ADOBE FLASH

Getting Started

Create a new

The create a new option box will display on opening the program.

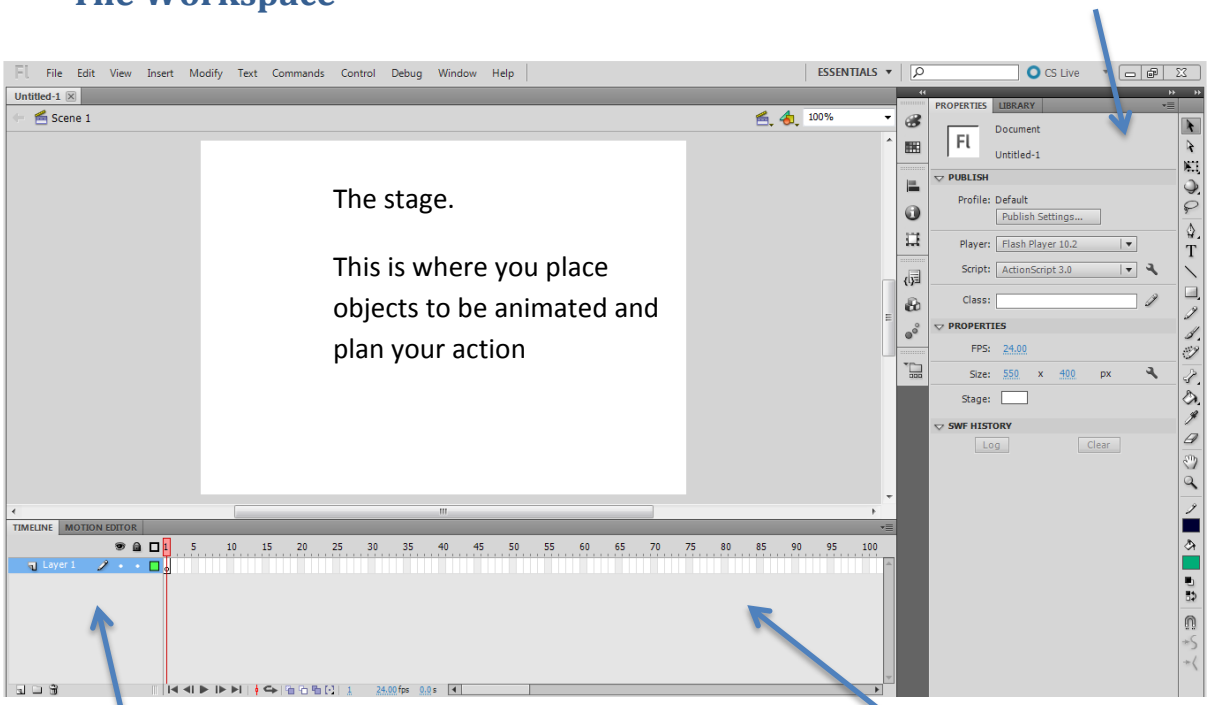
Go to Create New> Action Script 3.

The properties and library panel

This allows you to modify the properties of objects you have selected. It is context sensitive- only providing access to object properties when they are selected.

The library contains objects placed in the project.

The Workspace



The layers

Flash works with layers. Every object that moves independently must be on it's own layer. You create new layers using the icon at the bottom of the layers panel on the left.

The timeline.

This works in Frames per second. The fps are set below (a blue number). By default, it is set to 24, which is the standard for our broadcast system. Reducing the fps allows you smaller file sizes, but as the number decreases, so does the smoothness of your animation.

The tools

The tools sit on the side of your properties. They can be closed. IF you ever do this, go to the Window menu and select Tools to return them. This worksheet covers only those tools we will be using.

The select tool allows you to select and move objects on your stage.

The sub selection tool can be used to modify shapes by selecting and moving nodes and lines.

The free transform tool allows you to modify an objects size and shape and rotate or skew it.

The lasso tool allows you to select areas of your objects.

The pen tool allows you to draw objects which you can then modify using the sub selection tool.

The Text tool allows you to insert text.

The line tool is used to draw lines.

The rectangle tool allows you to draw shapes.

The pencil is a freehand line drawing tool.

The paintbrush allows you to paint fill.

The deco tool allows you to place on the stage pre-set images

The fill tool allows you to modify the colour of an object.

The eyedropper selects colours

The rubber rubs out objects

The hand moves your stage

The zoom allows you to zoom in on your stage.

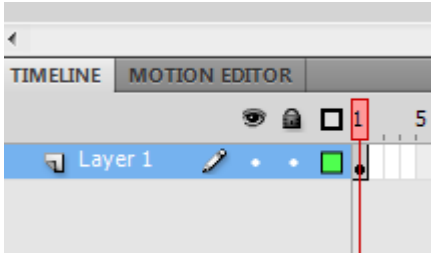
Pen colour is the outline colour while the fill colour is the inner colour. Clicking on either of these colours will open the colour selection panel.

A first simple animation.

Start by drawing a shape on the stage.

The shape tool is the rectangle icon. You will notice the small black triangle on the bottom of the icon. This indicates that there are additional shape options. Click and hold to see these. You can try a rectangle, oval, & polyStar. Primitive tools are almost identical; however they allow you to adjust angles and inner radius after they are created, unlike the rectangle and oval tools. Each shape can have different properties. Explore these then draw the shape.

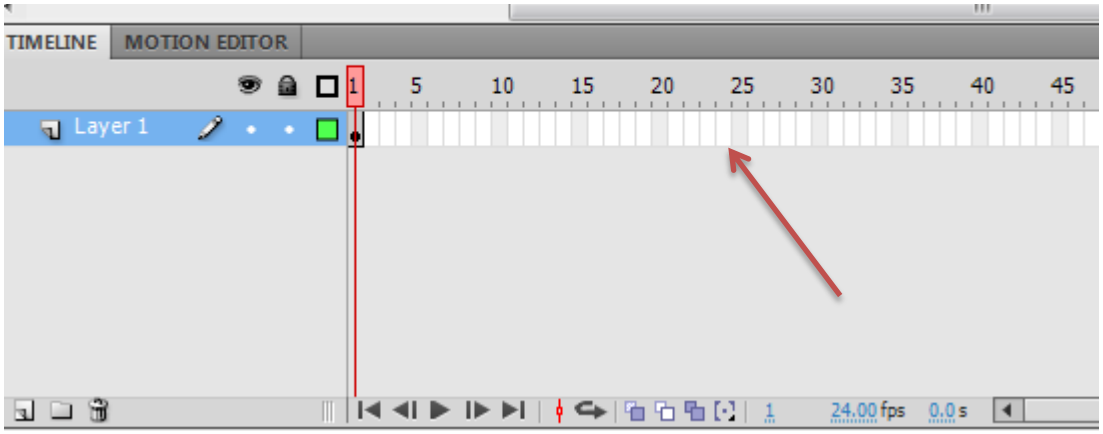
Explore shapes but delete all but the shape you wish to animate.



You will now notice that the first frame in the animation has a black dot in it. This dot was there before but was just an outline. This indicates a KEYFRAME. A dot that has only an outline is a blank keyframe, while a filled in dot indicates a keyframe that contains content.

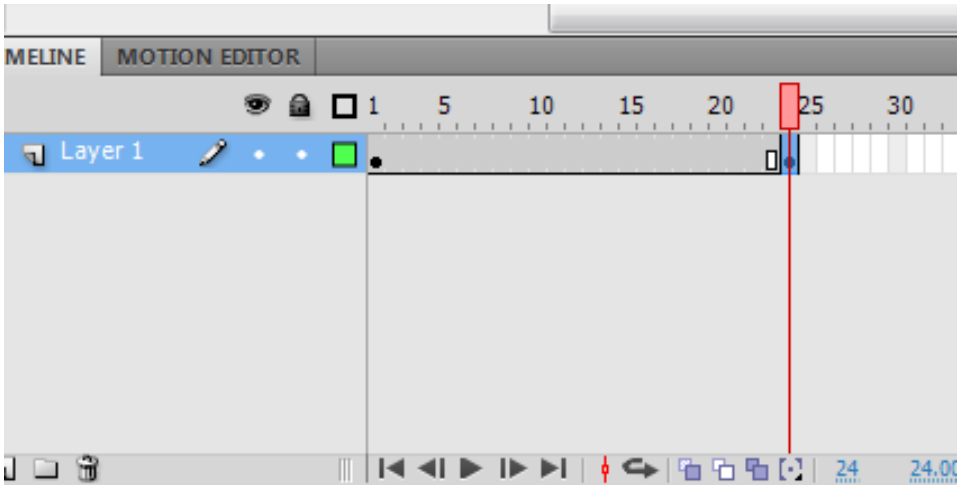
Keyframes are the key changes in an animation. To animate your object so that it can move from one side of the stage to the other, first use the selection tool to select it and drag it to your starting point.

Now we need to work with our timeline and keyframes.



If we are working with 24 frames per second (fps) and want our object to take one second to move across the stage, then place your mouse on frame 24 and right click. One of your options is to INSERT KEYFRAME. This will create a new key point in your animation. A BLANK KEYFRAME will create one

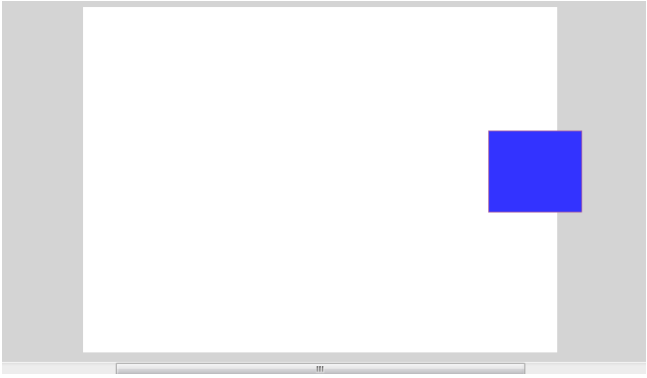
with no data in it. By inserting a keyframe we are placing a copy of the data in our pervious keyframe into this one as well. So we will have a shape at the beginning and the same shape at 24 frames.



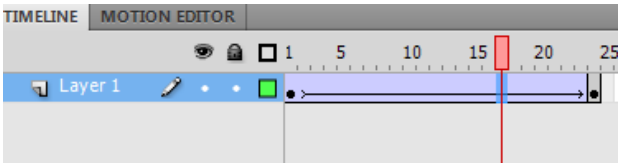
You can see that the second keyframe is black, indicating that it contains data.

The space between them is now grey.

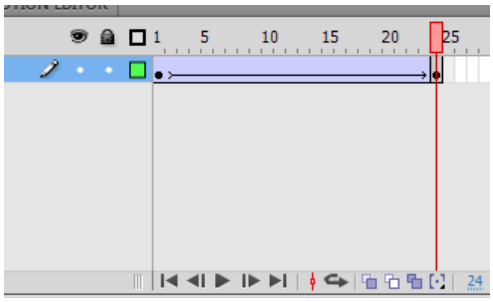
Now, with frame 24 selected, use the selection tool to move the shape to where you want it to finish.



The final step in animating this is to tell the computer to fill the grey frames in-between the two keyframes. This is called adding a “tween” or “tweening”. To do tis right click on the grey line and go to CREATE CLASSIS TWEEN at the top. You will notice other tween options. We will explore these shortly. When you have applied the tween, you will notice that you now have a black line indicating that there is a tween in place.



To see your animation go to CONTROL> PLAY, or press enter, or use the controls at the bottom of the timeline. Your animation will play from the red line- which is our play head. You can also drag this through the timeline to see the animation at your own pace. This is called “scrubbing”.



Using different tweens

Classic Tweens

We have already made a classic tween. The only rule for classic tweens is that you have on instance of a symbol at the start and one at the end. Classic tweens have a purple background.

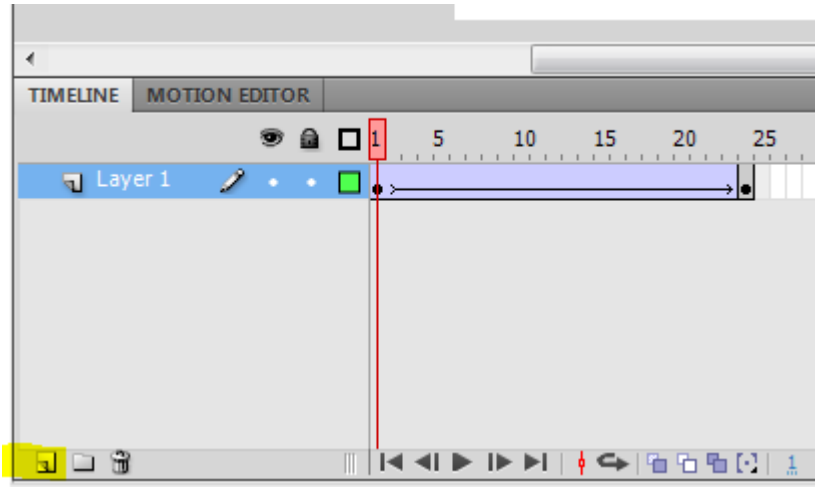
Shape Tweens

A shape tween is a morph animation between two shapes. This means that one shape will change into another.

Green backgrounds indicate shape tweens. If your green line has an arrow, this indicates that your tween is successful- it follows the rules. A dotted line indicates that there is a problem.

The rules are that you must define the start and end keyframe, and can have only one shape.

Let's begin by adding a layer to our existing animation. First return the play head to the beginning. Then click on the new layer icon at the bottom left of the timeline/layers panel. This will create a new layer for us to work on. Remember the rules;



1. that every object that moves independently must be on a different layer and
2. that only one shape may exist on a single layer to use a shape tween.

Now we will create the object that we want to animate. You may have noticed when you did the last tween that you could not access the shape tween option. It was greyed out. This is because the drawn shape was not suitable for this tween. A primitive shape is suitable, or a painted object.

Make sure that you have layer two selected. The selected layer is blue. Using the painting icon, paint a shape in the first keyframe. Keep it fairly simple. After you have painted something you can play with the object properties.

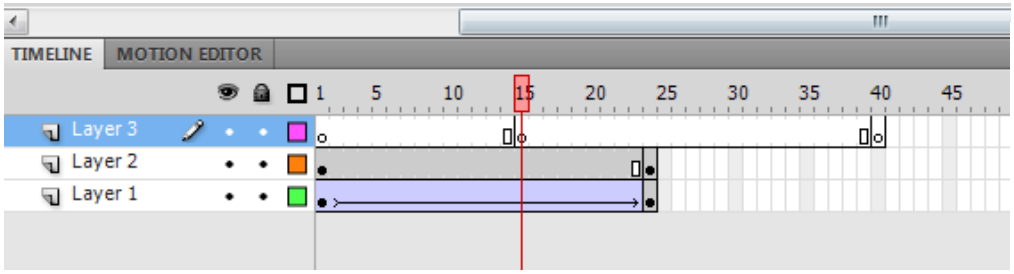
Now right click and insert a keyframe at the end time. This can remain 24 frames (1 second) or can be more or less. If it is more, your first shape will disappear after the second that it has been animated for. This is because it is no longer present in the timeline. With the end keyframe selected, modify the animation. This may be relocating it, changing the size or using the sub selection tool to modify the physical shape of the object.

When you have completed this, right click between the two keyframes and add a shape tween. Then play the animation to see the morph from the first to the second shape. You can also modify the colours between your frames, including this in the animation.

Motion Tweens

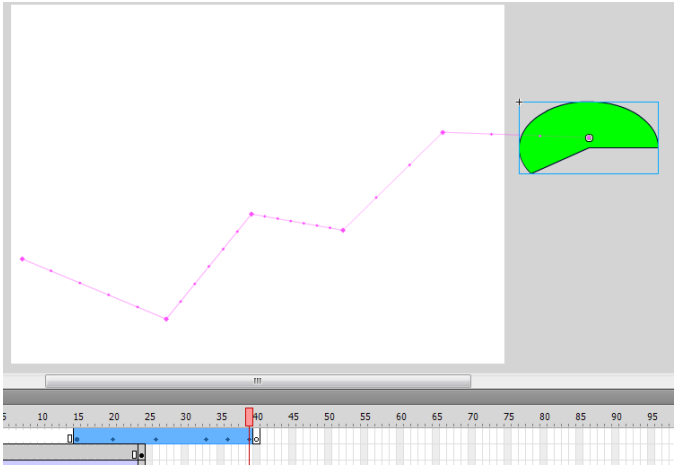
Motion tweens allow you to move an object along a path. A motion ween is a blue background. Motion tweens use symbols. To create a motion tween first create a new layer, as every object that moves independently of all other objects must be on its own layer, unless the other objects are no longer on that layer in the timeline. Now create the object to be animated in the appropriate keyframe. We are going to allow this new object to enter our animation later than the others, so to do this we need to select the keyframe where we want to start and insert into this a new BLANK KEYFRAME. This becomes the entry point for our new object. Select this frame and create an object using the shape tools.

Now go to the end point for that objects movement,



The object enters at 15 frames, and goes until 40 frames. The play head is on the entry frame, allowing us to create our object there.

To create the motion tween we do not want to place the end point and tell the computer to fill in the blanks. We are going to create a motion path that the object will now follow. To do this, right click on the timeline and create motion tween. You may be told that he object being animated must be converted to a symbol. Allow this. Now, place the play head (red line) at the first point where your object will change direction, so this could be at frame 20. Using your select tool, select the object and move it to the place where it will change direction. You will see that it is followed by a dotted line. This is its path. Repeat this process, selecting each pint where it changes direction with the play head, and moving the object as required until you have reached the end point for this animation.



You can return to the motion paths (the dotted lines) and edit these by placing the mouse on them. A curved line near your mouse indicates that if you click and drag you will curve the line, while an angle near the mouse indicates that you are selecting a point where the object changed direction, which you can move to a new location. These points where your object change direction appear on the timeline as diamonds. They are called property keyframes.

Removing Tweens

To remove a tween, right click on the line and select REMOVE TWEEN.