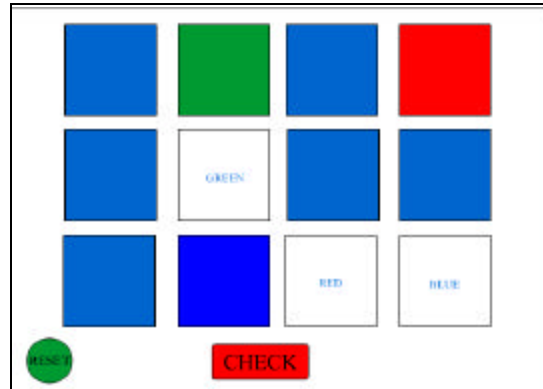
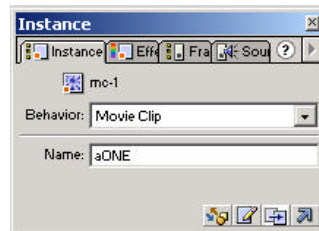


## Creating a Concentration game in Flash



1. Create a movie clip with 3 keyframes:
  - Frame 1: the “back” of the card. Script the frame “stop();”
  - Frame 2: the “front” of the card. You can put graphics or text here. Script it “stop();”
  - Frame 3: a buffer frame. Make it the same as frame 1. Script it “gotoAndPlay(1);”
2. Duplicate the movie clip (in the Library) and change frame 2 (the “face” of the “card”). Repeat until you have 6 pairs, or 12 movie clips.
3. Drag the movie clips onto the stage, arranging them on the screen.
4. One by one, click on the movie clips on the stage, and from the “Instance” panel, give them corresponding names. The “a” and “b” clips are matching pairs.

|        |        |
|--------|--------|
| aONE   | bONE   |
| aTWO   | bTWO   |
| aTHREE | bTHREE |
| aFOUR  | bFOUR  |
| aFIVE  | bFIVE  |
| aSIX   | bSIX   |



5. Script each of the movie clips as follows:

```
onClipEvent (mouseDown) {
    if (hitTest(_root._xmouse, _root._ymouse, false)) {
        if (this._currentFrame == 1) {
            gotoAndStop (2);
            _root.flip(String(this._name));
        }
    }
}
```

6. Make a “Check” button inside a movie clip
  - Make a button with the word “Check” on it.
  - Make a movie clip
  - Insert the button into the movie clip
  - Script the button:
 

```
on (release){
    _root.myEval();
}
```
  - Drag the movie clip onto the stage
  - In the instance panel, name the movie clip “checkMe”
7. Make a “Reset” button
  - Make a button
  - Drag the button onto the stage
  - Script the button:
 

```
on (release){
    _root.init();
}
```
8. Script the frame: There are 5 functions, in addition to the regular frame script that calls the init() function only once.

```
ifFrameLoaded (1) {
    _root.flip1 = "";
    _root.flip2 = "";
    if (_root.initialized != "go") {
        _root.init();
    }
    stop();
}

function flip(myImage){
    _root.playSound("flip");
    if (_root.flip1 == ""){
        _root.flip1 = myImage;
    } else {
        if (myImage != _root.flip1) {
            _root.flip2 = myImage;
            _root.checkMe._visible = true;
        }
    }
}

function playSound(thatSound){
    mySound = new Sound();
    mySound.attachSound(thatSound);
    mySound.start();
}
```

```

function evalMe() {
    if ((_root.flip1 != "") && (_root.flip2 != "")){
        if (_root.flip1.substr(1, _root.flip1.length) != _root.flip2.substr(1, _root.flip2.length)) {
            _root.flipback1();
        } else {
            _root.playSound("right");
        }
    }
    _root.flip1 = "";
    _root.flip2 = "";
}

function flipback1(){
    _root.playSound("wrong");
    eval(flip2).goToAndPlay(3);
    eval(flip1).goToAndPlay(3);
    _root.checkMe._visible = false;
}

function init(){
    _root.checkMe._visible = false;

    //Here's where we put the scramble function.
    //Make sure that we only do this once
    initialized = "go";

    //Flip all the cards over.
    _root.aONE.goToAndStop(1);
    _root.aTWO.goToAndStop(1);
    _root.aTHREE.goToAndStop(1);
    _root.aFOUR.goToAndStop(1);
    _root.aFIVE.goToAndStop(1);
    _root.aSIX.goToAndStop(1);
    _root.bONE.goToAndStop(1);
    _root.bTWO.goToAndStop(1);
    _root.bTHREE.goToAndStop(1);
    _root.bFOUR.goToAndStop(1);
    _root.bFIVE.goToAndStop(1);
    _root.bSIX.goToAndStop(1);

    //Build an array of the locations of the cards
    myItemArray= new Array("aONE", "aTWO", "aTHREE", "aFOUR", "aFIVE", "aSIX", "bONE", "bTWO", "bTHREE",
"bFOUR", "bFIVE", "bSIX");
    for (var x = 0; x < 12; x++){
        myItemArray[x] = parseInt(Math.random()*9) + myItemArray[x];
    }
    //Sort the array
    myItemArray.sort();
    //Now strip off the random number at the beginning of each item
    for (var x = 0; x < 12; x++){
        myItemArray[x] = myItemArray[x].substr(1, myItemArray[x].length);
    }
    // Build an array of x-y coordinates of the cards
    myXArray = new Array(_root.aONE._x, _root.aTWO._x, _root.aTHREE._x, _root.aFOUR._x, _root.aFIVE._x,
    _root.aSIX._x, _root.bONE._x, _root.bTWO._x, _root.bTHREE._x, _root.bFOUR._x, _root.bFIVE._x, _root.bSIX._x);
    myYArray = new Array(_root.aONE._y, _root.aTWO._y, _root.aTHREE._y, _root.aFOUR._y, _root.aFIVE._y,
    _root.aSIX._y, _root.bONE._y, _root.bTWO._y, _root.bTHREE._y, _root.bFOUR._y, _root.bFIVE._y, _root.bSIX._y);
    //Set the locs of the scrambled array to the locs of the static array of locs
    for (var t = 0; t < 12; t++){
        myElement = eval("_root." + myItemArray[t]);
        myElement._x = myXArray[t];
        myElement._y = myYArray[t];
    }
}

```