

Using the Bone Tool

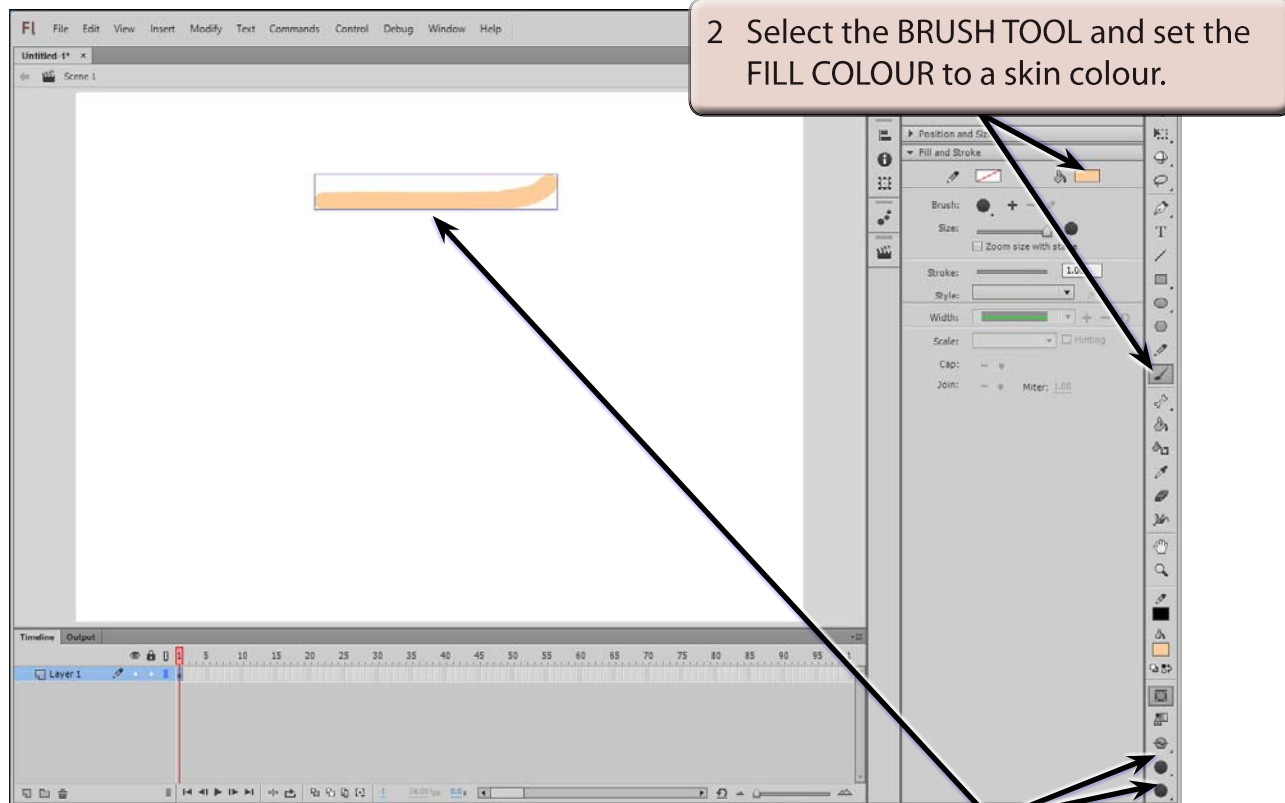
The BONE TOOL allows you to set hinges either within an object or between a group of objects. It can be applied to create human movements in arms and legs, robotic arm movements, crane operations, etc.

The Bone Tool Basics

To illustrate the basics of the BONE TOOL, a simple shape will be converted into an arm.

A Drawing the Shape

- 1 Load Flash or close the current files and create a new ACTIONSCRIPT 3.0 file.

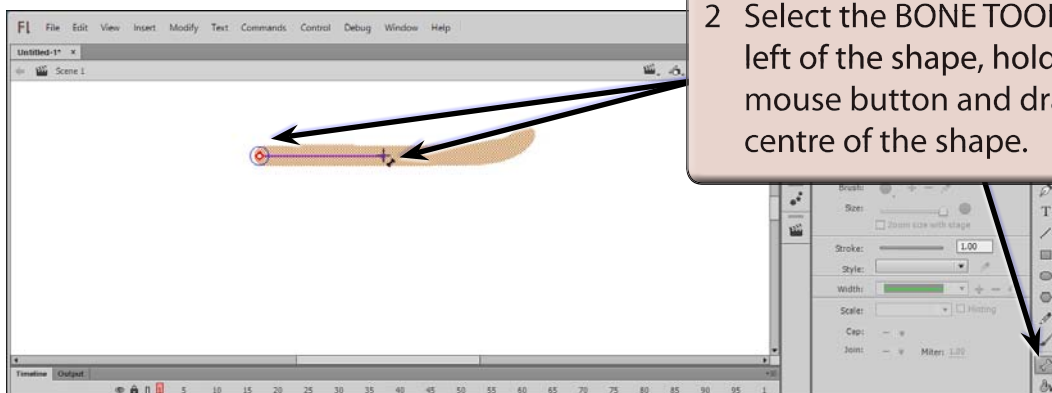


2 Select the BRUSH TOOL and set the FILL COLOUR to a skin colour.

3 Set the BRUSH SHAPE to a CIRCLE, the BRUSH SIZE to the largest size and paint a line with a small 'kink' to represent a hand at its right end.

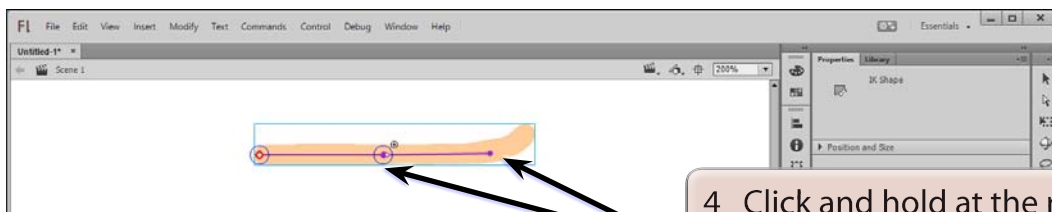
B Applying the Bone Tool

- 1 Press CTRL+ or COMMAND+ to zoom the view to 200%.



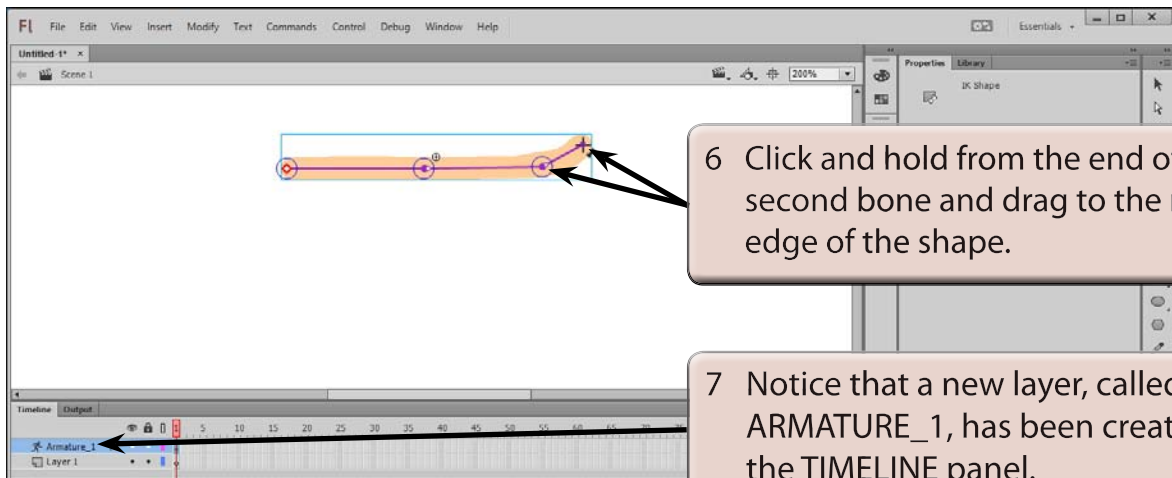
- 3 When you release the mouse button the first bone is created.

NOTE: This first section will represent a bone from the shoulder to the elbow.



- 5 Release the mouse button to create the second bone.

NOTE: This second section will represent a bone from the elbow to the wrist.

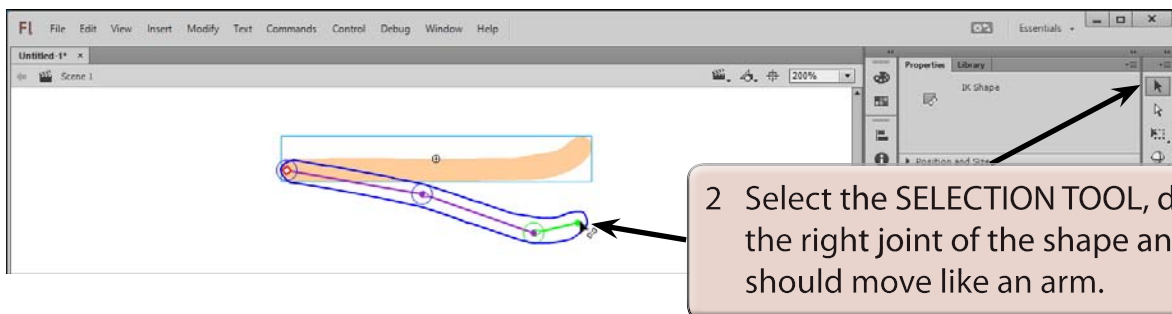


NOTE: All the bone sections are moved into the ARMATURE layer.

C Using the Bone Links

The bone sections have set a rotation point at the left of the shape and hinges (or joints) at the centre and near the right of the shape.

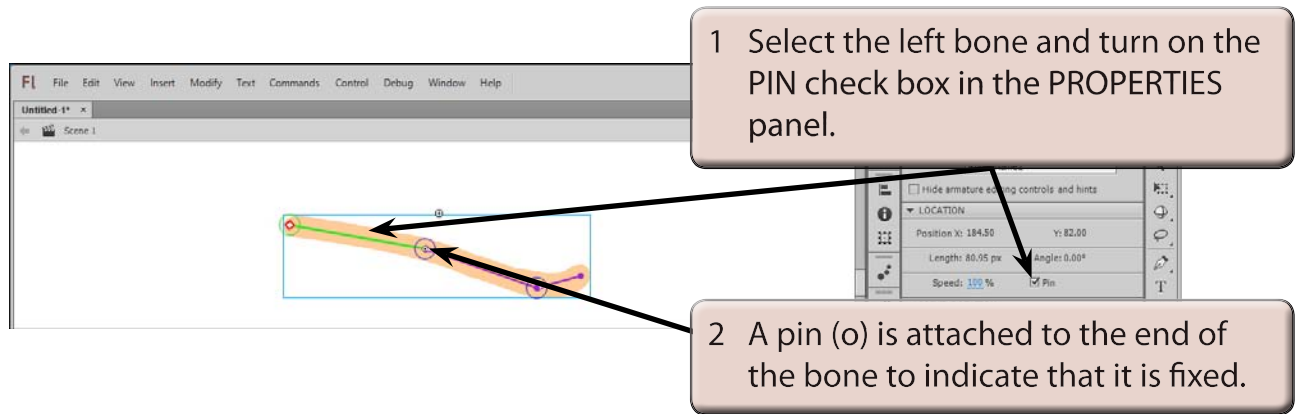
- 1 Press CTRL- or COMMAND- to return the view to 100%.



NOTE: When the mouse pointer is over a joint, a bone symbol is added to the pointer to indicate that the joint can be moved.

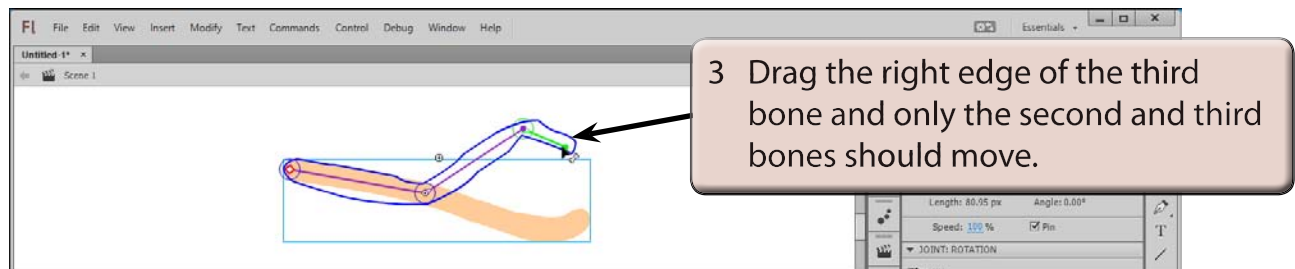
D The Pin Option

The PIN option allows you to fix the position of a bone and prevent it from moving.

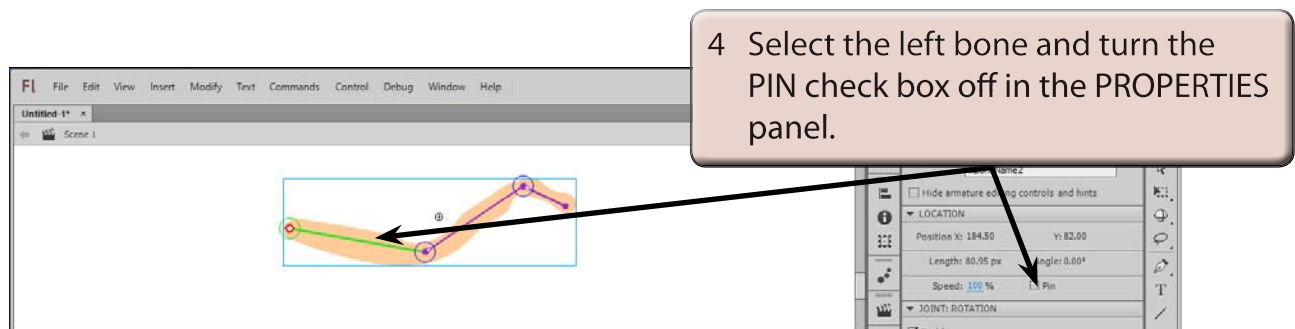


1 Select the left bone and turn on the PIN check box in the PROPERTIES panel.

2 A pin (o) is attached to the end of the bone to indicate that it is fixed.



3 Drag the right edge of the third bone and only the second and third bones should move.



4 Select the left bone and turn the PIN check box off in the PROPERTIES panel.

5 Try moving the right bone again and all the bones should move.