Building a Japanese Castle Complex – Part 1

We will be discussing Japan’s architecture and history over the next few weeks. This will show you how to start building a Japanese Castle.

1. First, open a new SketchUp file, and save it as “Firstname Lastname Japanese Castle”. Saving immediately is important so the software automatically saves your work incase the program stops working.

2. This is a basic example of what we are trying to achieve in the first few stages of the construction. After building the main castle structure we will create surrounding structures and terrain for the castle.

You will use the techniques we have learned thus far to build a building like this of your own design, based on this guide, which will give you a scaffold but not lock you into building an exact model. You can create any number of floors, and create a design of your own, using the guidelines set forth here. Please read the directions CAREFULLY.

3. This is actually much simpler to build than it looks. First, consider that there is a central tower as well as a larger lower level. The tower generally takes a squared off shape, but the lower level can be a more complex shape. Below are some example shapes you could use for your base plan, which will rise out of the ground, and then have a squared off tower rising from that.

4. As you can see these shapes are drawn in the TOP view, and all use lines connected at 90 degrees – there are no angled edges here. The plans for these castles were using 90 degree angles for the most part. As far as sizes we want to be entering in round numbers for the lengths of the lines, 100’, 20’, 80’, etc, to make the planning easier. You can make shapes you find interesting, but do not make them too large! Approximately 200’ across in either direction would be appropriate.
5. After you settle on your main floor plan, you can start to bring the building up into 3D. I am going to take one of the shapes I have created and use it as an example. Pull it up about 30' to create the very base of the castle. We want to create a profile of the curved stone base of the castle as shown. Don’t make the curve too steep.

6. Use extrude this around the shape by selecting the top face first, then Follow Me, then selecting the curved profile. This creates the base of the castle. Now offset the top face inward 5’ or so and pull the resulting inner shape upward 12’.

7. This will create the main floor of the Castle. We need to create the shape for the base of the main Tower before adding roof details to this floor. Select this entire object and turn it into a Group – we will edit that group later to add the roof.

8. After the base has been turned into a group, draw a square on top of some round number size – 80’x80’, 60’x60’, etc. Be sure that it will fit on your structure. Then pull that up 12’. Turn that into a group. Using guidelines set 6’ inwards from the edges as we did with the temple, create another square on top of this group.
9. Go to the Front View and slightly off to the side of your structure create a profile for the Roof object. This is similar to what we did with the Japanese Temple. You can use something like below. That is 12’ long, with a short 6” line on one side and a 6’6” line on the other. When you create the Arc drag downward and enter 1” for the arc’s bulge, just as we did with the Temple.

10. MOVE/COPY this into place on the midpoint of the center square. It is important that you COPY this object so you can reuse it for later steps!! Then select the center square, use Follow me, then select the profile to create the roof object. **Triple click the roof and create a group.**

11. Draw another rectangle that covers the sunken part of this object from one endpoint to the opposite corner. **Then pull that up 12’ and turn it into a GROUP.** We will repeat the previous steps until you have the number of floors you desire.
And so on, until your top floor is relatively small. We will continue with part 2 tomorrow.