



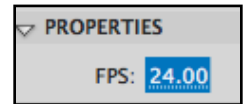
## Flash Exercise #2: Car Jump

**TERM**  
*FPS: frames per second.*

- 1) Choose **Create New: Flash File (Action Script 3.0)**.
- 2) Look at the Car Jump storyboard to see what you will be creating.
- 3) Look in the properties section of the menu along the right side. Change the FPS from 24.00 to 20.00.




### Create the ground and ramp layer.

- 4) Use the line tool to draw a line across the bottom of the stage. → 
- 5) Make sure the Object Drawing button at the bottom of the toolbar is NOT selected. 
- 6) Use the same tool to draw a short ramp in the middle of the line.
- 7) Double-click on the words “layer 1” in the Timeline.
- 8) Change the name of the layer to **ground**.



*The ground layer does not need to be converted to a symbol because it will not move.*

### Create your car by following the following steps:

- 9) Click the *Insert New Layer* button below and to the left of the “ground” layer. → 
- 10) Now you’re going to draw a racecar. And you’ll draw it up in the air so it’s not touching the ground yet.
- 11) Make sure you’re on the new layer.
- 12) Begin by using the circle tool to draw one wheel.
- 13) Use the black arrow *selection tool* to select the wheel by drawing a box around it. → 
- 14) Then choose **Edit > Duplicate** to make another one.
- 15) Use the black arrow to line the wheels up next to each other.
- 16) Find the paint bucket near the bottom of the toolbar. That’s where you change the fill color. Choose a medium grey color.
- 17) Now choose the fill tool, and click on each wheel.
- 18) Now choose the pencil tool from the toolbar. → 
- 19) Before you use the pencil, change the pencil options at the bottom of the toolbar from straighten to smooth.



- 20) Now draw the rest of the car. Use the car in the storyboard as a model, but yours doesn’t have to look identical. Make sure you draw a complete shape and connect it to where you started.
- 21) If you don’t like the way it looks, choose **Edit > Undo Pencil**, and try again.
- 22) Then choose the fill tool (paint bucket), and fill the car in.

23) If it doesn't fill, that means there may be a gap in the outline of the car. Locate the gap option setting below the toolbar. Change it from *close small gaps* to *close large gaps*. Then try filling it again.

24) Choose the black arrow tool and draw a box around the car.



25) Combine the car with the wheels by choosing **Modify > Convert to Symbol**. Name it *car*.

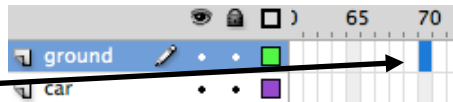
26) Rename *Layer 2* to *Car*.

27) Move the car down onto the ground.

28) Save your work (**File > Save As...**)

29) Name it with your last name and car (Ex: elmancar).

### Now we're going to move the car.



30) Click on frame 70, on the **ground** layer.

31) Choose **Insert > Timeline > Keyframe**. (The car will disappear).

32) Click on frame 20, on the **car** layer. Then **Insert > Timeline > Keyframe**.

33) Now move the car to the base of the ramp.

34) Click on frame 40, on the car layer and insert another keyframe.

35) Now move the car up and over the ramp.

36) Add another keyframe on the car layer on frame 50.

37) Move the car to the ground and then add a keyframe on frame 70.

38) Move the car off the stage to the right.

*You have now told the car where you want it to be at specific times in the animation.*

### Now we're going to add animation!

39) Click on the car layer anywhere between frames 1 and 20.

40) Add a tween (**Insert > Classic Tween**).

41) Do the same thing between frames 20 and 40; frames 40 and 50; and frames 50 and 70.

42) Press **Return** once to see the car go. The car will drive now! (*It's not perfect yet though*)

43) Click on frame 25 in the car layer and add a keyframe.

44) Choose the **free transform tool**.



45) Move the cursor to the corner of the car until it becomes a circle with an arrow on it.



46) Then click and drag a little bit so the car is pointing up the ramp.

47) Click on frame 40 and do the same thing.

48) You can press **return** to see the changes you've made in the rotation of the car.

## Now we're going to add a background.

49) Create a new layer and name it *background*.

50) Change the shape tool back to a rectangle tool and then change the fill color to light blue.

51) Make a box around the entire stage above the ground.

(the ramp and car will disappear for a couple steps)



52) Now change the fill color to green and make a rectangle from the ground to the bottom of the stage.

53) Grab the word background, and drag it down below the ground layer and drop it there.

54) Now add another new layer and name it *cloud*.

55) Click on frame 20 in the cloud layer.

56) Insert a keyframe.

57) Change the fill color to white.



58) Select the paintbrush tool.

59) Draw the outline of a cloud near the upper right corner **off** the stage.

60) Use the paint bucket tool to fill it in.

61) Click the word cloud in the cloud layer in order to select all parts of the cloud.

62) Choose **Modify > Convert to Symbol**. Name it *cloud*.

63) Now click on the cloud layer in frame 70.

64) Choose **Insert > Timeline > Keyframe**.

65) Use the selection tool (  ) to move the cloud towards the left side of the stage like it's floating across the sky.

66) Make sure the cloud is selected and choose the **free transform tool**.

67) Drag the cloud to be wider and shorter.

68) Click on the timeline anywhere on the cloud layer.

69) Add a **classic tween**.

70) Press **Return** to see your movie.

## Turning it in:

71) Save it. (**File > Save**)

72) Choose **File > Export > Export Movie...**

73) Change the name to your last name with *car* at the end.

74) Change the *Where* to **Desktop**.

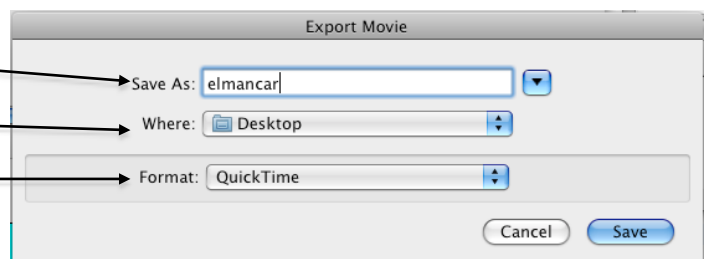
75) Change the *Format* to **Quicktime**.

76) Hit **Save**.

77) Then hit **Export**.

78) Hit OK when it tells you it's done.

79) Drag it from your Desktop to the **DROP BOX**.





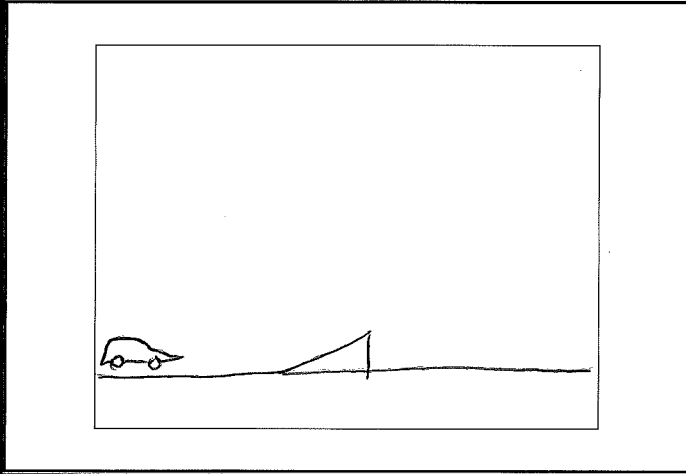
# Flash Animation Storyboard

Name(s): \_\_\_\_\_ Period: \_\_\_\_\_

Project Title: Car Jump

Scene #: 1

Frame #: 1



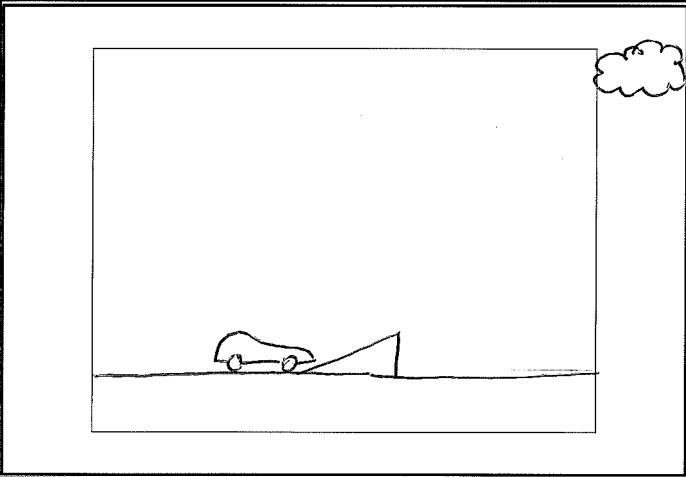
Describe this scene: Car is getting ready to jump ramp.

List all objects in this scene: ground, car, ramp, background

Total layers needed so far: 3

Scene #: 2

Frame #: 20 (= seconds from start 1 x 12)



Describe this scene: Car gets to base of ramp.

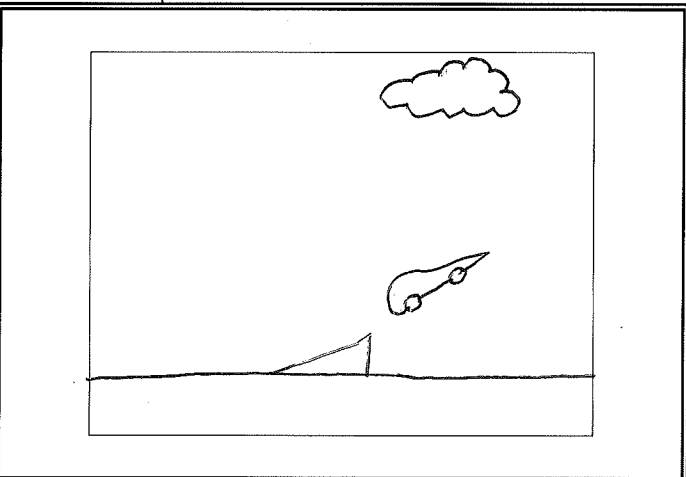
List all NEW objects: cloud

Number of NEW layers needed: 1

KEYFRAMES NEEDED: Which objects will change, begin, or end at this scene? car, cloud

Scene #: 3

Frame #: 40 (= seconds from start 2 x 12)

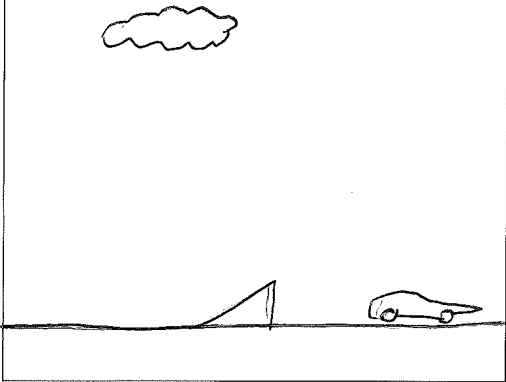


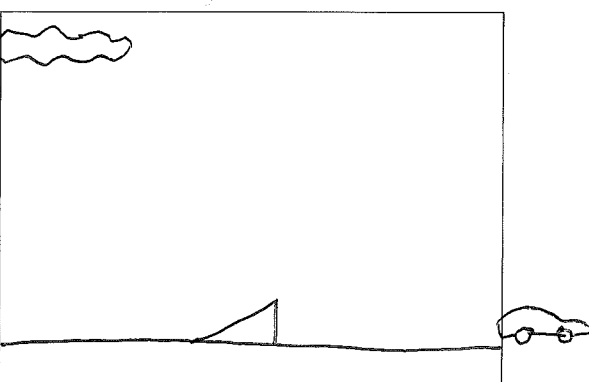
Describe this scene: Car jumps over ramp. Cloud floats from right to left.

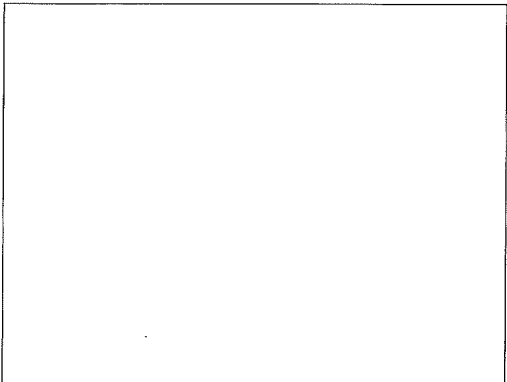
List all NEW objects: none

Number of NEW layers needed: 0

KEYFRAMES NEEDED: Which objects will change, begin, or end at this scene? car

|   |   |  |
|---|---|--|
| Scene #: 4  | Frame #: 50 (= seconds from start 2.5 x 12) | Describe this scene: <u>Car lands on ground.</u>                                     |
|  |   | List all NEW objects: <u>none</u>  |
|   |   | Number of NEW layers needed: <u>0</u>  |
|   |   | KEYFRAMES NEEDED: Which objects will change, begin, or end at this scene? <u>car</u> |

|  |   |   |
|--|---|---|
| Scene #: 5   | Frame #: 70 (= seconds from start 3.5 x 12) | Describe this scene: <u>Car drives off stage.</u>   |
|  |   | List all NEW objects: <u>none</u>   |
|  |   | Number of NEW layers needed: <u>0</u>   |
|  |   | KEYFRAMES NEEDED: Which objects will change, begin, or end at this scene? <u>car, cloud</u> |

|   |  |   |
|---|--|---|
| Scene #: 6  | Frame #: _____ (= seconds from start _____ x 12) | Describe this scene: _____  |
|  |  | _____   |
|   |  | _____   |
|   |  | List all NEW objects: _____   |
|   |  | Number of NEW layers needed: _____  |
|   |  | KEYFRAMES NEEDED: Which objects will change, begin, or end at this scene? _____ |
|   |  | _____   |