

Using the Bone Tool

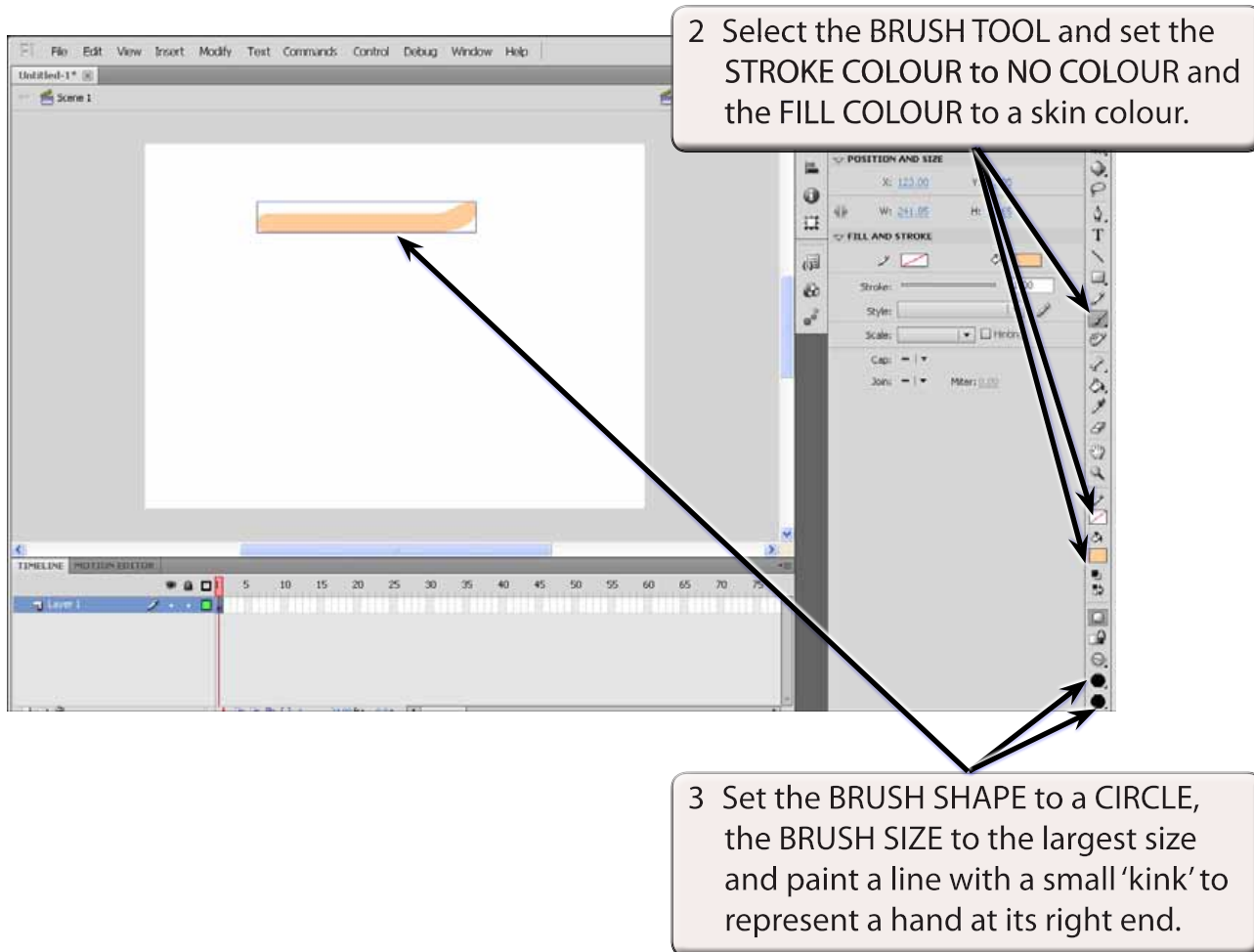
The BONE TOOL allows you to set hinges either within an object or between a group of objects. It can be applied to create human movements in arms and legs, robotic arm movements, crane operations, etc.

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 FLASH FILE (ActionScript 3.0).

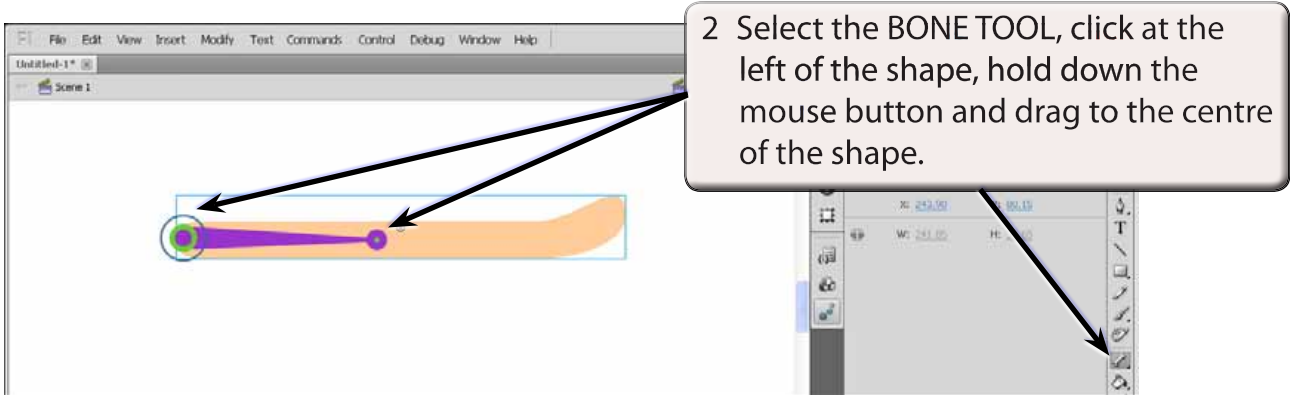


2 Select the BRUSH TOOL and set the STROKE COLOUR to NO COLOUR and the FILL COLOUR to a skin colour.

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.

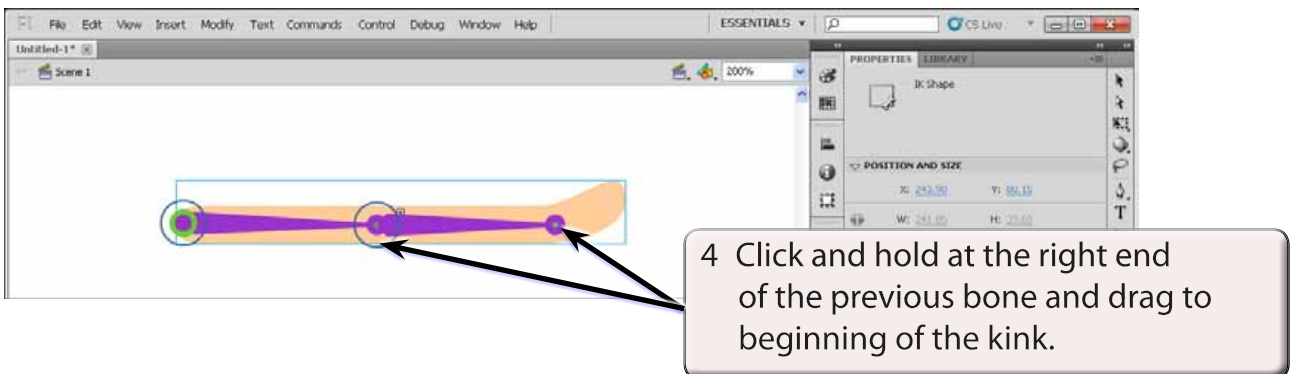
B Applying the Bone Tool

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



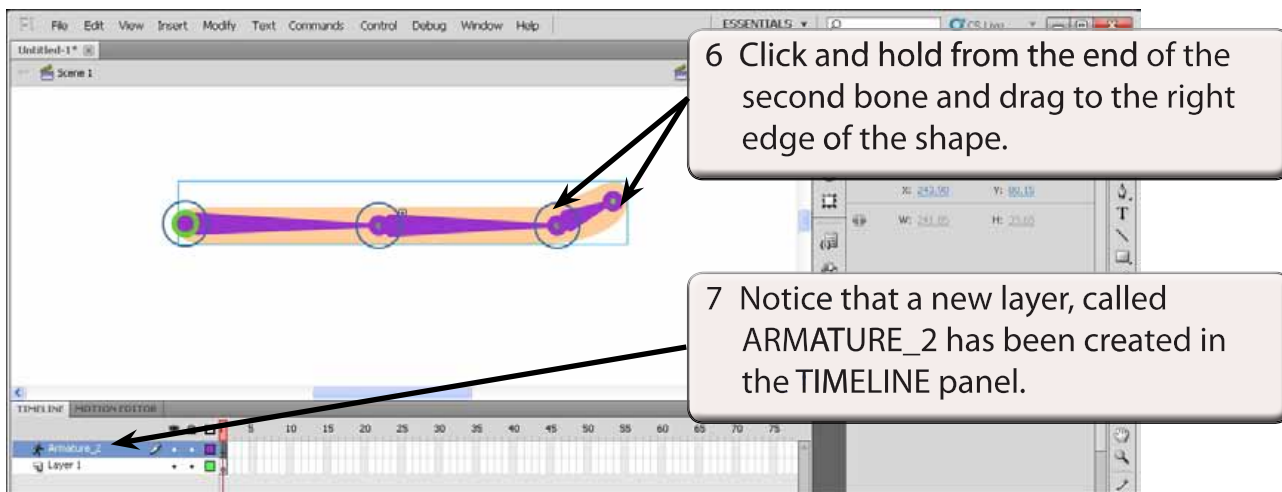
- 3 When you release the mouse button the first bone is created.

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.

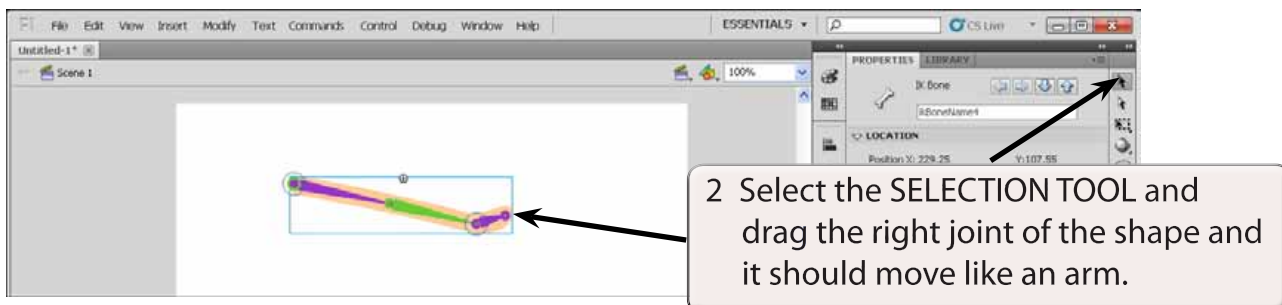


NOTE: All the bone sections are moved in the **ARMATURE** layer.

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%.

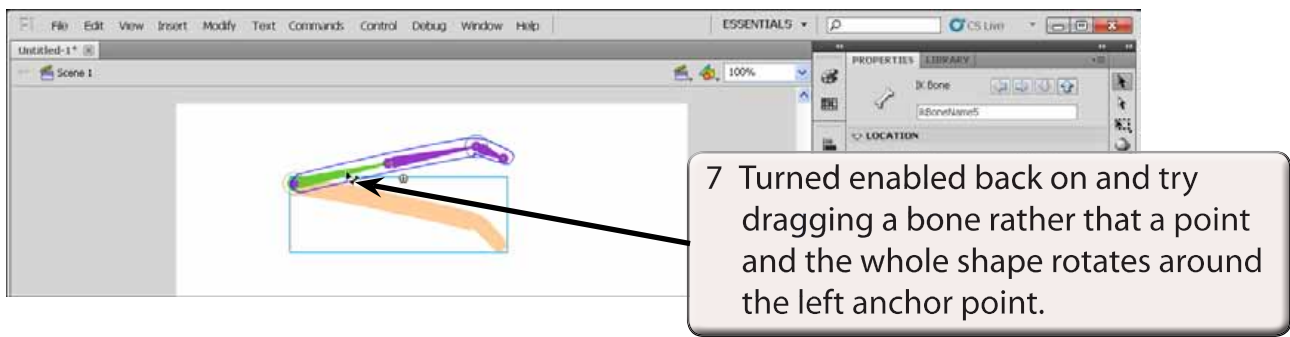
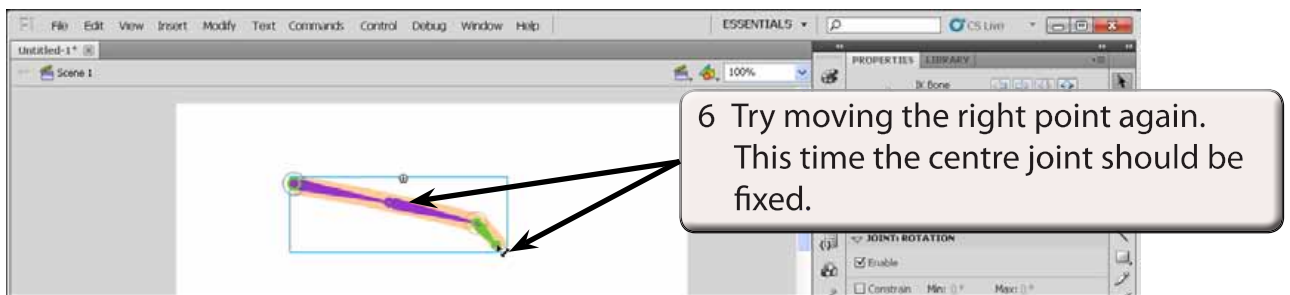


NOTE: When the mouse pointer is over a joint, a bone symbol is added to the pointer to indicate that the joint can be moved.

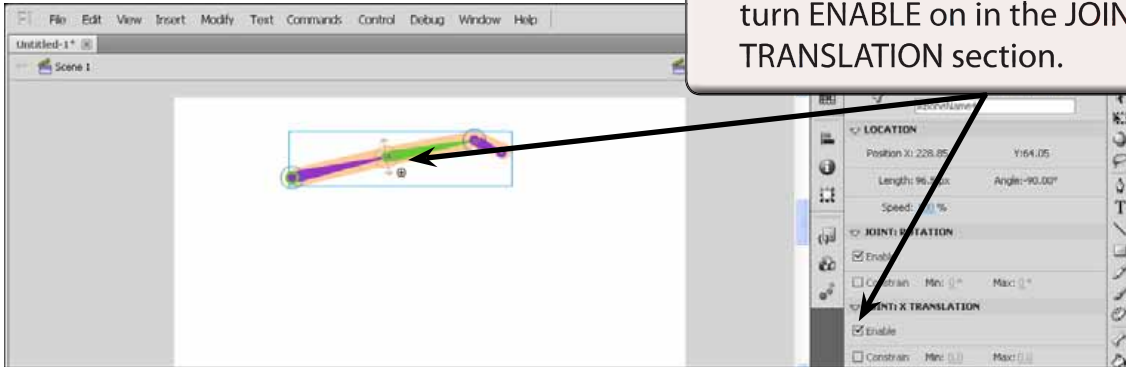
3 The PROPERTIES panel allows you to control the movement of the bones.



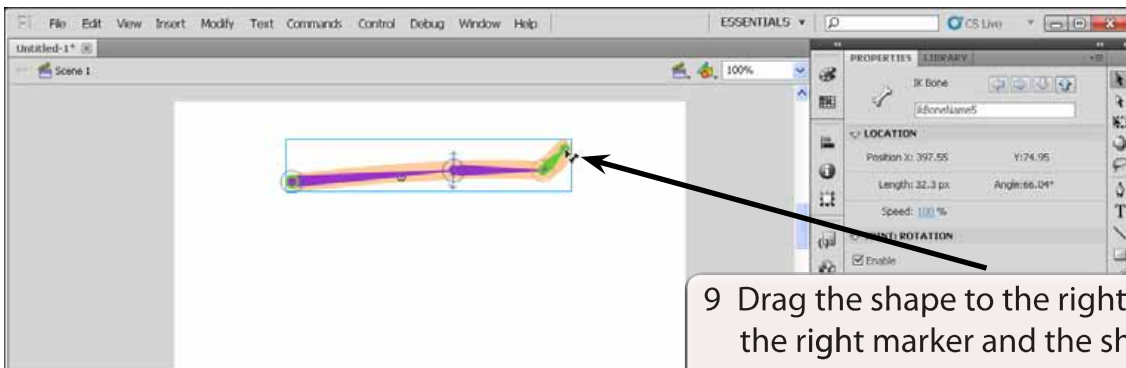
5 In the PROPERTIES panel, turn off ENABLE in the JOINT ROTATION section.



8 Click on the centre bone and turn ENABLE on in the JOINT X TRANSLATION section.



9 Drag the shape to the right from the right marker and the shape will stretch in the X or horizontal plane.



10 Press CTRL+Z or COMMAND+Z to undo the stretches.

11 Select the middle bone again and turn ENABLE back off in the JOINT X TRANSLATION section of the PROPERTIES panel.

