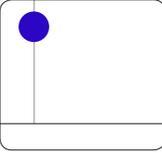


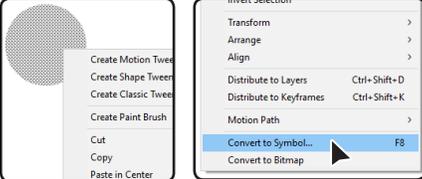
Name:

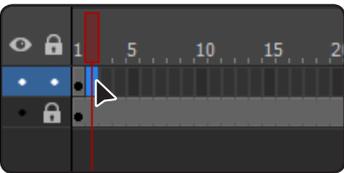
2-D Animation Workshop

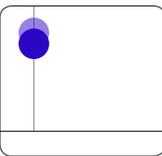
Girls Can! Conference

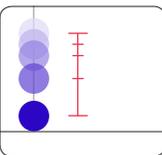
LET'S MAKE A BOUNCING BALL!

1  **Draw a ball**
Click the oval marquee tool (or press **O**)
Move the mouse over to the top left of the canvas.
At the top left, press and hold shift while dragging out a circle.

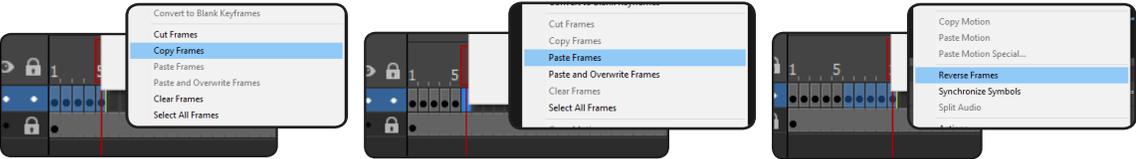
2  **Make it a symbol**
Click the direct selection tool (or press **V**)
then single click the circle you just made.
On the circle, right click, select "Convert to symbol...",
(or press **F5**) name it anything, and press ok.

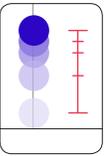
3  **Make a new keyframe**
Go to the timeline at the bottom of the screen, select
the next frame to the right of the circle, click it and
press the new frame button (or press **F5**)

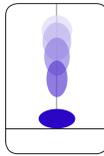
4  **Move the circle lower, make new keyframes, repeat**
Follow the vertical line and move the circle lower by selecting
the direct selection tool (the black arrow) at the top of the
toolbar (or press **V**). Then follow the instructions from #3.
Repeat - Keep making new frames and moving the ball accordingly.

5  **Move ball to the ground**
Continue moving the ball lower and following the
instructions from #3, with more and more space
between them, until you hit the ground.

6 **Copy and paste the frames**
Go to the timeline and select all of the frames you have made so far by selecting
one then shift clicking to the other end. With them all selected, right click over
them and select copy frames. Then select the next frame to the right of the last
circle, right click, and select paste frames. Select the frames you just pasted.



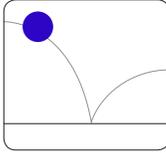
7  **Reverse Frames**
With those frames
selected, right click
them, and select
"Reverse Frames".

8  **Add squashes and stretches**
Now you can go back to the low point
of the bounce and squash the ball. If
you're feeling fancy you can also go to
the midway points and stretch the ball.

NOW THAT'S A BOUNCE! check out the other side for the next challenge.

NOW, LET'S MAKE A TRAVELING BOUNCING BALL!

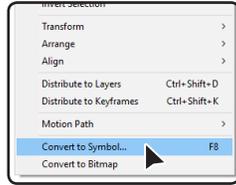
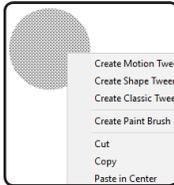
1



Draw a ball

Click the oval marquee tool (or press **O**)
Move the mouse over to the top left of the canvas.
At the top left, press and hold shift while dragging out a circle.

2



Make it a symbol

Click the direct selection tool (or press **V**)
then single click the circle you just made.
On the circle, right click, select “Convert to symbol...”,
(or press **F5**) name it anything, and press ok.

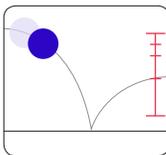
3



Make a new keyframe

Go to the timeline at the bottom of the screen, select
the next frame to the right of the circle, click it and
press the new frame button (or press **F5**)

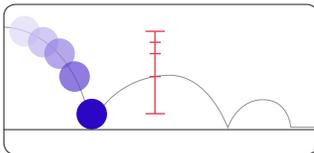
4



Move the circle along the line, make new keyframes, repeat

Follow the purple line and move the circle lower by selecting
the direct selection tool (the black arrow) at the top of the
toolbar (or press **V**). Then follow the instructions from #3.
Repeat - Keep making new frames and moving the ball accordingly.

5



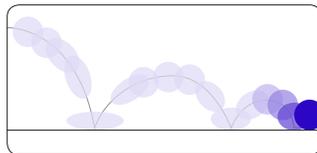
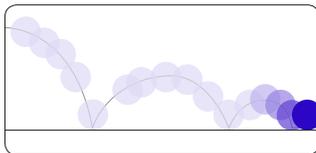
Move ball to the ground

Continue moving the ball lower and following
the instructions from #3, with more and more
space between them, until you hit the ground.

6

Add squashes and stretches

After the ball has been moved all the way across, you can go
back to squash the ball where it hits the ground. Then you can
stretch the ball in the frames before and after each squash.



AND THOSE ARE SOME ANIMATION BASICS!

Check out the list of shortcuts at kathrynmae.com/blog/animation-presentation-2019.html