

## Exaggeration: Lesson 2

### Understanding the Principle of Exaggeration

---

The principle of exaggeration is used to gather interest and excitement for your animation and connect with your audience. This is accomplished by embellishing actions and emotions beyond their realistic levels—helping to draw attention to the main parts of an animation.

A common use of this principle is to exaggerate emotions, which helps connect with the audience. For example, if a character is tired, show how exhausted he is by having him yawn excessively. If a character is angry, change his facial expression to make him look furious, and make his face redden.

Balancing the use of exaggeration in an animation is key. You don't want to add exaggeration to all elements in your animation, since it will make the animation seem unrealistic. Using too much exaggeration can also make it difficult to draw attention to certain objects, since the audience won't understand what you want them to focus on. On the other hand, adding exaggeration to just one object in the scene may make the overall animation appear lifeless and unrealistic to the audience.

Also, please note that exaggeration is often used with squash and stretch. For example, a character may cross a puddle of water and stretch his legs excessively to make it across the puddle without getting wet.

### Related Project Files

---

The following related project files are located in the ASCurriculum-Lesson2.zip file that accompanies this course:

- **Tutorial 2.1.anime** - A completed version of the project that you will complete in this lesson.
- **Tutorial 2.1.mov** - A completed render of the project that you will complete in this lesson.
- **Tutorial 2.1 How To.mov** - A step-by-step video tutorial of the project that you will complete in this lesson.

### Tools Used

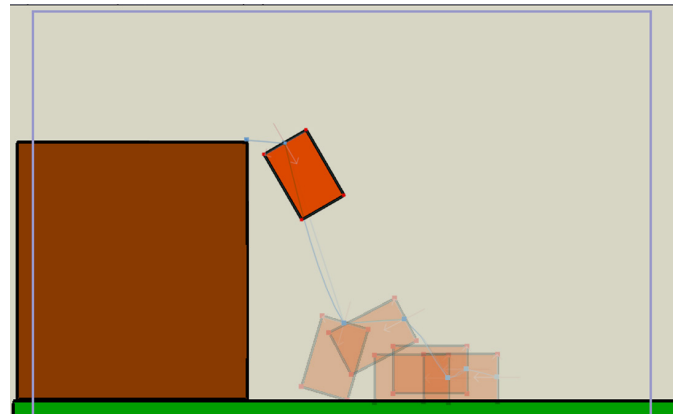
---

- **Draw Shape** tool, **Pan** tool, **Zoom** tool, **Rotate Layer** tool, **Translate Layer** tool, **Set Origin** tool

### Tutorial 2: Overview

---

A simple way to show exaggeration of an object is with a brick. In this tutorial you'll animate a brick teetering on the top of a building, then falling down and bouncing. Exaggeration makes the brick teeter longer than it would in real life, adding some suspense to the animation.



# The Principles of Animation

## Tutorial 2: Teetering Brick Exaggeration

### Step 1: Draw the Ground

Go to **File > New** to open a new Anime Studio document. In the **Layers** window, double-click Layer 1 and rename it **Ground**. Make sure you are on **Frame 0**.



In the **Style** window, choose Green for a fill color. Select the **Draw Shape** tool, and make sure that **Auto Fill** and **Auto Stroke** are on and that you have selected **Rectangle** for the shape option. Draw a green rectangle at the bottom of the scene.

Save your project at this point, naming it Lesson2\_YourLastName.

### Step 2: Draw the Building



In the **Layers** window, create a new **Vector** layer named **Building**. To create a new Vector Layer, click the **New Layer** Button in the **Layers** menu and click **Vector** from the pull down menu. Select Brown for a fill color and draw a rectangle for the building.



Use the **Zoom** and **Pan** tools in the **Workspace** section of the toolbox to zoom in closer to the top of the building, but also make sure that you can see the origin point in the scene.

### Step 3: Create Two Bricks



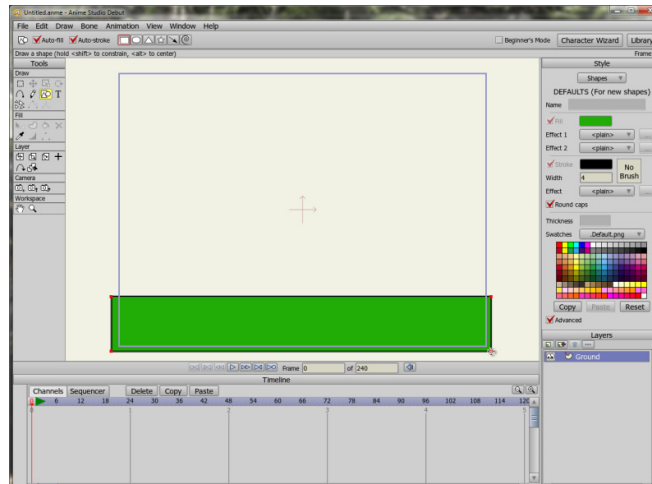
Create one brick. In the **Layers** window, create a new **Vector** layer named **Brick Left**.



Select a brick red fill color and reselect the **Draw Shape** tool. Draw a brick teetering on the edge of the building.



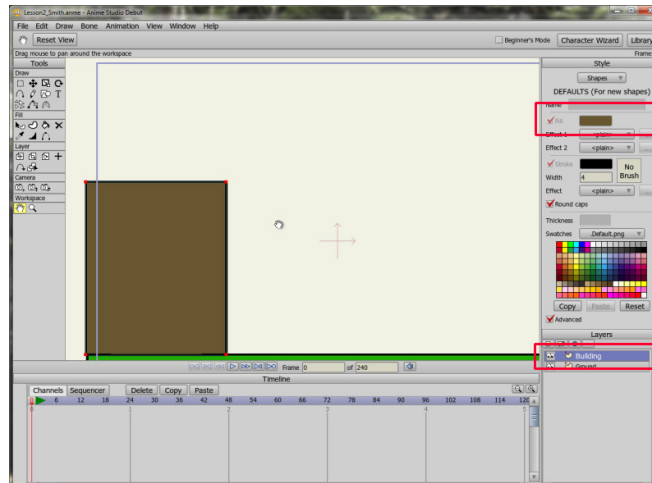
To create the second brick, click the **Duplicate Layer** button in the **Layers** window. Change the name to **Brick Right**.



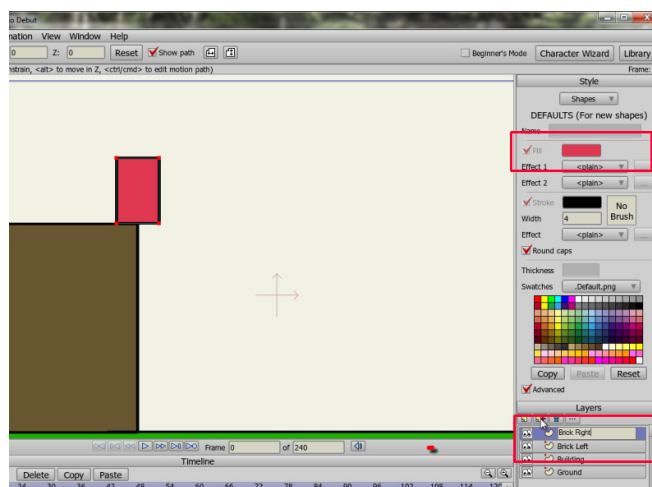
For further information on the **Layers** window, refer to the Anime Studio Debut Users Manual.

For further information on the **Style** window, refer to the Anime Studio Debut Users Manual.

For further information on the **Draw Shape** tool, refer to the Anime Studio Debut Users Manual.



See Step Four for a detailed explanation of **origin points**.



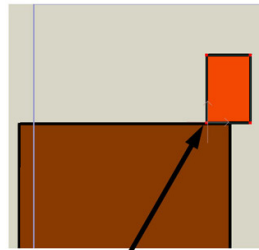
For further information on the **Pan** and **Zoom** tools, refer to the Anime Studio Debut Users Manual.

## Step 4: Set the Origin Points

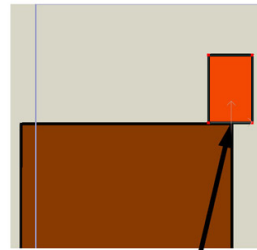


Select the **Brick Left** layer from the **Layers** window. Choose the **Set Origin** tool from the **Layer** section of the toolbox, and move the origin point to the lower left corner. Then select the **Brick Right** layer and move the origin to the bottom center.

Save your project at this point, and remember to save often as you build your animation projects.



BRICK LEFT  
ORIGIN POINT



BRICK RIGHT  
ORIGIN POINT

The **origin** is the point that the layer rotates around when using the Rotate Layer tool and the point that the layer resizes around when using the Scale Layer tool. The location of the origin can also define how a layer will move when it is attached to a group of bones. For further information on the **Set Origin** tool, refer to the Anime Studio Debut Users Manual.

Because the brick is teetering on the edge of the building, the center of balance changes depending on the direction that the brick rotates. When the brick rotates toward the left, the center of balance will be in the lower left corner. When it rotates toward the right, the center of balance is at the edge of the building. To simulate this, you'll need to create two bricks, one with the origin point at the lower-left corner and the other with the origin point at the bottom center. Later you'll display one brick when it teeters toward the left and the other brick when it teeters toward the right.

## Step 5: The First Teeter

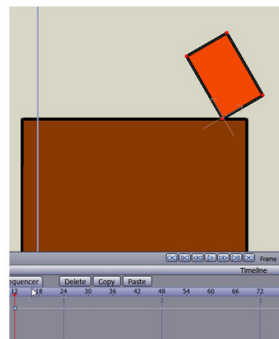
You'll need to hide Brick Right. Double-click the **Brick Right** layer in the **Layers** window, and uncheck the **Visible** option to make it invisible.

Now you'll learn how to show and hide one of the bricks, depending on which way the brick is teetering. Let's animate the first cycle back and forth.

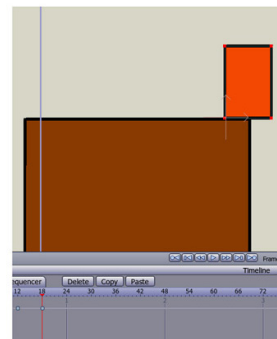


Select the **Brick Left** layer in the **Layers** window. Move to **Frame 12** in the timeline and select the **Rotate Layer** tool. Rotate the brick to 30 degrees.

Move ahead to **Frame 18** and set the rotation back to zero.

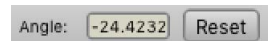


Brick Left - Frame 12



Brick Left - Frame 18

To **rotate** an object, you have two options—you can rotate freely with the mouse or precisely by entering values in the **Angle Rotation** field. After you rotate an object with the mouse, the Angle Rotation window will show you the measure of your angle (see example below).



**The Rotate Layer and Scale Layer tools are now built into the Translate Layer tool.** First, choose the T tool and then move your cursor to a point on the bounding box. Placing your cursor on a bounding box will activate the **Scale Layer** tool, while placing your cursor just outside a corner bounding box will activate the **Rotate Layer** tool.

# The Principles of Animation

## Step 6: The First Teeter

(continued)

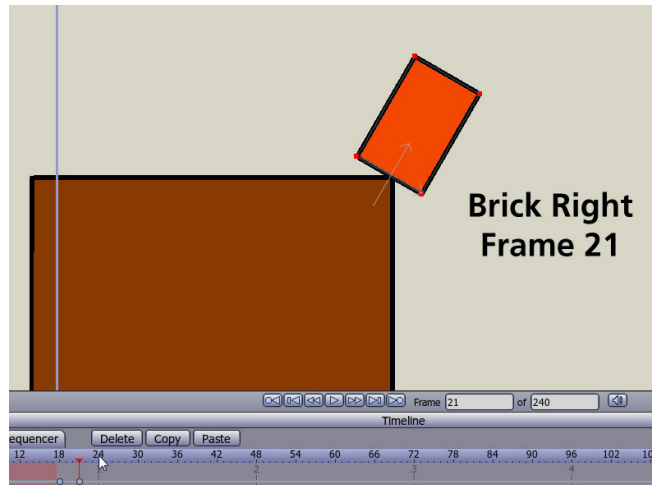
For the second half of the cycle you'll want to display **Brick Right**, so you'll need to hide Brick Left.

Double-click the **Brick Left** layer in the **Layers** window and uncheck the **Visible** option to make it invisible. Then double-click **Brick Right** and make it visible.



Now move to **Frame 21**.

Use the **Rotate Layer** tool to rotate **Brick Right** to -30 degrees.

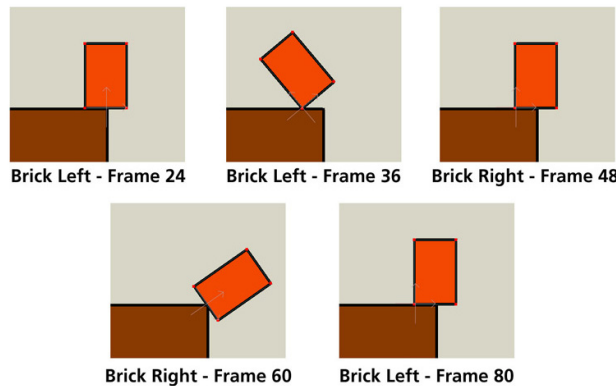


## Step 7: The Second Teeter



The second cycle is done in a similar manner:

- At **Frame 24**, rotate **Brick Right** 0 degrees. Make **Brick Right** invisible, and make **Brick Left** visible.
- At **Frame 36**, use the **Rotate Layer** tool to rotate **Brick Left** 40 degrees.
- At **Frame 48**, rotate **Brick Left** 0 degrees. Make it invisible in the **Layers** window. Make **Brick Right** visible.
- At **Frame 60**, use the **Rotate Layer** tool to rotate **Brick Right** -55 degrees.
- At **Frame 80**, rotate **Brick Right** 0 degrees and make it invisible in the **Layers** window. Then make **Brick Left** visible.



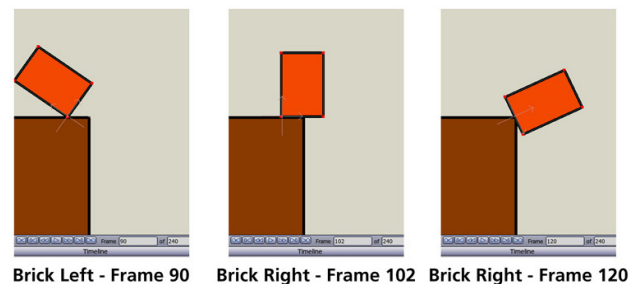
## Step 8: The Third Teeter



The third cycle is a little bit different, because at the end the brick begins the fall to the ground:

- At **Frame 90**, use the **Rotate Layer** tool to rotate **Brick Left** 55 degrees.
- At **Frame 102**, rotate **Brick Left** 0 degrees and make it invisible in the **Layers** window. Make **Brick Right** visible.
- At **Frame 120**, use the **Rotate Layer** tool to rotate **Brick Right** -65 degrees.

Save your project at this point.



## Step 9: Begin the Fall

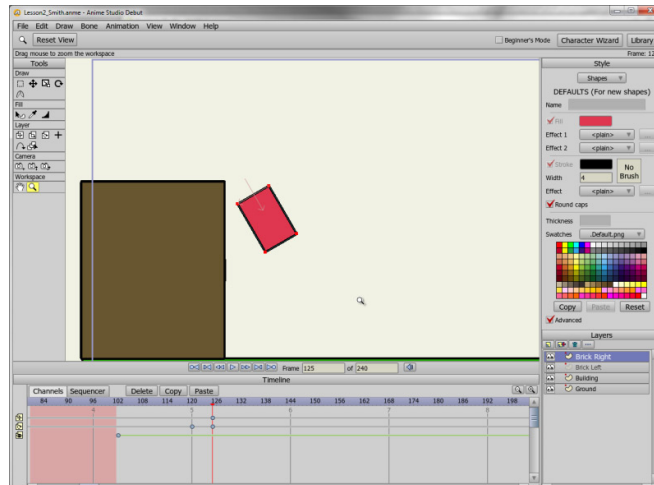
Now we'll make the brick fall to the ground. After it falls, it will bounce and rotate until it comes to a stop.



At **Frame 125**, use the **Rotate Layer** tool to rotate **Brick Right** -150 degrees.

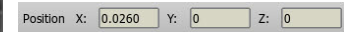


Then move it away from the building with the **Translate Layer** tool.



For further information on the **Translate Layer** tool, refer to the Anime Studio Debut Users Manual.

To move objects in a layer to a particular position you have two options—you can move them freely with the mouse or precisely by entering values in the **Position** fields (see example below).



## Step 10: End the Fall



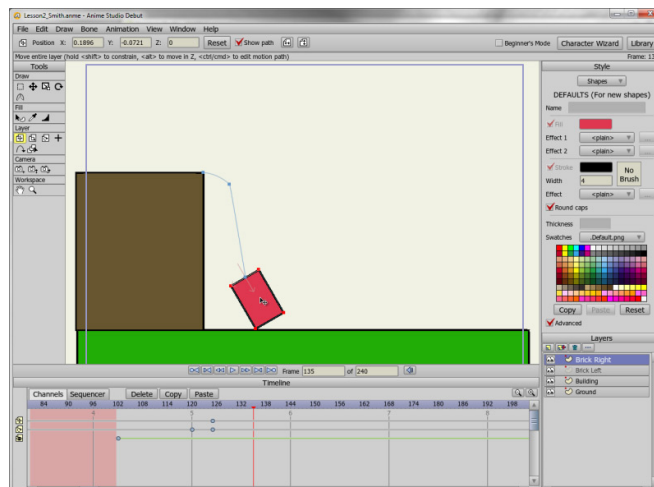
Use the **Pan** and **Zoom** tools in the **Workspace** tool area to zoom out so that you can see the ground.



At **Frame 135**, use the **Translate Layer** tool to move the brick to the ground.



Then use the **Rotate Layer** tool to tilt the brick the other way (about -196 degrees rotation). Adjust the position of the brick with the **Translate Layer** tool if needed.



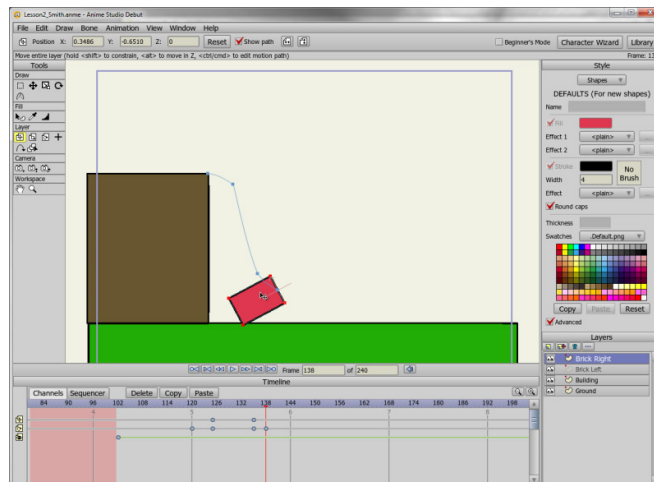
## Step 11: Begin the Bounces



At **Frame 138**, use the **Rotate Layer** tool to rotate **Brick Right** to -242 degrees.

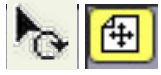


Then use the **Translate Layer** tool to move it more toward the right, keeping it up in the air for a bounce.

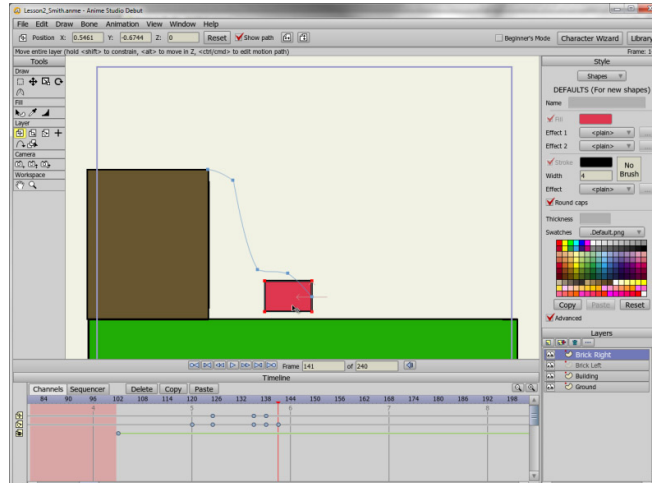


# The Principles of Animation

## Step 12: Continue the Bounces



At **Frame 141**, use the **Rotate Layer** tool to rotate **Brick Right** to -270 degrees so that it is parallel to the ground. Then position the brick on the ground, moving it further to the right.

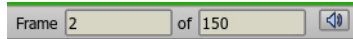


## Step 13: Finish the Bounces



At **Frames 144 and 146**, use the **Translate Layer** tool to make one final bounce, up slightly at **Frame 144** and back down again at **Frame 146**.

Enter **150** into the second box in the **Frame Counter** and hit **Enter** to limit the animation to 150 frames in length (see example below).



After your keyframes are set, play the animation to see how it looks. Continue to tweak your positions until you're happy. Then save your project, and render the animation.

