Flash bouncing balls

- Open New Flash ActionScript 3.0
- Choose Classic as the Design type located in the upper right corner

- The Properties window is located on the right
  - Set the size to 550 x 400 pixels
  - Set the frame rate (FPS) to 12 by left clicking and dragging left on the underlined number

- In the Properties window, choose a Stage color other than white by clicking on the color box
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-Select the same two colors for the Stroke (looks like a pencil with color box below) and Fill (looks like a paint bucket with color box below) colors that are located at the bottom of the tool bar.

-Select the Oval tool on the tool bar (O).

-Place the mouse on the Stage and left click and drag out a circular ball shape.

-The Timeline will now show a solid black dot on Layer 1. This is called a **KEYFRAME**.

-Click on frame 5 on Layer 1 in the Timeline (This is the vertical boxes below the numbers).

-Right click > Insert Keyframe (F6)
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<table>
<thead>
<tr>
<th>Frame 5 Keyframe Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>-This will add a new keyframe (solid black dot) to the timeline at frame 5.</td>
</tr>
<tr>
<td><em>Notice the area at the bottom of the timeline shows what frame location of the red playhead, as well as the frame rate (fps) and length of time in seconds (s)</em></td>
</tr>
<tr>
<td>-With frame 5 keyframe selected, click on the Selection Tool (V) [black arrow move tool]</td>
</tr>
<tr>
<td>-Place the mouse on the ball on the stage and move it to a different location</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Frame 10 Keyframe Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Click on frame 10 on Layer 1 in the timeline</td>
</tr>
<tr>
<td>-Insert a keyframe (F6)</td>
</tr>
<tr>
<td>-With frame 10 keyframe selected, click on the Selection Tool (V)</td>
</tr>
<tr>
<td>-Place the mouse on the ball on the stage and move it to a different location</td>
</tr>
</tbody>
</table>
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- Continue to repeat this process every 5 frames up to frame 30 of inserting a keyframe and then moving the ball on the stage. This will make 7 keyframes from 1 to 30.

- Click on every keyframe (black dot) individually (1, 5, 10, 15, 20, 25, 30) in the timeline and watch the ball on the stage to make sure it appears in a different location at every different keyframe.

- Click on the first keyframe on Layer 1 in the timeline, hold Shift and then click on the last keyframe in the timeline.
- All frames from 1 to 30 will highlight

- Right click anywhere within the highlight
- Select Create Classic Tween

- A solid black arrow will appear between each keyframe in the timeline
- Click Command + Enter to view your animation

- Label the Layer the color of the ball by double clicking on the word (Layer 1) in the timeline and typing in the name. Hit Return.
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- Lock the layer by clicking on the dot below the lock symbol for that layer in the timeline

<table>
<thead>
<tr>
<th>Unlocked</th>
<th>Locked</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Unlocked" /></td>
<td><img src="image2" alt="Locked" /></td>
</tr>
</tbody>
</table>

*It is very important to lock layers when you are done with a layer. It is very easy to make keyframes on the same layer that should be on different layers. Please learn to lock each layer when you are done working with that layer.*

- Choose a new color for the Stroke and Fill colors at the bottom of the tool bar. You can make the same color or different colors if you like.

- Create a new layer by clicking on the New Layer button below the layers in the timeline. (Similar to new layer button in Photoshop)

- Click on frame 1 on Layer 2, the frame box will highlight

![New Layer Button](image3)

![Frame Highlight](image4)
### Flash bouncing balls

- Select the Oval Tool (O) and drag out a new ball on the Stage in a different location from the first ball.

- Insert a keyframe at frame 5 and then use the Selection tool (V) to move the ball on the stage to a different location.

- Make sure to click on each keyframe between 1 and 30 and watch the ball on the stage to make sure it is in a different location each time.

- Shift click to highlight all the keyframes, and add a Classic Tween

- Label and Lock the layer

- Create 10 total bouncing balls. Each one must be on a different layer.

- Make each ball a different color.

- Make the balls different sizes

- Animate each ball for 30 frames

- Save as an FLA and Export as a SWF