

Tutorial 7: CELL BASED ANIMATION CS4/5

In this tutorial you will learn how to create cell based animation. The aim is to get a stickman to blink and smile.

Step 1: Set up the page

Open Flash and resize the work area to 600 X 450 for this example. Call it "stickman".

Step 2: Draw the face of a stickman

Draw the face of a stickman, placing each of the major components (eyes, face and mouth) on their own layer

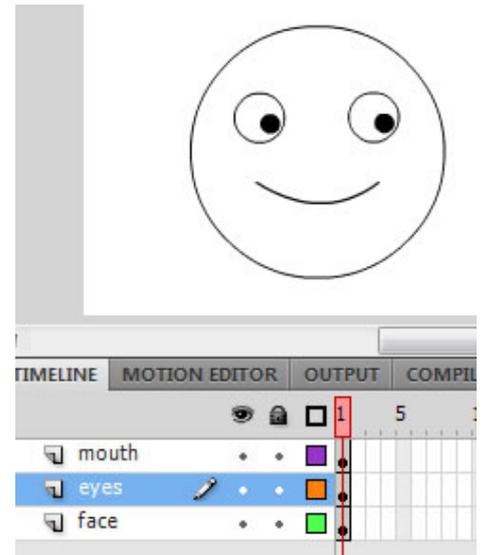
- Draw the head on layer 1 and call the layer "head"
Use the **Oval Tool** with a black stroke (outside) and a white fill (inside)

- Create a new layer 2. Draw the eyes on this layer and call the layer "eyes"

For the eye draw two circles, with the inside circle having a black fill. Copy and paste this eye to make the second eye

- Create a new layer 3. Draw the mouth on this layer and call the layer "mouth"
 - Use the **Line Tool** to draw a straight line

- Use the **Selection Tool**,  roll over the line, until you see an arrow with a curve. Double click the line and drag it to make the line into a curve (smile).

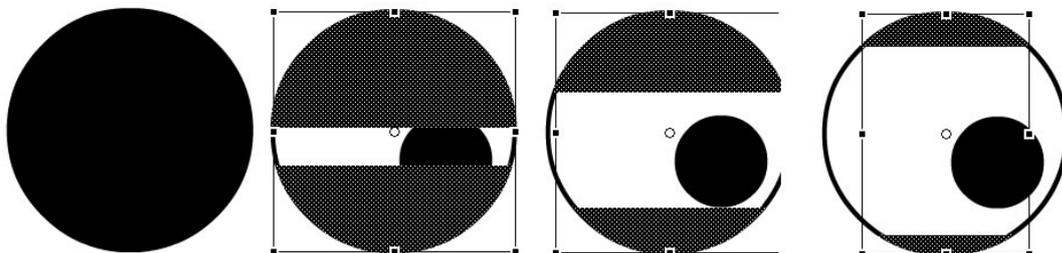


Notes:

1. check each drawing is on the correct layer
2. if the Snapping of graphics is annoying you can turn it off. **View | Snapping** and unselect all the ticks

Step 3: Animate a wink

Animate eyelids to cover the eye to make it wink



- Create a new layer called "eyelid" above the eye layer.

Create a fully closed eye

- Create a new keyframe in frame 2. Right click on the frame and select **Insert Keyframe**, or **F6**
- Copy the outside right eye graphic from eye layer
- Paste it into the eyelid layer over the top of the eye. To paste in place use **CTRL+SHIFT+V**
- Fill this graphic with black

- Break this graphic apart (CTRL B)
- Creating eyelids between closed and open
- Select the next frame in the eyelid layer and add a keyframe (F6)
 - Use the **Free Transform Tool**, select a small section from the middle of the eyelid and **delete**
 - Repeat this process adding new frames and making the eyelid smaller until the eye is open

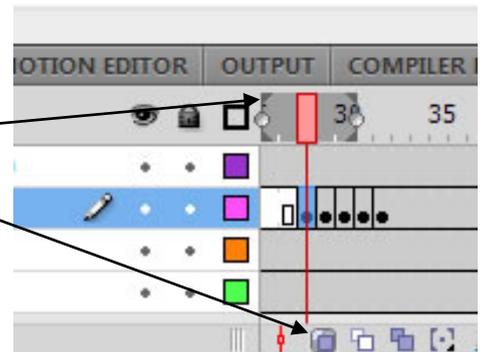
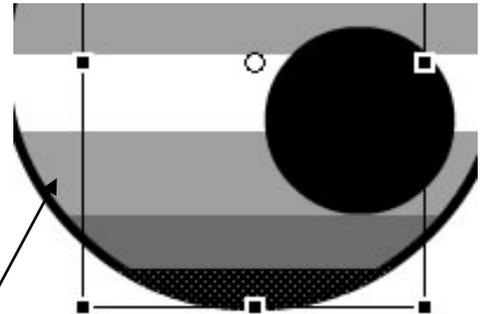
Put the blink animation together

- Select and copy eyelid frames
 - Hold the SHIFT key down and select the frames
 - Right hand click and select **Copy Frames**
 - Move to the next blank frame, right hand click and **Paste Frames**

Frames

- Select the original frames and revise the order
 - Hold the SHIFT key down and select the frames
 - Right hand click and select **Revise Frames**
- In a wink the eye is held shut momentarily
 - Insert frames when the eyelid is fully closed, using **F5**
- Add frames into the other layers so they are the same length as the eyelid layer, using F5

Note: Turn on the **Onion Skin**, so that you can see what was drawn on the last frame so that you can compare the changes. Changes from the previous or later frames are seen as a lighter colour. (See cell stickmanCS4.swf)



Step 4: Animate the eyes

Move the pupils in the eyes

- Repeat step 3 but instead move the pupils in the eyes, looking left and right

Step 5: Animate the mouth

Move the mouth

- Repeat step 3 but instead move the mouth

Step 6: Test animation

Use **Control | play** to test your animation so far. See if it is the same as the sample animation stickmanCS42.swf.

Step 7: Save your animation

Save as a Flash document (stickman2.fla)

Export as a Flash movie (stickman2.swf)

Extension:

1. Add other parts of the stickman's face on new layers
2. Create a walking person using cell based animation