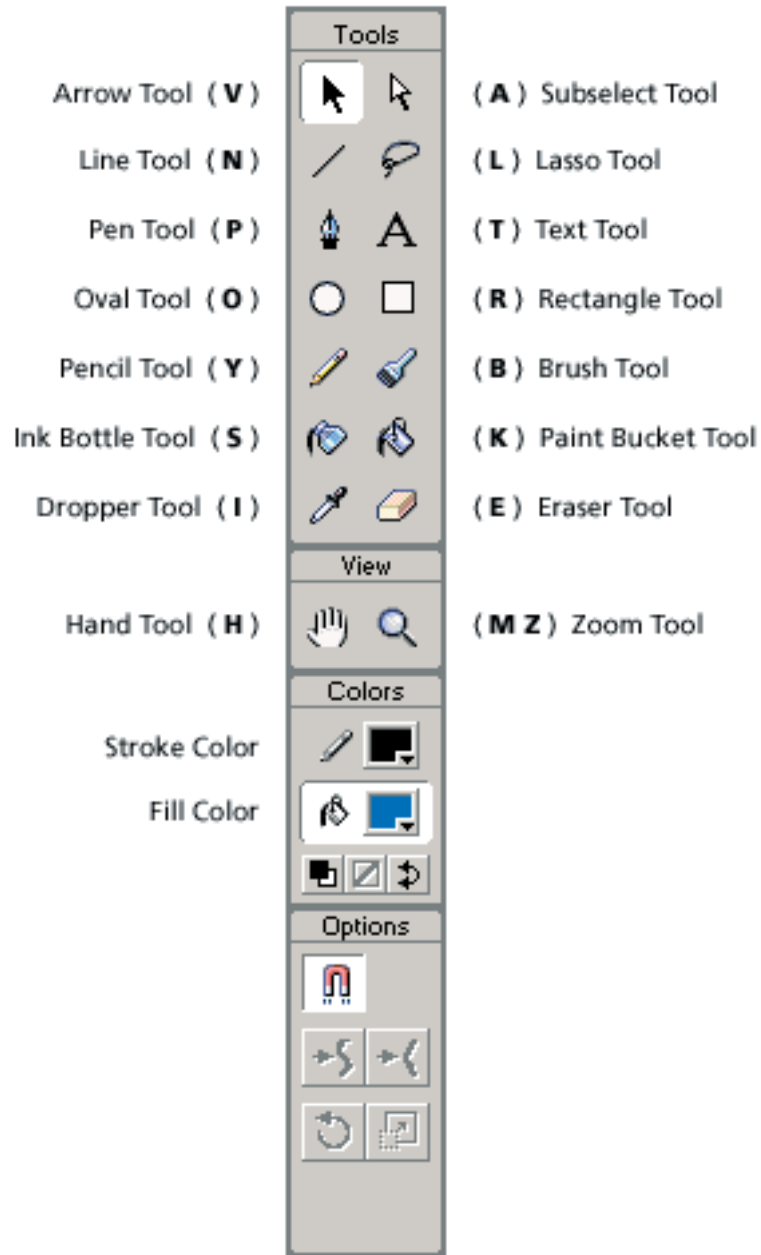


Flash 5 Animation Pack



Symbols

Symbols (there are a few different types) are reusable items, meaning there can be multiple instances of the same objects on the Stage. Symbols are necessary for interactivity and can play an important part in animation.

The Library holds symbols for reuse. Each movie you create has its own library. To open the library, click Window > Library. You can edit the symbol by double-clicking it.

Every time you drag a symbol from the Library to the Stage, you create a new instance of the symbol. You can modify instance properties, such as scale, rotation, transparency, and tint without altering the original. Color options can be found by clicking Window > Panels > Effect to open the Effects Panel.

Notice that you can click the symbol and move it around on the stage as if it were a group.

It is easy to turn a shape into a symbol, just select it and either click Insert > Convert to Symbol or key F8. This will prompt you for symbol information.

First, enter a symbol name (this is how it will be referenced in the library). Next, you are asked how the symbol will behave, as a Movie Clip, Button, or Graphic.

Movie Clips

Movie Clips are the most versatile of the symbol types. They are like another movie within themselves. You can also apply interaction to Movie Clips that you unable to with other symbols.

Graphics

Graphic symbols are also like movies within themselves; however, there are less options of adding interactivity to this type of symbol.

Buttons

Buttons are an interactive symbol that has functionality built-in from Flash. When editing a Button, you will find frames for different button states and for Hit, which is the size and shape of the area that allows the button to be used for interactivity between the button states.

Layers

Layers stack on top of one another vertically. Where there is nothing drawn on a layer, you can see through it to the layers below. Layers help you organize your artwork and animation.

To create a new layer, click Insert > Layer. To rename a layer, double-click on the layer name.

You also have the option to Show/Hide, Lock, and Outline each layer by clicking on the dots to the right of each layer name. Another way to access these options is to click Modify > Layer.

To change layer order, you can click and drag them by their name in the Timeline.

When you draw or edit your artwork, the active layer is highlighted in the Timeline. The pencil icon near the middle indicates that the layer is editable. If the pencil icon has a red slash through it, the layer is not editable, indicating that it may be locked.

Grouping was a method used to keep artwork separate but on the same layer.

Guide Layers

Guide layers are used in symbol animation (Motion Tweening). There are always two layers involved in this animation technique: the guide layer with a motion path (pen or pencil tool) and a linked normal layer with the symbol that will follow the path.

To set up guide layers, first select the normal layer to add a guide to (it is preferred that the layer not already have Motion Tweening). Then, click Insert > Motion Guide or click the Add Guide Layer button to the right of the Add New Layer button. To remove guide layers, you can simply delete them. On the guide layer, draw a path for the symbol to follow. With the Arrow Tool selected, look at the Options sections for the tool. Make sure the magnet icon is pressed/active (this will ensure that our symbol will snap to the guide). On the starting Keyframe of the animation, drag the symbol by the Registration Point (shown as a crosshair on the symbol) to a position on the drawn guide line (the registration point will show as an outlined circle that turns bold as it snaps to the guide; you can also use the extreme edges of your symbol as snapping points). On the stopping Keyframe of the animation, move the symbol in the same manner to another area of the guide line (make sure your guide layer's frame span extends into your animation if you do not see it). You can now apply Motion Tweening to the starting Keyframe.

There are special Frame panel options for Guide Layers. Orient to path will rotate your symbol as needed to point in the direction of the guided animation. Synchronize will make sure that the animation loops properly (dropping frames of animation if needed). Snap ensures using the symbol's registration point to follow the motion guide.

Frames

Think back to layers. Layers were stacked vertically. Frames, on the other hand, are stacked horizontally, starting with frame 1.

While Layers are only responsible for visibility of overlapping artwork, frames are also in charge of timing when animation comes into play. You can think of frames as pages in a flip-book. There are special frames called Keyframes. Keyframes are frames that can start a span of frames with the same artwork on a layer or stand alone. They are the frames that have a circle in them. Frames without the circles are standard frames. If you have a span of frames, you may notice a block in the last Keyframe, signifying the span's end.

Frames that do not have bold black borders are unused, meaning they are not part of your project but are available for use. Artwork on a Keyframe can be made to span across many frames by inserting frames. To do so, click on the Keyframe, then click Insert > Frame. A faster way of doing this is pressing the F5 key, which adds the amount of frames you have selected (ie. if one frame is selected, one frame will be added and if twenty frames are selected, twenty will be added). You can click anywhere within a frame span to select all the frames in the span. To select a single frame hold the Ctrl (PC) or Command (MAC) key and click on a frame or drag to make a small selection. To remove frames, you can use the same rules as above, except click Insert > Remove Frames or press Shift + F5 with the amount of frames to remove being selected.

You can split a span into a new section to work with by inserting a Keyframe along the span or directly after it. Just click Insert > Keyframe or press the F6 key. To insert a blank Keyframe, click Insert > Blank Keyframe or press the F7 key. To remove an added Keyframe on a layer, click the Keyframe and click Insert > Clear Keyframe or press Shift+F6.

With Frames selected, you can Reverse their order, Synchronize any contained symbols (to help with animation timing by dropping frames if needed), and convert them to Keyframes or Blank Keyframes by clicking Modify > Frames and then selecting an option.

Animation

One way is to create many individual Keyframes and manipulate artwork between them as necessary. Although it may be necessary when adding some animation details, this process can become quite a task, so we will also look at ways in which Flash helps.

Flash helps by using Tweened Animation. To create it you need two Keyframes (a starting Keyframe and a stopping Keyframe) and then Flash handles the animation between them (hence the word ‘tween’) in the frame span that follows the starting Keyframe. You want to be sure to only have one object Tweening per layer. If more than one object is Tweened on a layer, Flash will be confused and either perform no animation or unpredictable results.

There are two types of Tweening. Shape Tweening (for vector objects) occurs when you have one shape you wish to transform into another. Motion Tweening (for symbols) is used to transform one symbol to a transformed (Scale, Rotate, Skew, Tint, Brightness, Alpha, etc.) version of itself, not to another symbol. You cannot mix the type of Tweening (ie. Motion Tweening a vector shape), so be sure you use the right type of Tweening. If you Motion Tween a vector object, the vector object on only that keyframe will first be converted to a symbol and added to your library with a generic name automatically. That symbol will remain in your library until you choose to delete it.

You can control Tweening from the Frame panel by clicking Window > Panels > Frame. Click on your first keyframe and then select a type of Tweening. Easing will control how the animation eases into the beginning motion (easing in) or the ending motion (easing out). The Options section is used for guide layers.