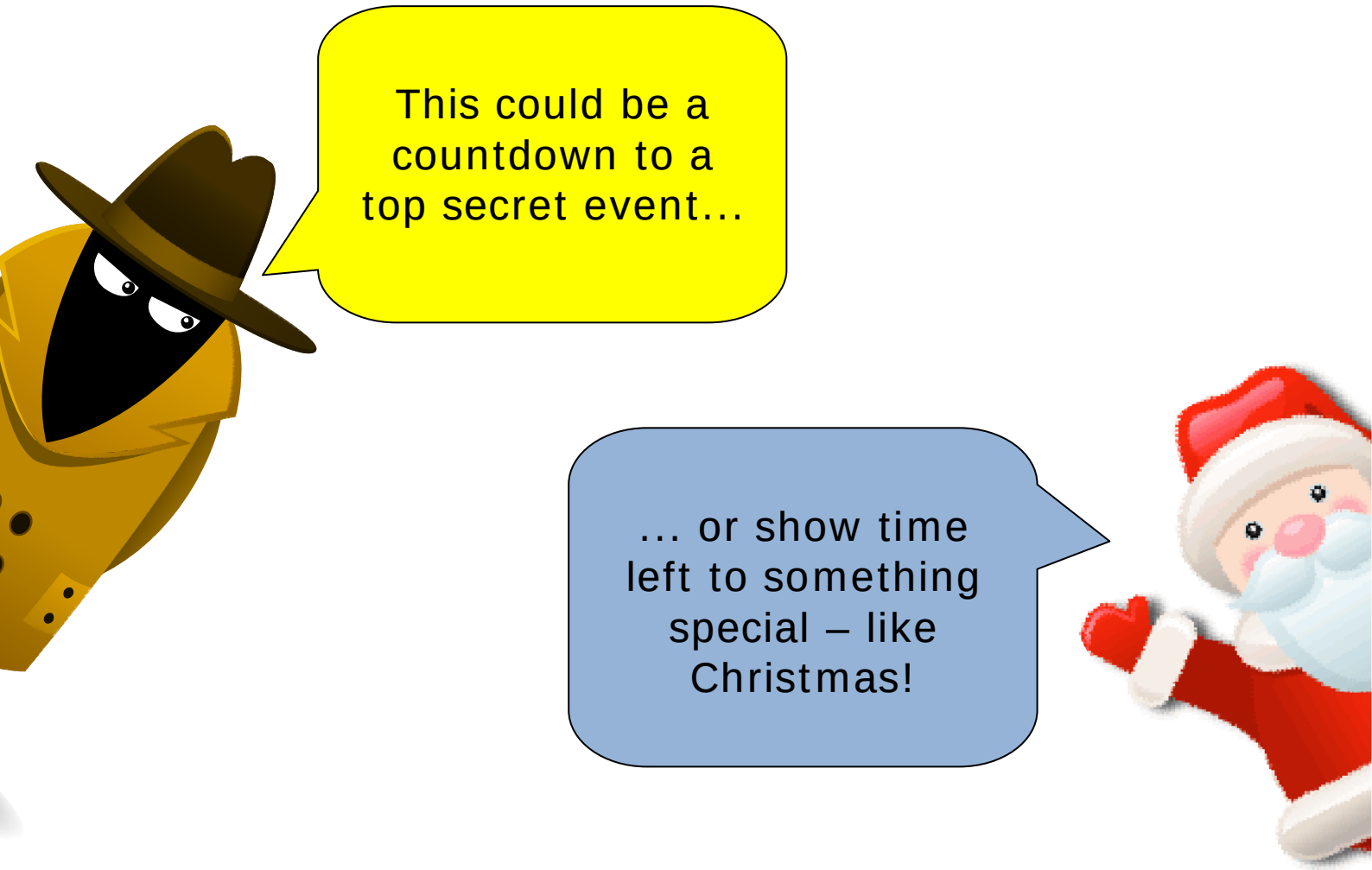
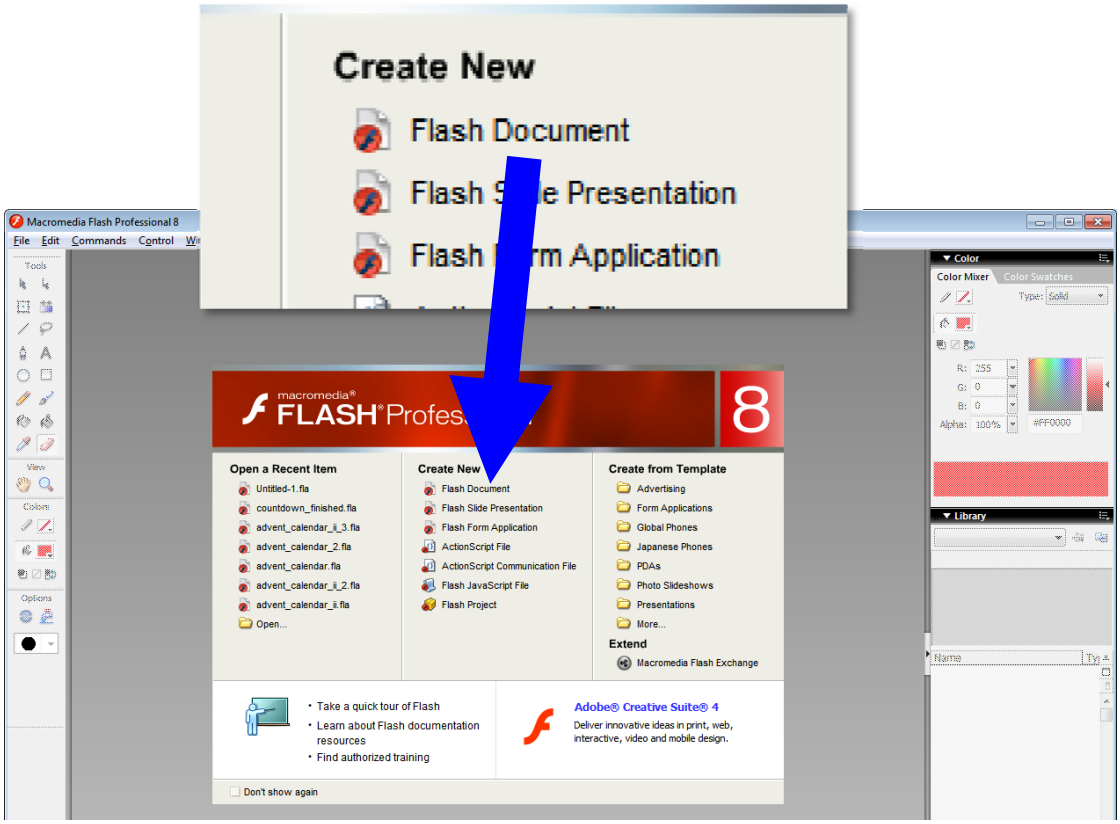
Creating a Flash countdown timer

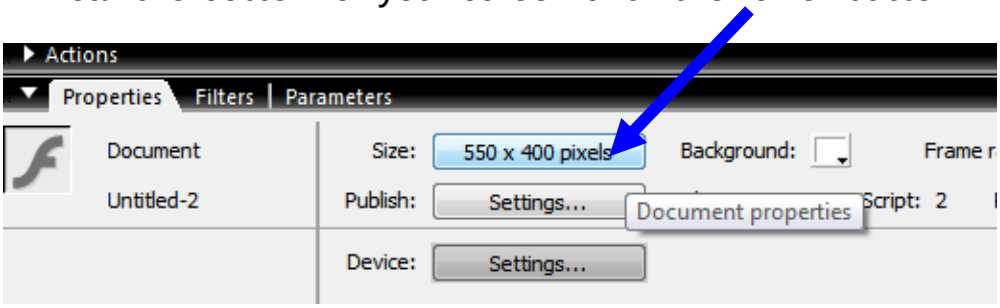
Enhance your Flash skills so you can develop an existing project



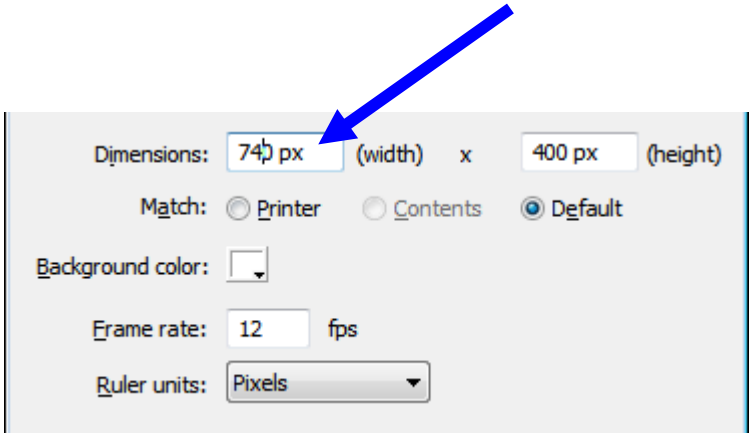
1. Load Flash and select ‘New Flash document’

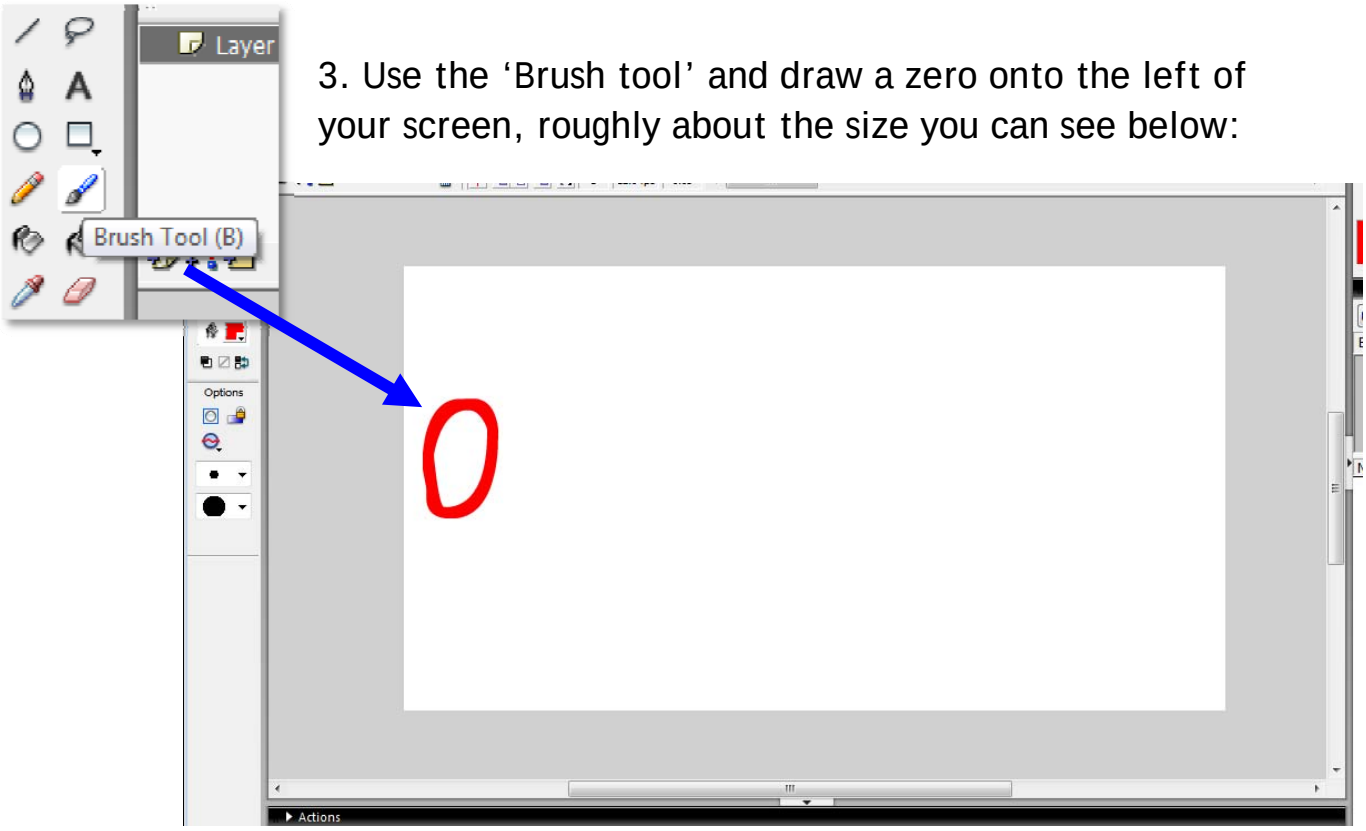


2. Near the bottom of your screen click the ‘Size’ button:



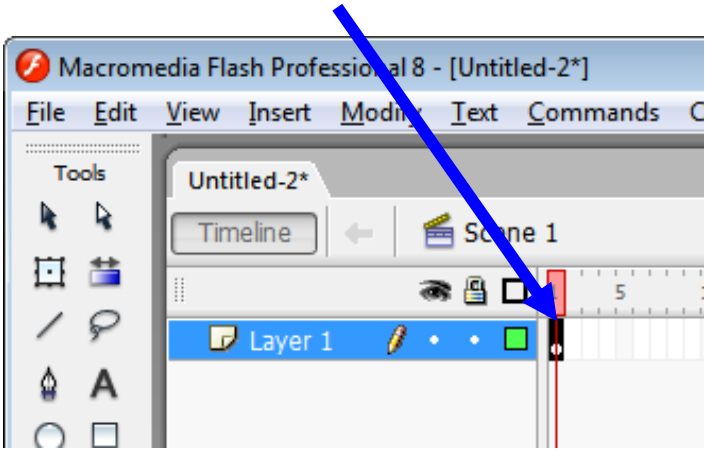
… and change the document properties to 740 wide by 400 high:





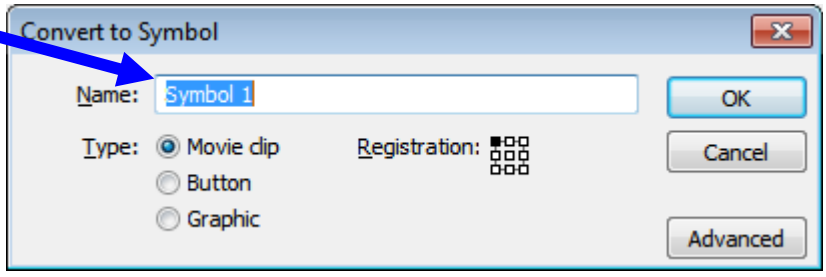
3. Use the ‘Brush tool’ and draw a zero onto the left of your screen, roughly about the size you can see below:

4. Click on the small dot on the timeline – this will select your ‘zero’.

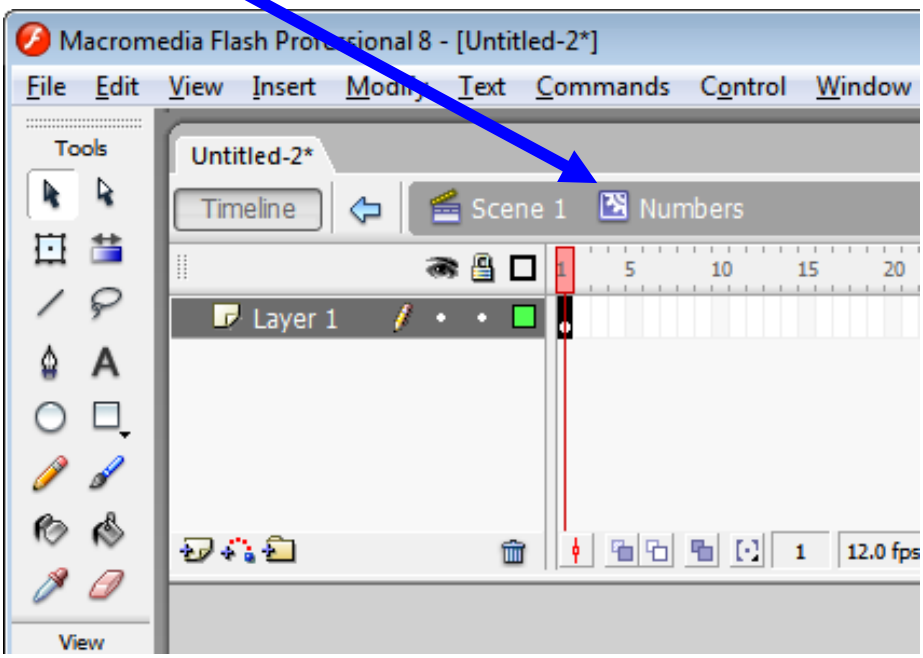


… press the F8 key on your keyboard (*if it doesn’t work, check to make you’ve pressed your ‘function lock’ key*)

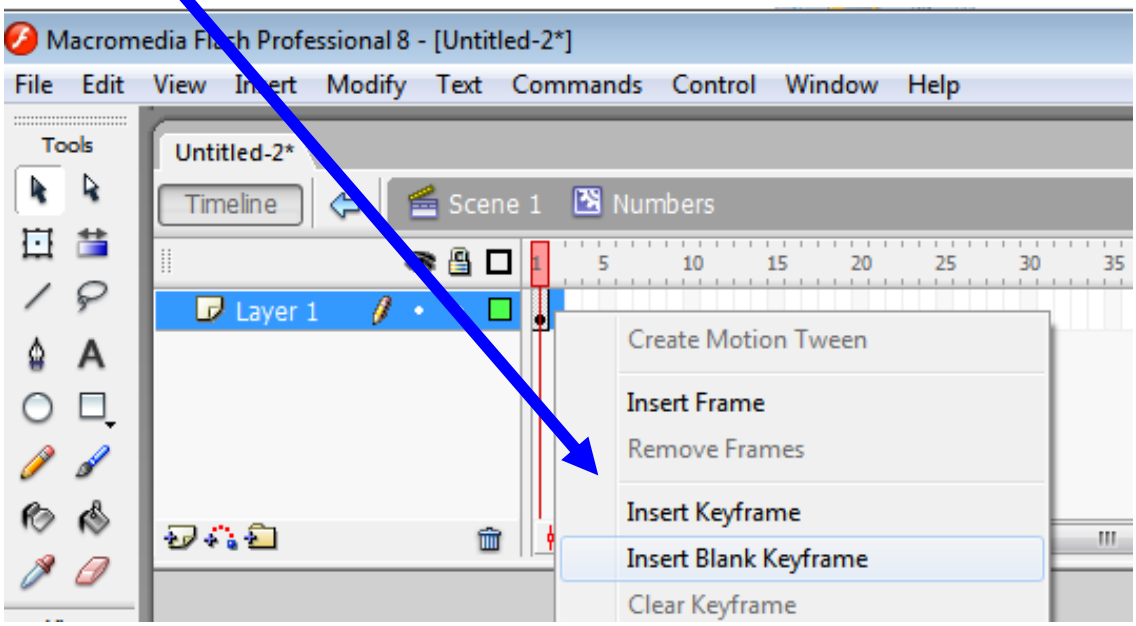
5. The ‘Convert to Symbol’ dialog box will appear. Change the name to ‘Numbers’ and press ‘OK’.



6. Using the ‘Selection Tool’ (the black arrow) double-click on the new zero. Your screen should look similar to this – showing ‘Scene 1’ and ‘Numbers’

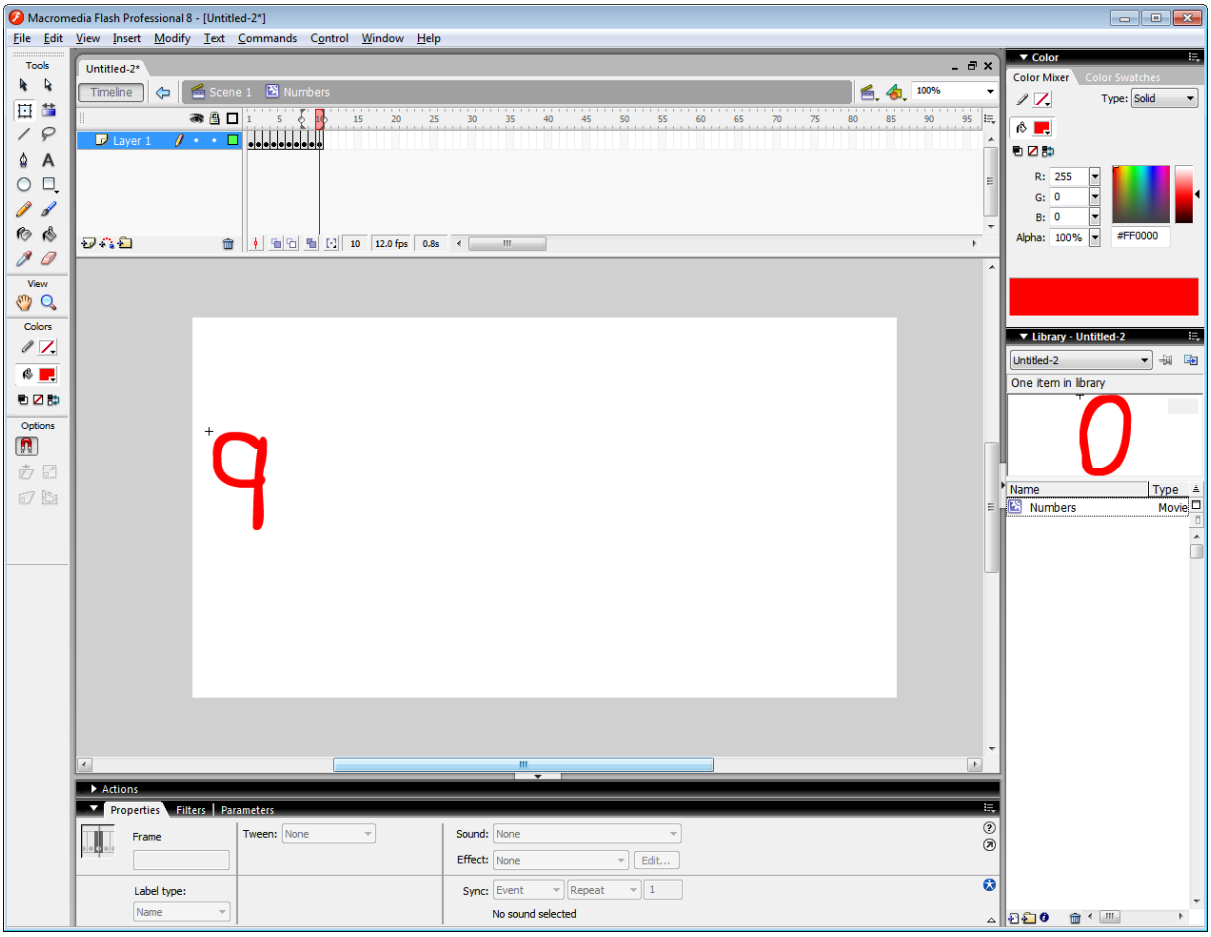


7. Hover over the existing frame, right-click and select ‘Insert Blank Keyframe’:

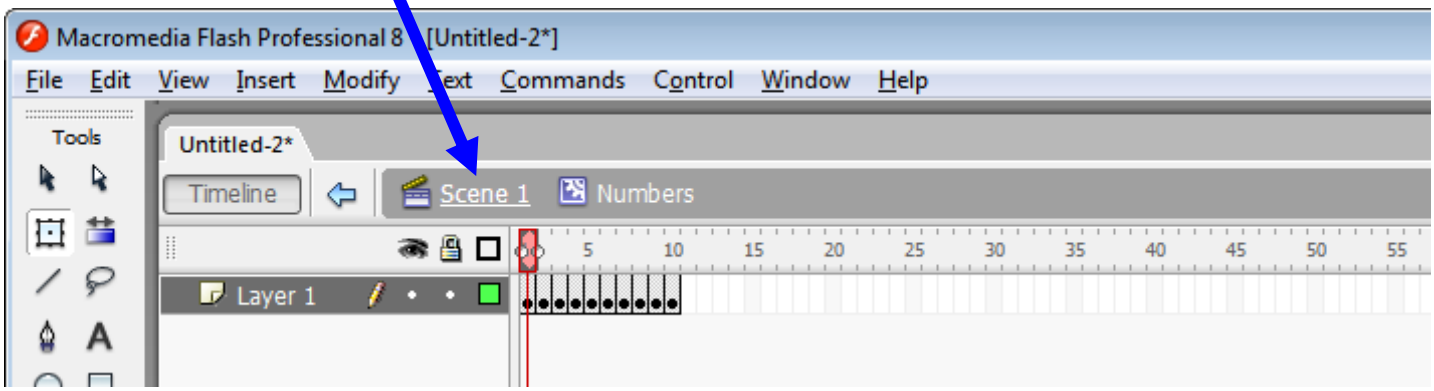


8. Draw a number 1 in this next frame. Try to keep it a similar size to the zero.

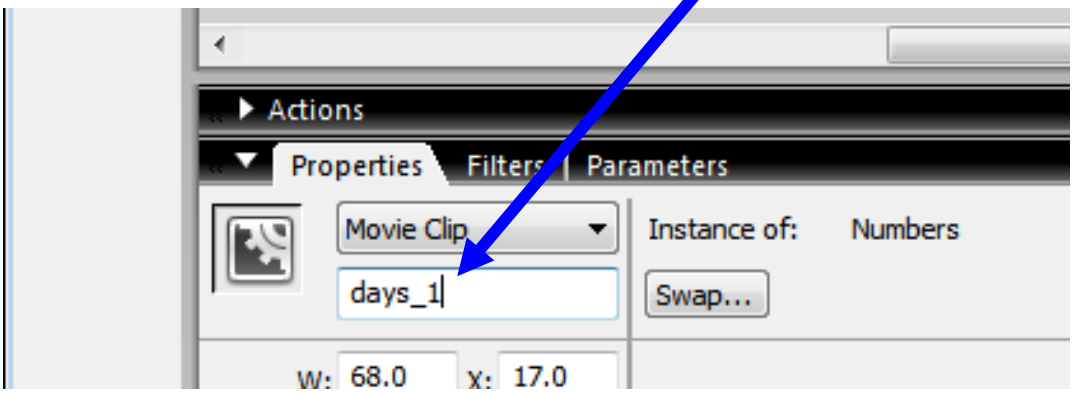
9. Repeat this process until you have all the numbers from 0 to 9 – your screen should look similar to this:



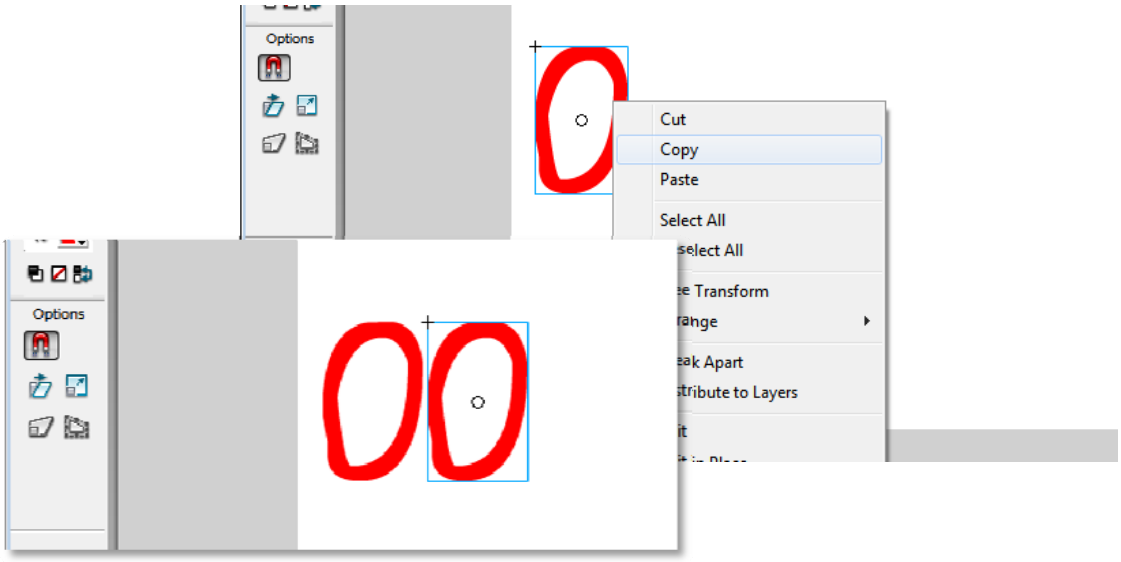
10. Click on ‘Scene 1’ to return to the top-level of your Flash document.



11. Once back to the main stage, use the selection tool (the black arrow) to select the zero. Look at the Properties panel near the bottom of the screen and add the name ‘days_1’.

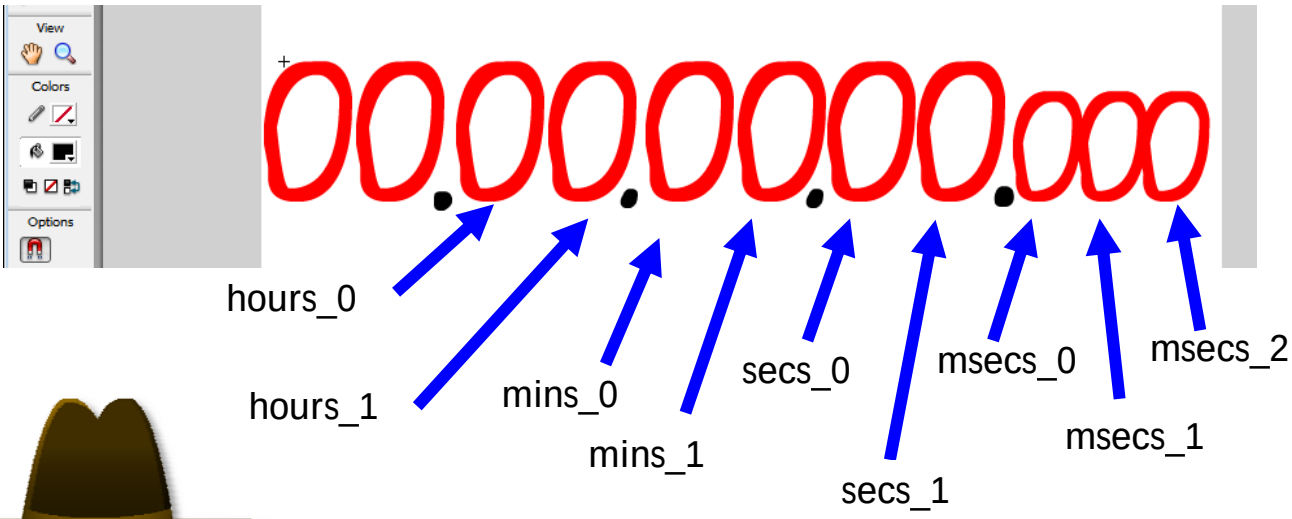


12. Right-click on the ‘zero’, select ‘Copy’ and then use the ‘Paste’ option so you have two ‘zeroes’.



13. Just as you named the first zero, make the name for the second one ‘days_2’. [Clue – remember to look in the Properties panel]

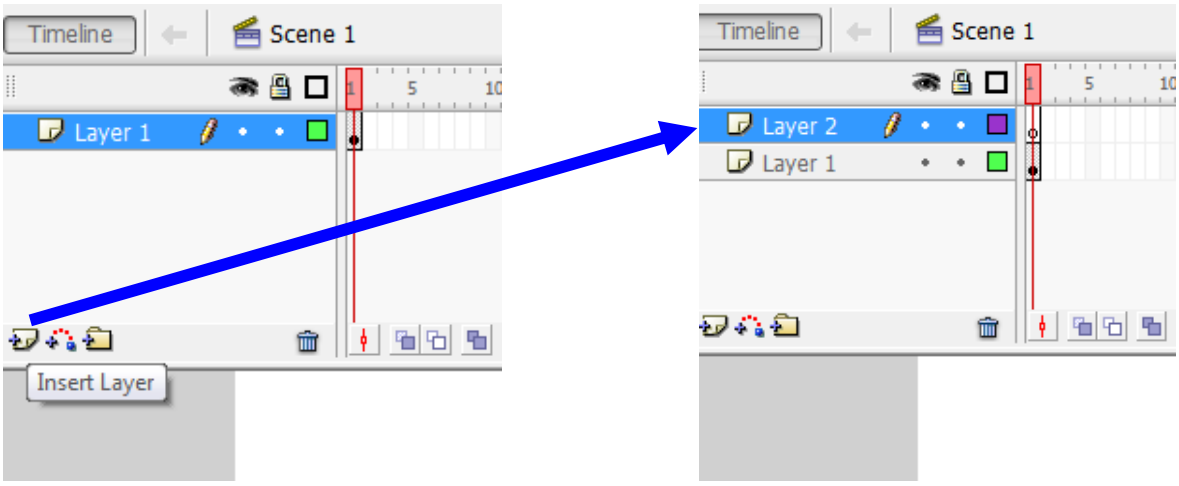
14. Repeat steps 12 and 13 until you have eleven zeroes shown on your page. Make sure you add the correct name for each:



This looks complex because it is! We are going to program this Flash file so it automatically counts down. The above labels are very important – so check you’ve got ‘em right.

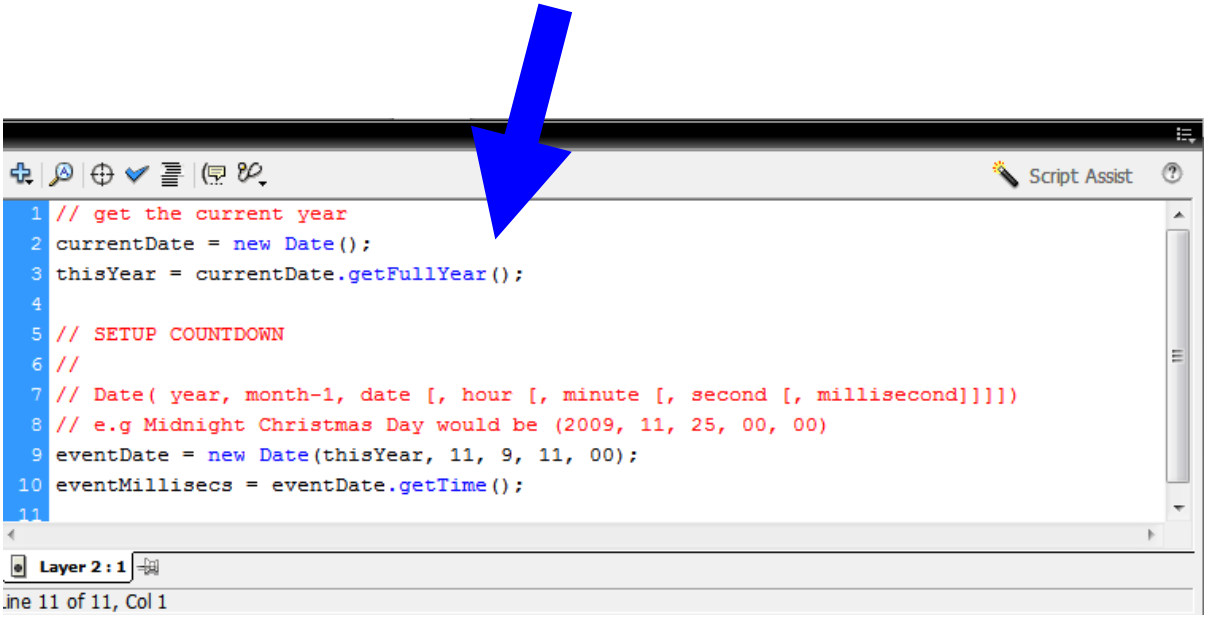
15. So it looks more like a countdown, try to find a way to add a small dot between the days, hours, minutes, seconds and milliseconds:

16. Near the top of your screen you should see 'Layer 1'. Use the 'Insert layer' option to add a new layer:



17. Click in this new layer and press the F9 key (this should trigger the 'Actions' panel. Copy and paste the code below:

```
// get the current year
currentDate = new Date();
thisYear = currentDate.getFullYear();

// SETUP COUNTDOWN
//
// Date( year, month-1, date [, hour [, minute [, second [, millisecond]]]])
// e.g Midnight Christmas Day would be (2009, 11, 25, 00, 00)
eventDate = new Date(thisYear, 11, 9, 11, 00);
eventMillisecs = eventDate.getTime();
```

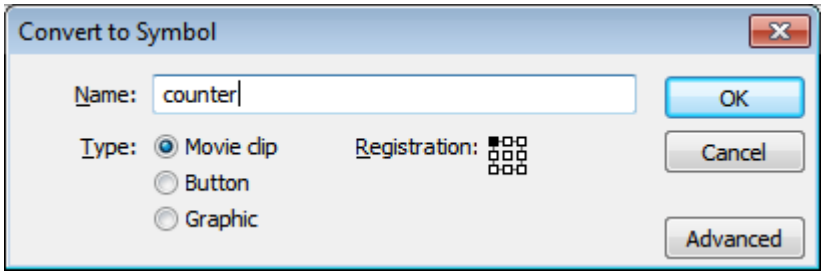


Look carefully at this code. What do you think it does?

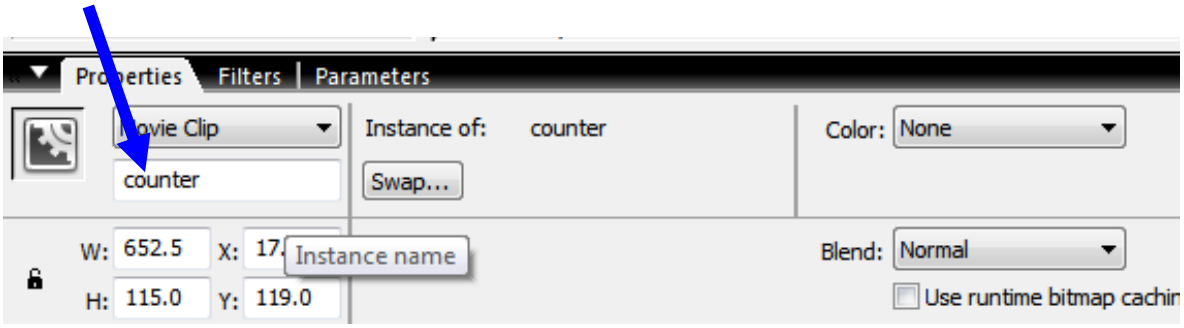
The ‘eventDate’ variable is vitally important for the entire countdown.

18. Try to change the code so it will countdown until Christmas Day. The ‘comments’ within the code (normally shown in grey) should help.

19. Click on the black dot shown on your Layer 1 – this should select all of your numbers. Press F8, call the symbol ‘counter’ and press ‘OK’.

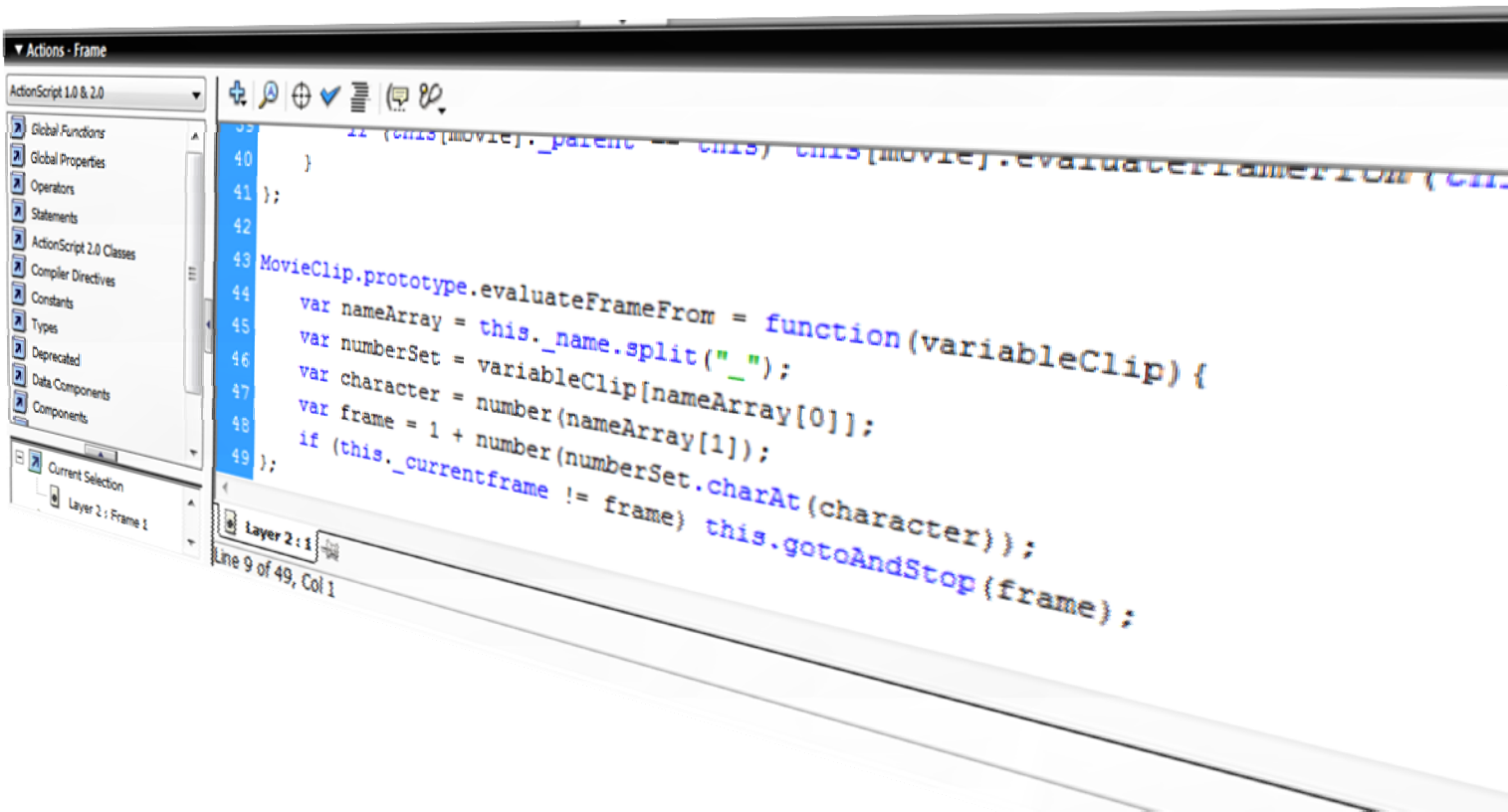


20. Look on the Properties panel and set the ‘Instance Name’ as ‘counter’:

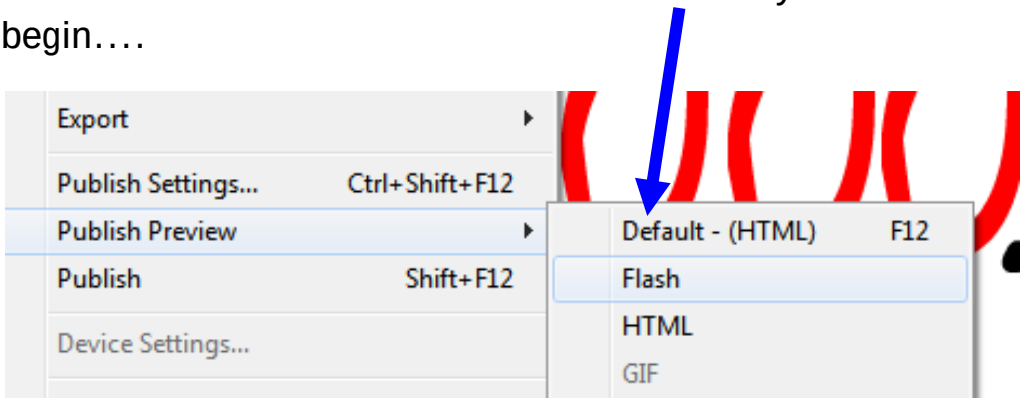


21. Click back to Layer 2 (as shown in step 17). Copy and paste the following code underneath the code you've edited:

```
counter.onEnterFrame = function(){
	currentDate = new Date();
	currentMillisecs = currentDate.getTime();
	this.msecs = eventMillisecs - currentMillisecs;
	if (this.msecs <= 0){
		// This is where you can add your own code - add another frame
		//play();
		return;
	}

	this.secs = Math.floor(this.msecs/1000); // 1000 millisecs = a second
	this.mins = Math.floor(this.secs/60); // 60 seconds make a minute
	this.hours = Math.floor(this.mins/60); // 60 minutes make a hour
	this.days = Math.floor(this.hours/24); // 24 hours make a day
	this.msecs = string(this.msecs % 1000);
	this.secs = string(this.secs % 60);
	this.mins = string(this.mins % 60);
	this.hours = string(this.hours % 24);
	this.days = string(this.days);

	while (this.msecs.length < 3) this.msecs = "0" + this.msecs;
	if (this.secs.length < 2) this.secs = "0" + this.secs;
	if (this.mins.length < 2) this.mins = "0" + this.mins;
	if (this.hours.length < 2) this.hours = "0" + this.hours;
	while (this.days.length < 3) this.days = "0" + this.days;
	for(movie in this){
		if (this[movie]._parent == this)
		this[movie].evaluateFrameFrom(this);
	}
};

MovieClip.prototype.evaluateFrameFrom = function(variableClip){
	var nameArray = this._name.split("_");
	var numberSet = variableClip[nameArray[0]];
	var character = number(nameArray[1]);
	var frame = 1 + number(numberSet.charAt(character));
	if (this._currentframe != frame) this.gotoAndStop(frame);
};
```



22. Press ‘File’ > ‘Publish Preview’ > ‘Flash’ – your countdown should begin....



If everything works as expected, your final challenge is to improve the presentation. Edit & improve your numbers – add background images & make it look good....

If something has gone wrong, look back carefully through the instructions. Did you add the correct labels to your numbers? Do you have enough numbers? Check...