

A. New File.

Step 1. Click File Menu > New.

Step 2. In the New Document dialog box, select **Web** and **Low**. Click Create.

B. Draw Pacman Circle.

Step 1. Click Insert Menu > New Symbol (**Ctrl-F8**).

Step 2. In Convert to Symbol dialog box, **Fig 1**
Name **Pacman1**
Type **Graphic**
click OK.

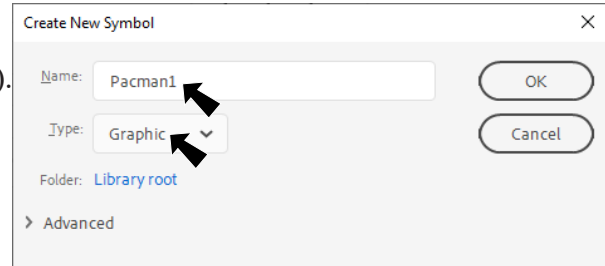




Fig. 1

Step 3. Press on **Rectangle Tool**  and click **Oval Tool**  (O) in the toolbar.

Step 4. Click the **Stroke Color**  at the bottom of the toolbar to open the color pop-up menu and click **No Color** , **Fig 2**.

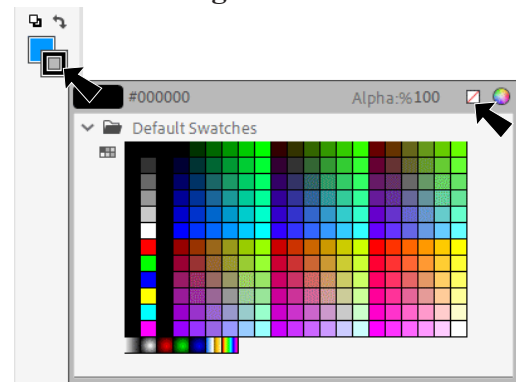



Fig. 2

Step 5. Draw a circle, **Fig. 3**. Hold down Shift key when dragging to constrain shape to a circle.

Step 6. Click **Selection Tool**  (V) in the toolbar and click the circle to select it.

Step 7. In the Properties panel (**Ctrl-F3**)
under Position and side, **Fig. 4**
Width and Height 40
X and Y -20 (this will center circle in symbol)



Fig. 3

Step 8. **Show All (Ctrl-3)**.

C. Save File As 'pacman'.

Step 1. Click File Menu > Save As.

Step 2. Key-in **pacman** for the filename and press ENTER.

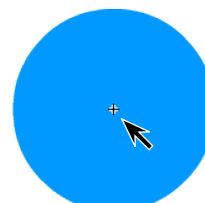


Fig. 5

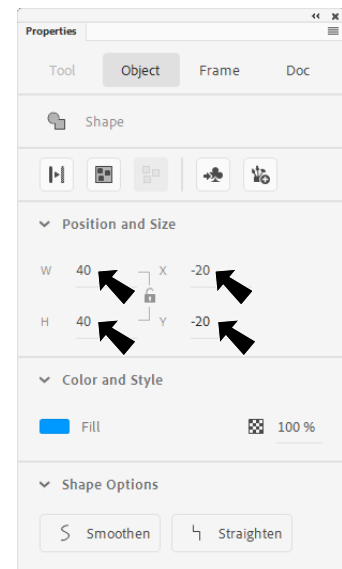



Fig. 4

D. Insert Keyframes in frames 2 and 3.

Step 1. In Layer 1 insert 2 keyframes. Press **F6** twice or click **Insert Keyframe**  twice from Timeline tools, **Fig 6**.

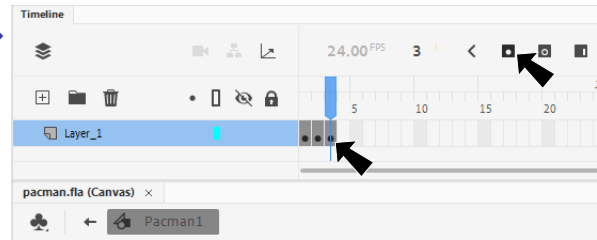


Fig. 6

E. Big Mouth (45 Degree Lines).

Step 1. Click on the **first keyframe** to move to Keyframe 1 in the timeline, **Fig. 7**.

Step 2. Click the **Line Tool**  (N) in the toolbar.

Step 3. In the Properties panel (**Ctrl-F3**) under Style, **Fig. 8**
Stroke style **Hairline**

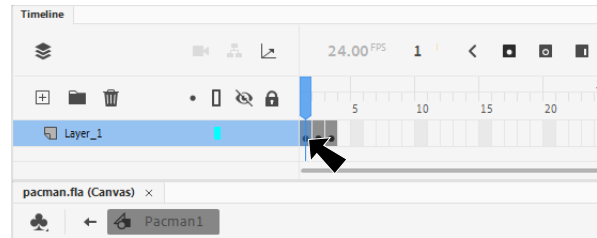



Fig. 7

Step 4. Draw lines from the center of circle at 45 degrees out beyond the circle edge. Hold down the Shift key to constraint to 45 degrees, **Fig. 9**.

Step 5. Delete the open mouth fill section of circle with the **Selection Tool**  (V), **Fig. 10**.

Step 6. Then delete the lines. Double click a line to select all lines, **Fig 11**.

Step 7. Save (**Ctrl-S**).

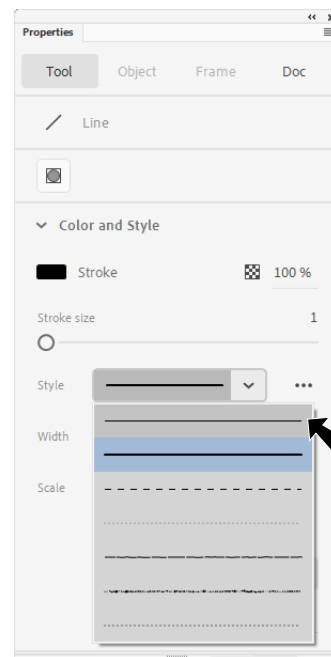


Fig. 8

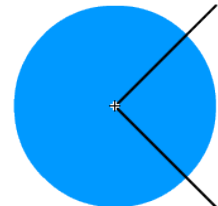


Fig. 9

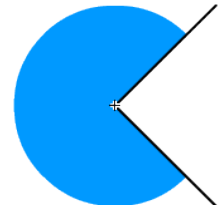


Fig. 10



Fig. 11

F. Medium Mouth (22 Degree Lines).

Step 1. Click on the **second keyframe** to move to Keyframe 2 in the timeline, **Fig. 12**.

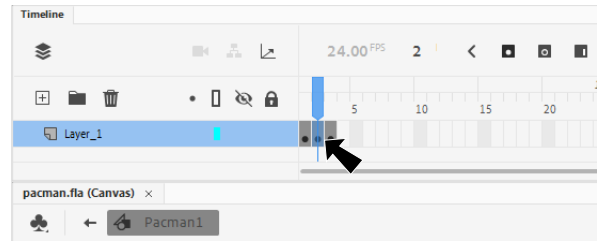


Fig. 12

Step 2. Click the **Line Tool**  (N) in the toolbar.

Step 3. Draw a horizontal line from center of circle out to right edge of circle, **Fig. 13**.

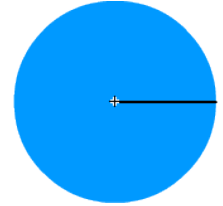



Fig. 13

Step 4. Click the **Free Transform Tool**  in the toolbar (Q).

Step 5. Click the line and move center  to left edge of line at center of circle, **Fig. 14**.

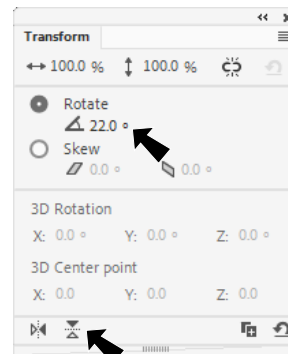


Fig. 15

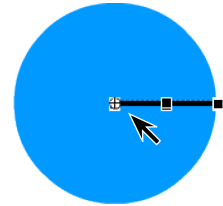


Fig. 14

Step 6. Display the Transform panel (**Ctrl-T**).
Key-in **22** for Rotate, **Fig. 15** and **Fig. 16**
press ENTER.

Step 7. Click the **Selection Tool**  (V) in the toolbar and keep line selected.

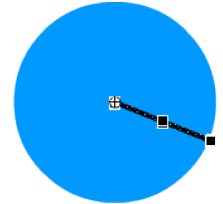


Fig. 16

Step 8. Click Edit Menu > Duplicate (**Ctrl-D**), **Fig. 17**.

Step 9. In the Transform panel (**Ctrl-T**).
Click Flip Selection Vertically, **Fig. 15** and **Fig. 18**

Step 10. Grab the left end of the line and drag it to center of circle. Snap the end to the end, **Fig. 19**.

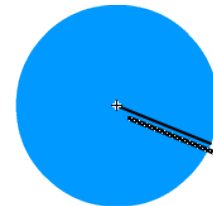


Fig. 17

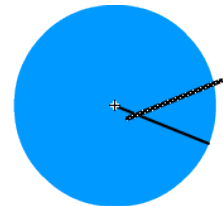


Fig. 18

Step 11. Delete the open mouth section of the circle and lines, **Fig. 20**.

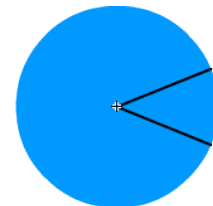


Fig. 19

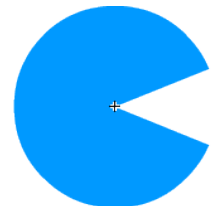



Fig. 20

G. Insert Frame After Each Keyframe.

Step 1. Click keyframe 1 of Layer 1 and click **Insert Frame**  (F5) from Timeline tools, **Fig 21**.

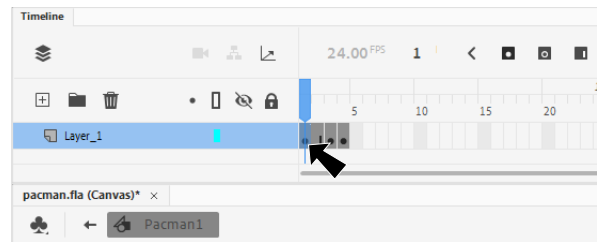


Fig. 21

Step 2. Repeat at keyframe 3. Click keyframe 3 in the timeline and press F5 to insert a frame, **Fig. 22**.

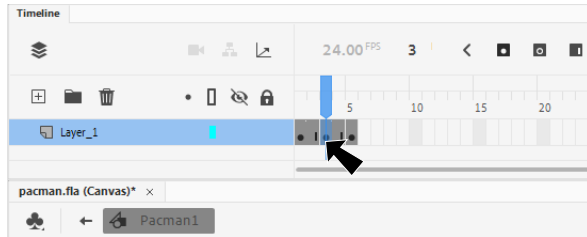


Fig. 22

Step 3. Repeat at keyframe 5. Click keyframe 5 in timeline and press F5 to insert frame, **Fig. 23**.

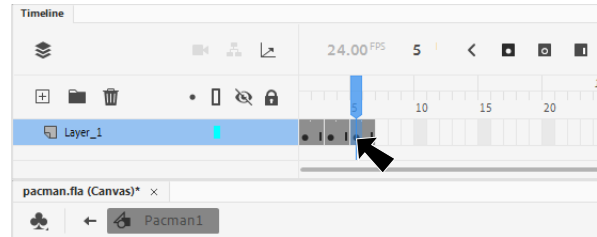


Fig. 23

H. Copy Half Open Mouth Frames

Step 1. Right click keyframe 3 and click **Copy Frames** from menu, **Fig. 24**.

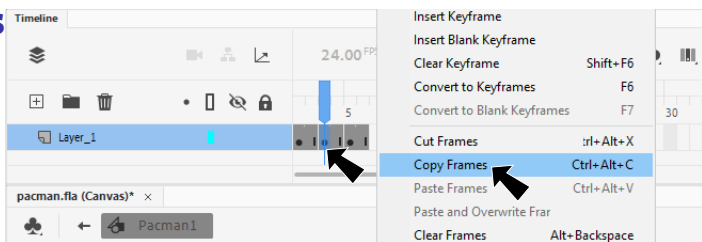


Fig. 24

Step 2. Right click frame 7 and click **Paste Frames** from menu, **Fig. 25**.

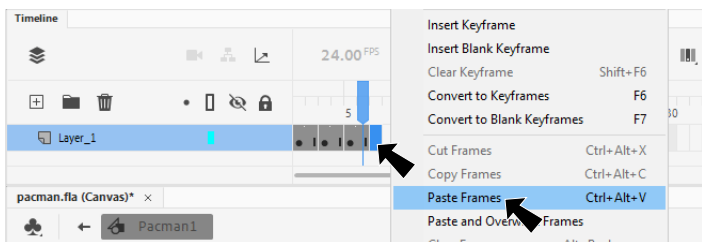


Fig. 25

Step 3. Click frame 7 and press F5 to insert frame, **Fig. 26**.

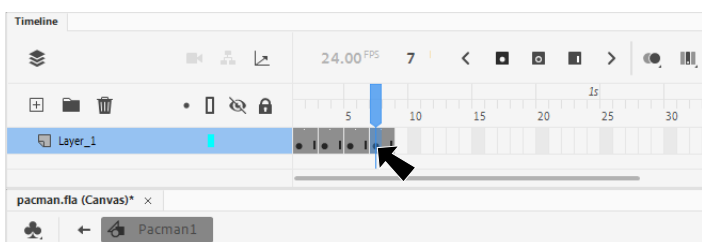


Fig. 26

Step 4. Save (Ctrl-S).

I. Test Symbol.

Step 1. Click **Loop Playback**  in the Timeline header.

Step 2. Drag **Frame Selectors**  to select all 8 frames, **Fig. 27**.

Step 3. Click **Play**  and click **Pause** .

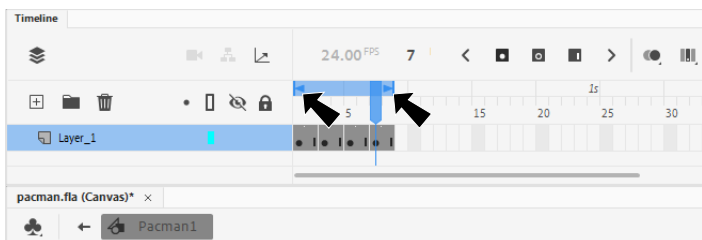





Fig. 27

J. Background Grid.

- Step 1. Click **Back**  at left end of Timeline to return to the scene. (**Ctrl-E**).
- Step 2. In the Document Setting panel (**Ctrl-J**)
Stage size Width 520 Height 400, Fig. 28
click OK.
- Step 3. Click View Menu > Grid > Edit Grid (**Ctrl-Alt-G**).
- Step 4. In the Grid panel (**Ctrl-Alt-G**)
check **Show grid**, Fig. 29
check **Snap to Grid**
Width  40 Height  40
click OK

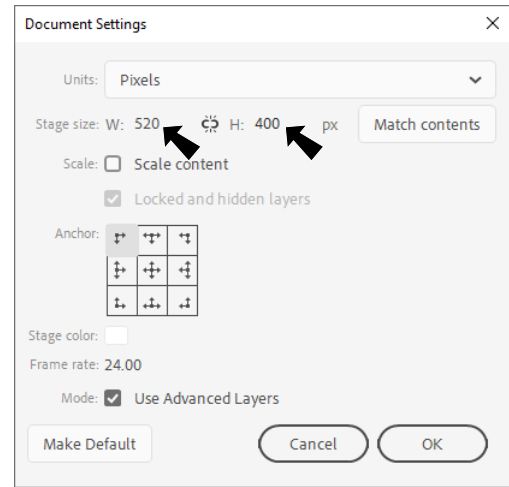





Fig. 28

K. Draw Rectangle Around Stage.

- Step 1. **Show All** (**Ctrl-3**).
- Step 2. Click the **Rectangle Tool**  (**R**) in the toolbar.
- Step 3. Click the **Fill Color**  at the bottom of the toolbar to open the color pop-up menu and click **No Color** , Fig. 30.
- Step 4. In the Properties panel (**Ctrl-F3**)
under Color and Style, Fig. 31
Stroke size **1**
- Step 5. Draw a rectangle around stage, Fig. 32. Start rectangle in top left corner of the stage and drag to bottom right corner of stage.

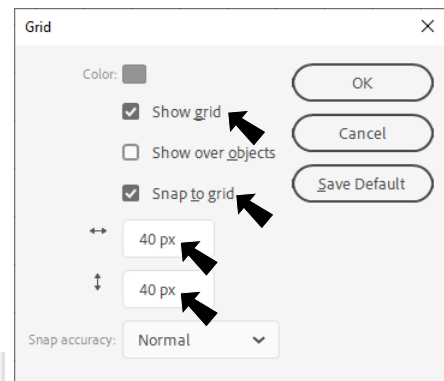


Fig. 29

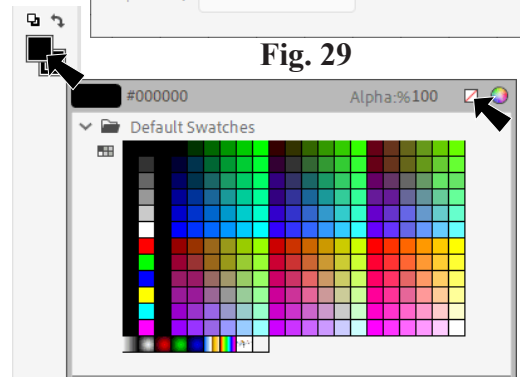


Fig. 30

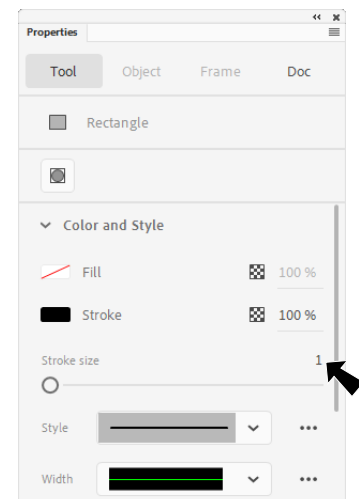


Fig. 31

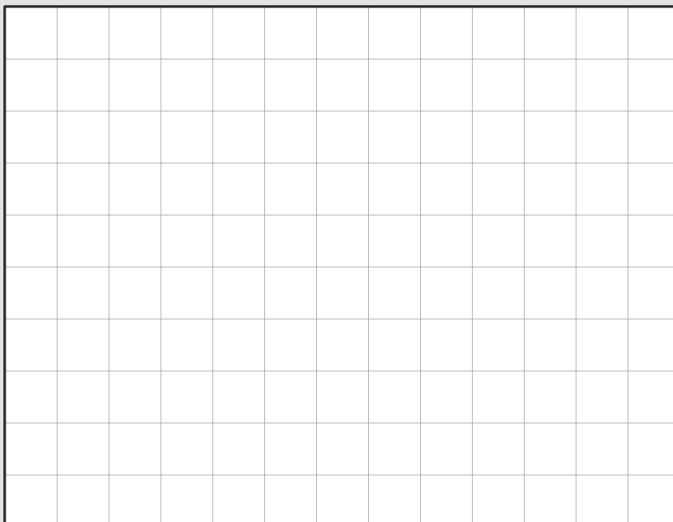




Fig. 32

L. Lines.

- Step 1. Click the **Line Tool**  (N) in the toolbar.
- Step 2. Draw lines, **Fig. 33**. First, draw 10 grids across, 4 grids down, then 5 grids across. You can draw more line if you wish. Use the grid to measure. Use the **Selection Tool**  (V) to delete the one grid space for an opening.

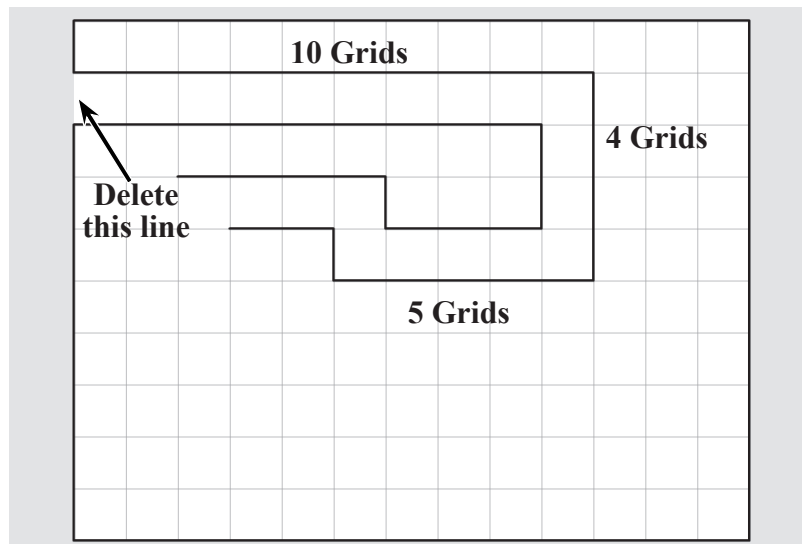




Fig. 33

- Step 3. Save (Ctrl-S).

M. Set Up Layers.

- Step 1. **Double click Layer 1** name in the Timeline and key-in **Background** for the new layer name, **Fig 34**.
- Step 2. Insert Layer  and rename layer **Pacman1**, **Fig 35**.
- Step 4. Click **Lock Layer**  of **Background** layer to lock the Background layer., **Fig. 35**.

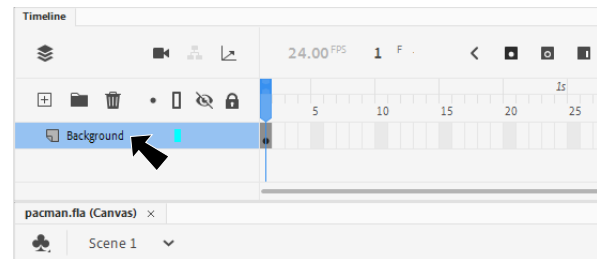


Fig. 34

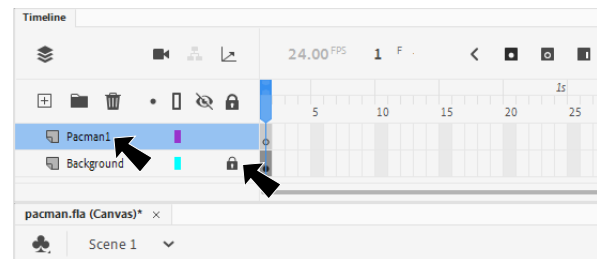



Fig. 35

N. Open Library for Pacman Symbol.

- Step 1. Click Window Menu > Library (Ctrl-L).
- Step 2. Drag your **Pacman** symbol from the Library panel to the stage. Position the position the symbol just off the stage at the opening, **Fig. 36**.
- Step 3. Close the Library panel .

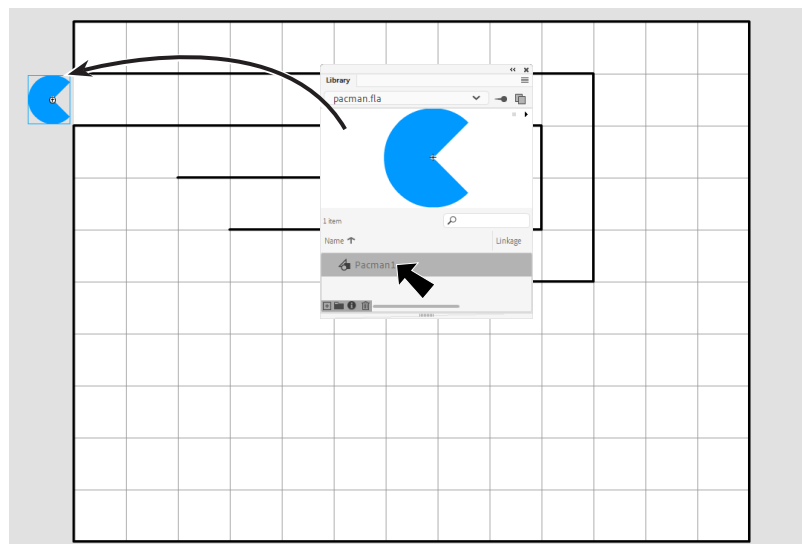


Fig. 36

O. Keyframe Pacman Move 10 Grids Across.

Step 1. Click **frame 92** of **Background** layer and click **Insert Frame**  (F5) from Timeline tools, **Fig 37**.

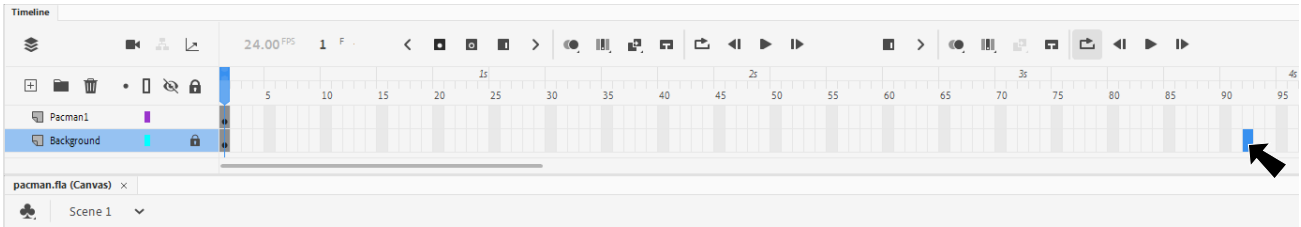



Fig. 37

Step 2. Click **frame 50** of **Pacman1** layer and click **Insert Keyframe**  (F6) from Timeline tools, **Fig 38**.

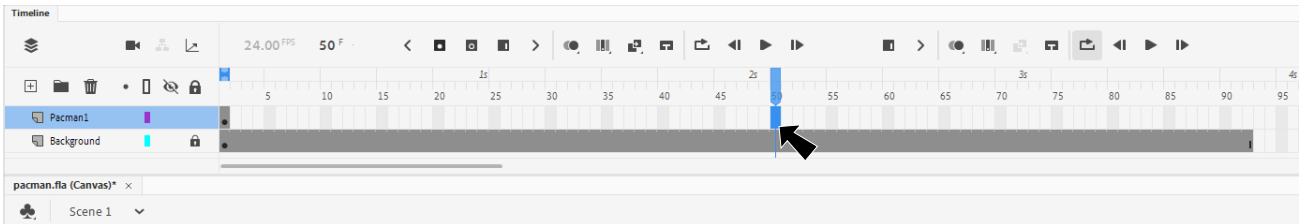



Fig. 38

Step 3. Use the **Selection Tool**  (V) to move pacman across to the end of the 10 grid run, **Fig. 39**. For each grid space we will use 5 frames. So for 10 grid spaces we are using 50 frames. This will keep the speed consistent.

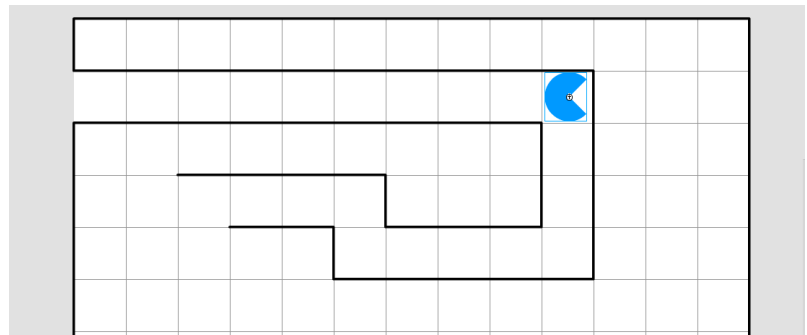


Fig. 39

Step 4. **Right click** in between keyframes and click **Create Classic Tween** from menu, **Fig. 40**.

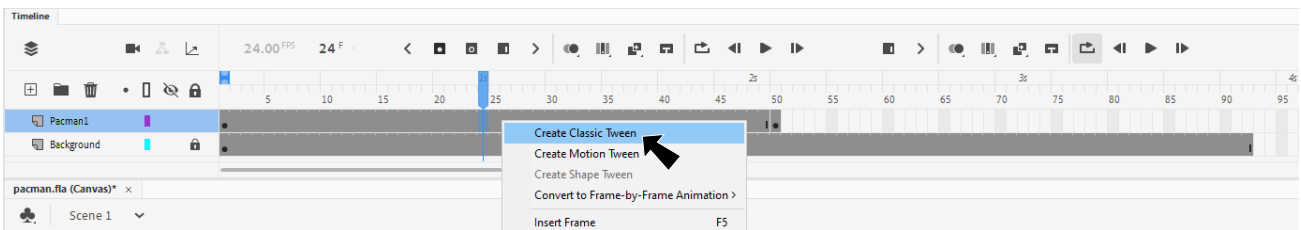



Fig. 40

Step 5. Click and hold **Step Back One Frame**  in the Timeline header to rewind and **Play** .

P. Keyframe Rotate 90 Down.

Step 1. Click **frame 51** of **Pacman1 layer** and click **Insert Keyframe**  (F6) from Timeline tools, **Fig 41**.

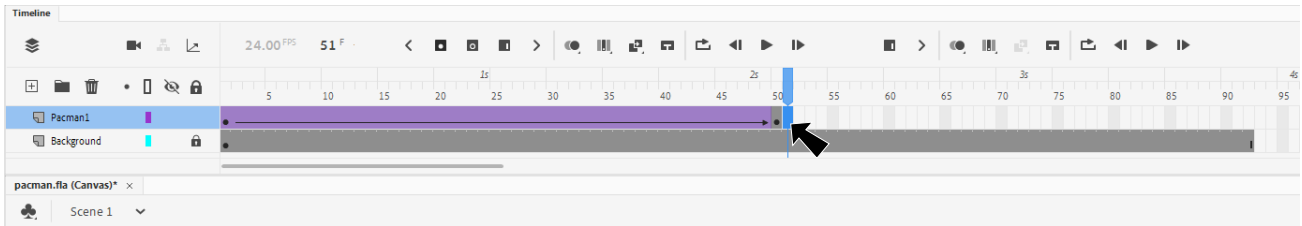




Fig. 41

Step 2. Click the **Free Transform Tool**  in the toolbar (Q).

Step 3. Click symbol and place cursor near a corner of the symbol and when the circular arrow  appears hold down the Shift and rotate the symbol 90 degrees so it is headed down, **Fig. 42**.

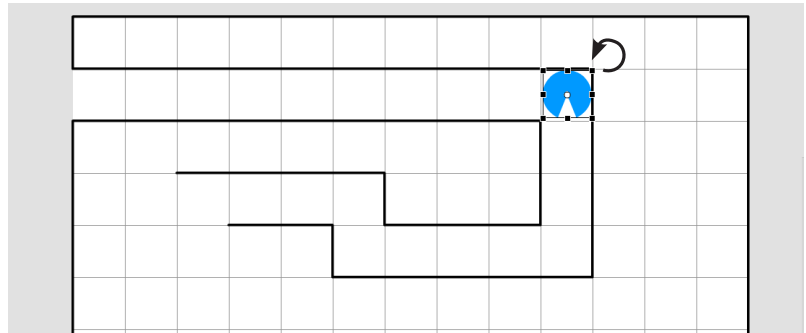


Fig. 42

Q. Keyframe Move 4 Grids Down.

Step 1. Click **frame 70** of **Pacman1 layer** and click **Insert Keyframe**  (F6) from Timeline tools, **Fig 43**. Remember: for **each grid space use 5 frames**. So, for 4 grid spaces (our next run) we are placing a keyframe 20 frames from the last keyframe.

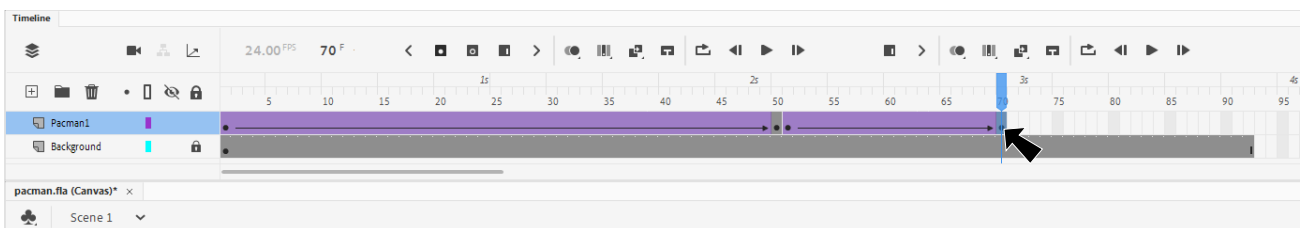



Fig. 43

Step 2. Use the **Selection Tool**  (V) to move Pacman down to the end of the 4 grid run, **Fig. 44**.

Step 3. **Right click** in between the keyframes and click **Create Classic Tween** from the menu.

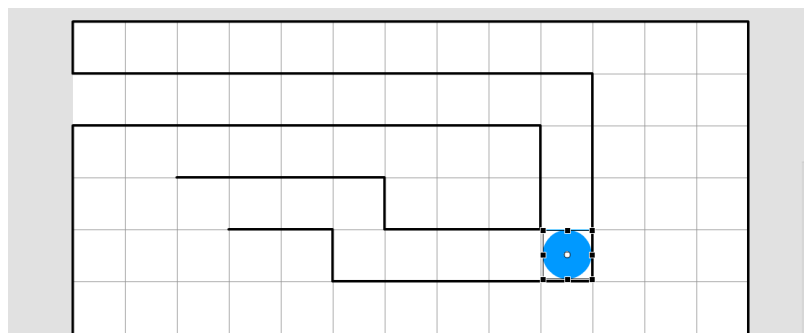



Fig. 44

R. Keyframe Rotate 90 Left.

Step 1. Click **frame 71** of **Pacman1 layer** and click **Insert Keyframe**  (**F6**) from Timeline tools, **Fig 45**.

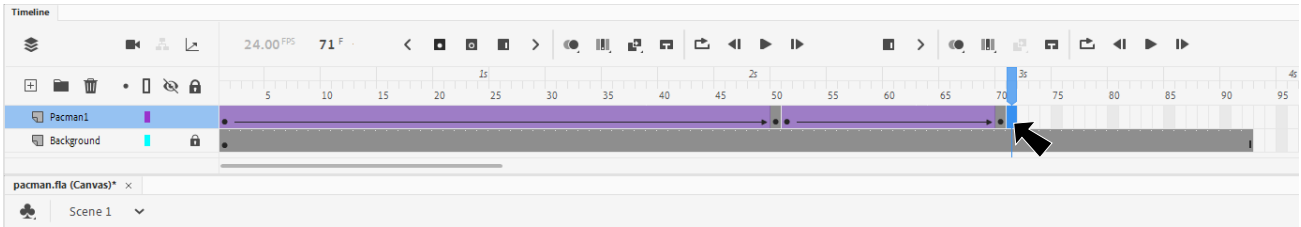



Fig. 45

Step 2. Click the **Free Transform Tool**  in the toolbar (**Q**).

Step 3. Click symbol hold down the Shift and rotate symbol 90 degrees so it is headed left, **Fig. 46**.

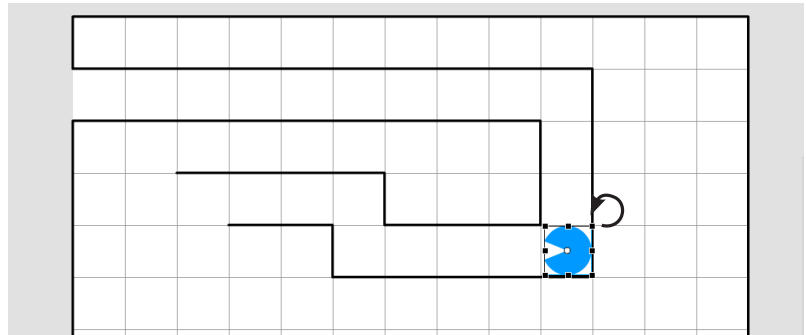


Fig. 46

S. Repeat and add more Runs:

1. **Right click** and click **Insert Keyframe**. Each grid space - use 5 frames.
2. Move the Pacman symbol.
3. **Right click** **Create Motion Tween**.
4. Rotate 90°

To turn off Grid use View Menu > Grid > Show Grid or (**Ctrl - `**)

U. Frame Rate.

Step 1. In the Document Setting panel (**Ctrl-J**) **Frame rate 16**, **Fig. 47** click OK.

Step 2. Click **Play**  in the Timeline header.

Step 3. Save (**Ctrl-S**).

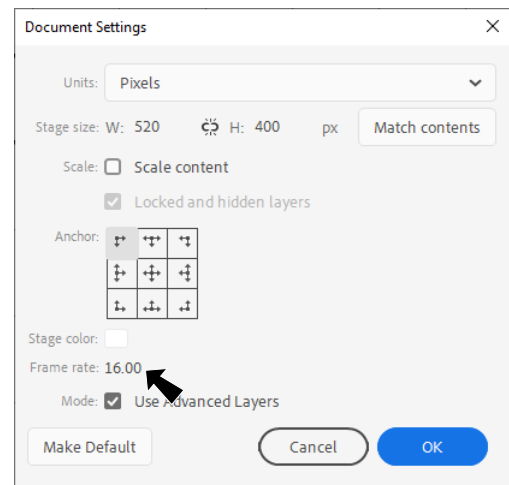


Fig. 47