then type into Width and make the stroke width 2mm.
Click a Swatch in the Colour Palette to change the head's fill colour.
Click the body path and make its stroke width 2mm and give it a fill colour.
Click the rear leg path and make its stroke width 2mm and give it a fill colour.
Click the tail path and make its stroke width 2mm and give it a fill colour.
- G: Claw** Zoom into a cat's paw then Click Pen Tool (Bezier Tool) to select it.
Make Clicks to create a triangular closed path of three nodes to make a claw at the end of a cat's toe.
Click Node Tool and click on the Nodes and the Path Segments to create the curved claw.
Click Selector Tool and Click-Drag the claw to fit with a slight overlap of the cat's toe.
Click the Object Menu then the Lower to Bottom Command to send the claw below the level of the toe.
In Fill and Stroke Dialog Click the Stroke Style Tab, then type into Width and make the stroke width 1mm.
In Fill and Stroke Dialog, in Join: option, Click the Round Join icon to smooth sharp points in the stroke.
Click a Swatch in the Colour Palette to change the claw's fill colour to grey.
- H: Other Claws** Click Selector Tool and Click to select the existing claw.
Click Edit Menu and Paste In Place Command then Click-Drag this new claw into position above a toe.
Click Node Tool and Click-Drag Nodes and Segments to properly adjust the claw to the different toe.
Note Press Shift Key to override snapping to grids, objects etc.
Note Selector Tool and Rotation Handles may be used to reorientate the claw.
Click Selector Tool then Click-Drag the claw into position to protrude beyond its toe.
Click the Object Menu then the Lower to Bottom Command to send the claw below the level of the toe.
Now, choose any existing claw, copy and paste in place, then position it above a toe without a claw.
Edit the new claw to suit, reposition it and send it below the level of the toe.
Continue creating new claws until all sixteen toes are equipped with claws.
- I: Eyes** Scroll and Zoom into cat's face then Click Pen Tool (Bezier Tool) to select it.
Click-Drag in the face, dragging up-and-right, then release mouse button, drag down-and-right then Click to create a curved Segment and a second Node.
Click directly into the starting point's square box to finish a closed path of just two nodes.
Click Node Tool and Click-Drag Nodes and Segments to properly outline the left eye.
Click Ellipse Tool and Ctrl+Click-Drag to draw a small circle for the eye's pupil.
Use Selector Tool to position pupil in left eye.
Click Swatches in the Colour Palette to change fill colour of the eye and the pupil.
Now create the cat's right eye.
- J: Nose** Click Pen Tool (Bezier Tool) then Click several times to create a closed path of three nodes.
Click Node Tool and Click-Drag Nodes and Segments to properly outline the nose.
Click a Swatch in the Colour Palette to change fill colour of the nose.
- K: Tongue** Click Pen Tool (Bezier Tool) then Click several times to create a closed path of three nodes.
Click Node Tool and Click-Drag Nodes and Segments to properly outline the tongue.
Click a Swatch in the Colour Palette to change fill colour of the tongue.
- L: Mouth & Whiskers** Click Pen Tool and create an open path of two Nodes for the mouth.
Click Node Tool and Click-Drag Nodes and Segments to properly locate the mouth over the tongue.
Create new open paths then adjust their curves and position them for the cat's whiskers.
- M: Inside Ears** Click Pen Tool and create triangular paths for the cat's pair of inside ears.
Click Node Tool and properly locate the inside ears then use Selector Tool to choose a fill colour.
- N: Coat Patches** Click Pen Tool and create random open paths for the cat's irregular coat patches.
Click Node Tool and properly locate the patches then use Selector Tool to choose fill and stroke colours.
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- O: Save Drawing** Save the Drawing as InkDrawTut2CatStretching.svg.
Export the Drawing in a Bitmap file as InkDrawTut2CatStretching.png.