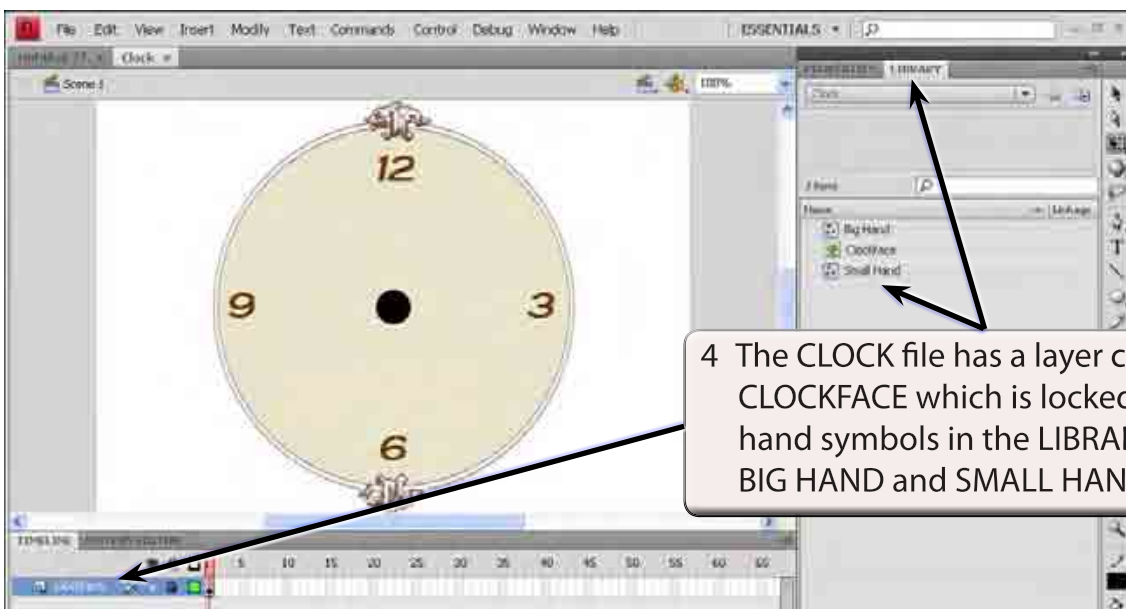# Fixed Point Animations

There are times when you want an object to stay fixed at one end and move around that point. Some examples of this are the hands of a clock, the dials on speedometers or fuel gauges, or levels in a computer game. In this chapter fixed point animations will be demonstrated by animating a clock that has been prepared for you. The hands will be animated to move from 3 o'clock to 4 o'clock.

Loading the Prepared File

1   Load Flash and click on the OPEN button or close the current file and click on the OPEN button.

2   Access the FLASHcs4 SUPPORT FILES, open the CHAPTER 8 folder and load the file:

Clock

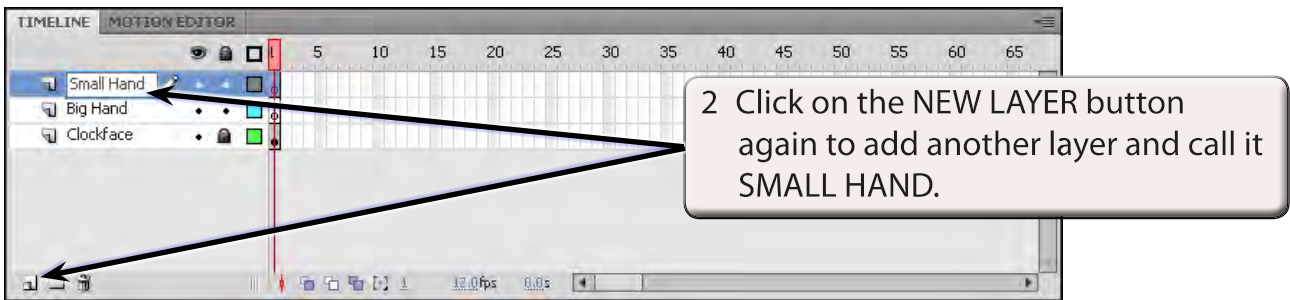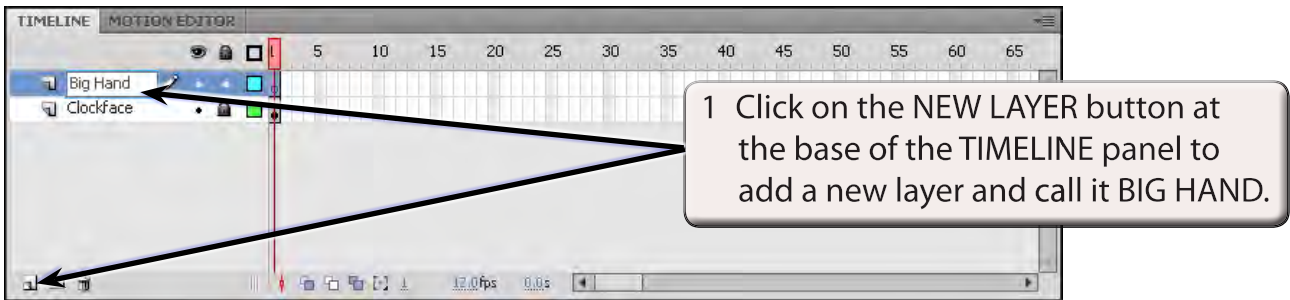3   Open the LIBRARY panel (or press CTRL+L or COMMAND+L to open it).

4 The CLOCK file has a layer called CLOCKFACE which is locked and two hand symbols in the LIBRARY panel, BIG HAND and SMALL HAND.

5   These resources will be used to complete the animation.

6   Use SAVE AS from the FILE menu to save the file in your STORAGE folder under the name:

Clock

Adding Layers

Two extra layers will be needed, one for the BIG HAND and the other for the SMALL HAND.

1 Click on the NEW LAYER button at the base of the TIMELINE panel to add a new layer and call it BIG HAND.

2 Click on the NEW LAYER button again to add another layer and call it SMALL HAND.
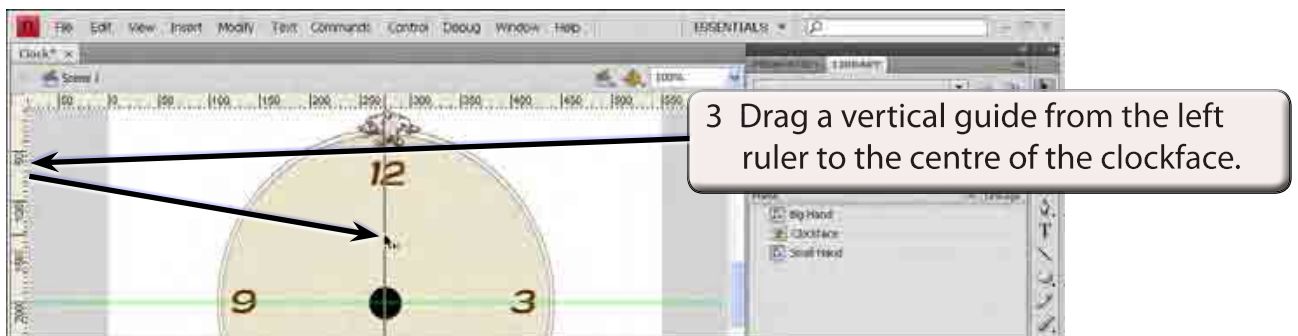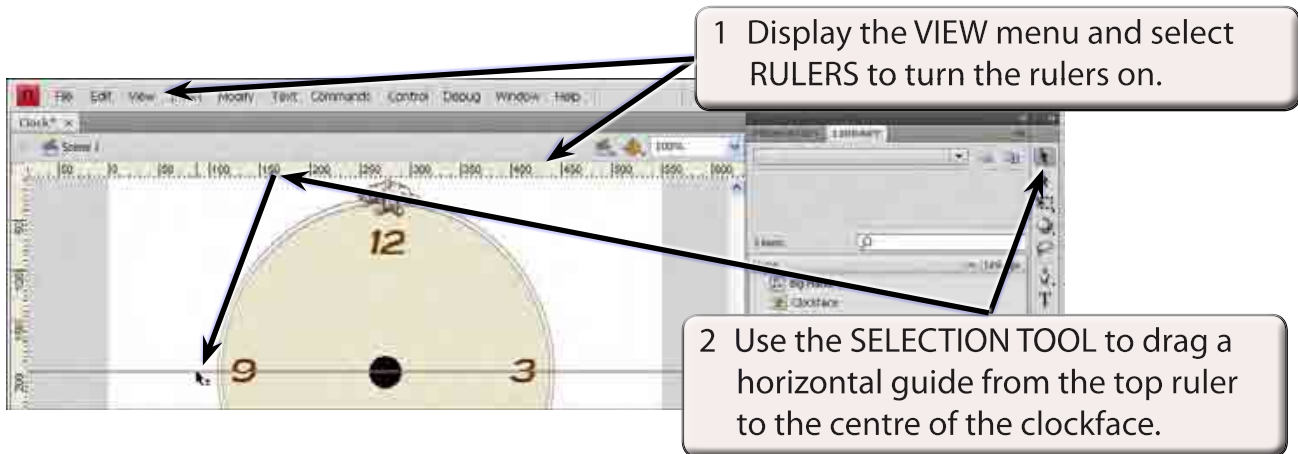
Inserting the Clockface Frames

We will make this a 1 second animation (24 frames). Frames will need to be added to the CLOCKFACE layer so that the clockface stays on the screen throughout the animation.

Click on FRAME 24 of the CLOCKFACE layer and press the F5 key to insert an extra 23 frames to the layer.
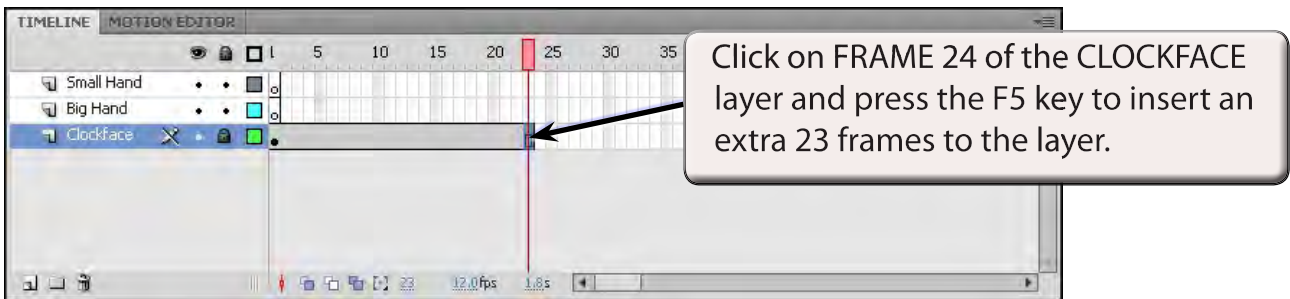
Adding Guides to the Screen

To assist with the placing of the clock hands on the screen GUIDES will be used to locate the centre of the clockface.

1 Display the VIEW menu and select RULERS to turn the rulers on.

2 Use the SELECTION TOOL to drag a horizontal guide from the top ruler to the centre of the clockface.

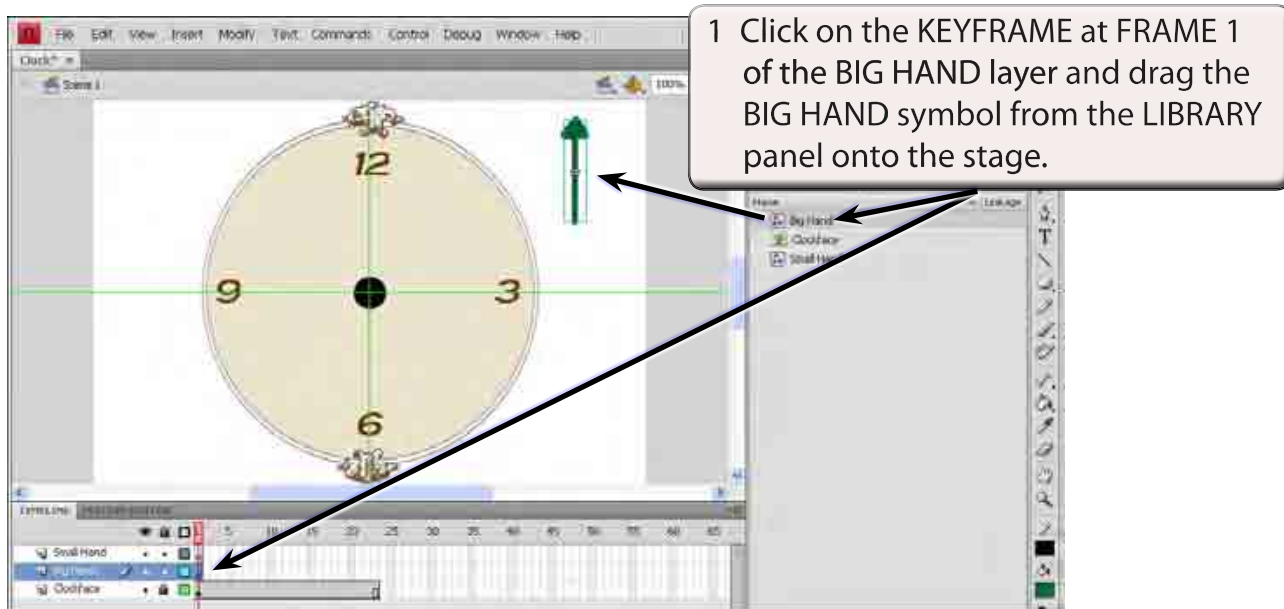3 Drag a vertical guide from the left ruler to the centre of the clockface.

4   Use the VIEW menu to turn the RULERS off.

Animating the Big Hand

The big hand will need to rotate around the clockface once. This can be done using a MOTION TWEEN and a PROPERTY KEYFRAME.

A   Adding the Symbol to the Animation

1 Click on the KEYFRAME at FRAME 1 of the BIG HAND layer and drag the BIG HAND symbol from the LIBRARY panel onto the stage.

2   Notice that the REGISTRATION MARKER is at the centre of the symbol.

B   Editing the Big Hand Symbol

In order to rotate the big hand at its base the REGISTRATION MARKER will need to be moved to the base of the hand.   The REGISTRATION MARKER controls where the rotation occurs.

1 Double click on the BIG HAND symbol in the LIBRARY panel to open the EDIT SYMBOL MODE screen.