

Zombies! In Google SketchUp

In showing my SketchUp students the procedure to create the “chat” model (one of the other projects included in this month’s set), I started with a model that included two 2D people downloaded from the 3D Warehouse:



A couple of the kids complained (rightly) that these cardboard cutout people are boring - they don’t even have faces. So I asked what they’d like to see instead of faceless forms, and the reply from a couple of boys was instantaneous: “Zombies!” So this project shows how to add some character to the people you download.



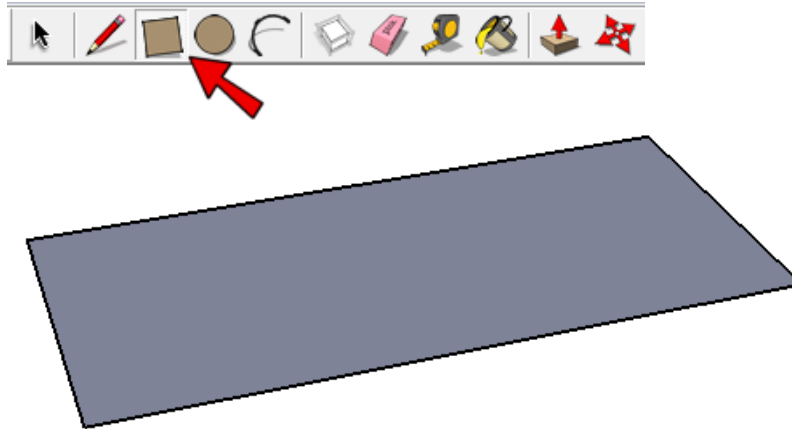
For this project, it helps to have some basic knowledge of Google SketchUp (though detailed instructions are provided). In particular, it’s important to know how to zoom, rotate, and pan the view. If you need more information on how to get started, and a description of some basic tools, please read 3DVinci’s Getting Started Guide (PDF).

PC users: go to http://www.3dvinci.net/SketchUp_Intro_PC.pdf.

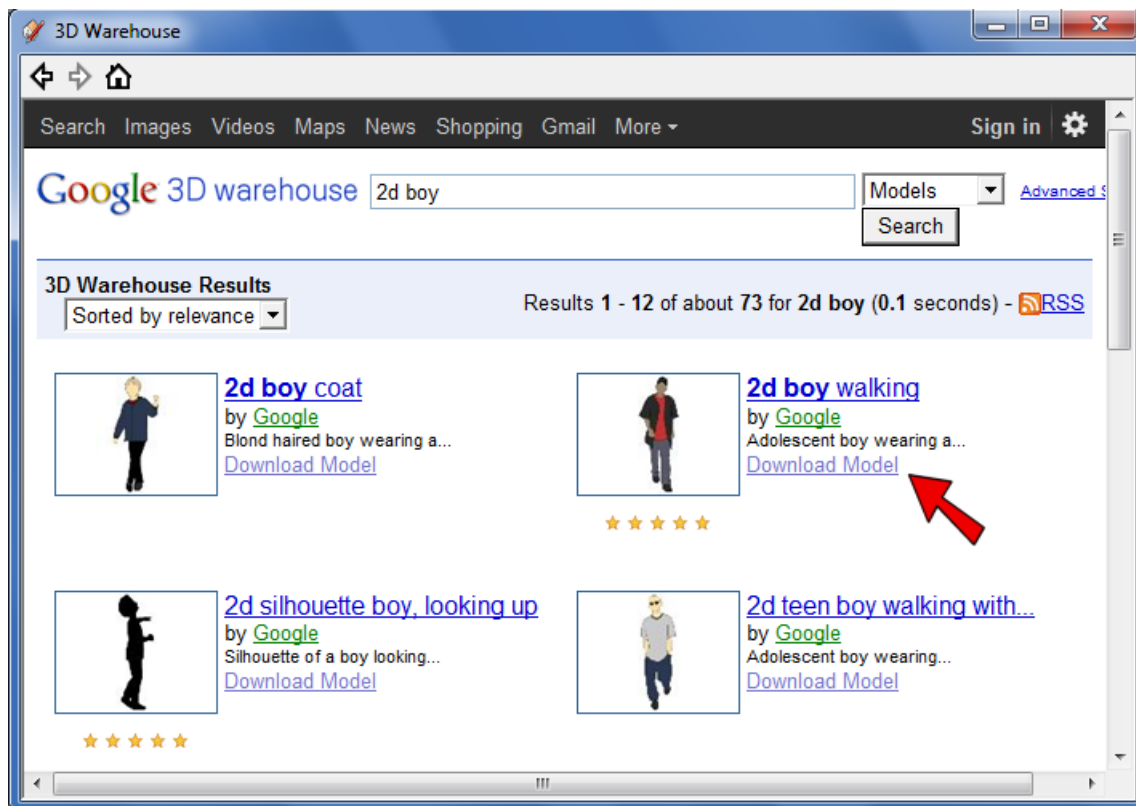
Mac users: go to http://www.3dvinci.net/SketchUp_Intro_MAC.pdf.

Step 1: Get Faceless 2D People

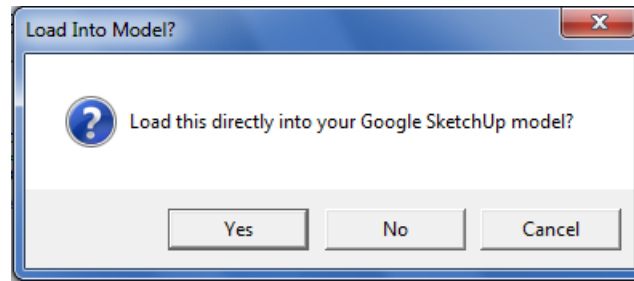
1. Start a new SketchUp model and if you have anyone already in your model, erase them. Activate the **Rectangle** tool and draw a rectangle on the ground - this just makes a floor for the people to stand on.



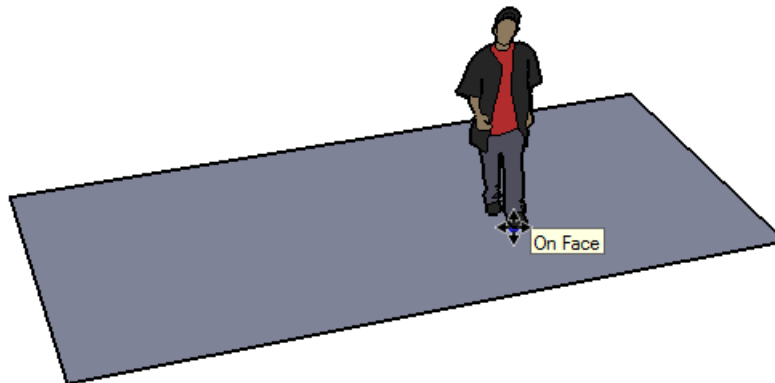
2. Activate the **Get Models** tool, and search for “2D boy.” People models that are 2D are basically cardboard cutouts, but they give the illusion of being 3D because they always face you, no matter how you orbit around the model. And 2D people are very small models, compared to 3D people which can have thousands of edges and faces, so they won’t slow down your model. For the “2d boy walking” model shown below, click the “Download Model” link.



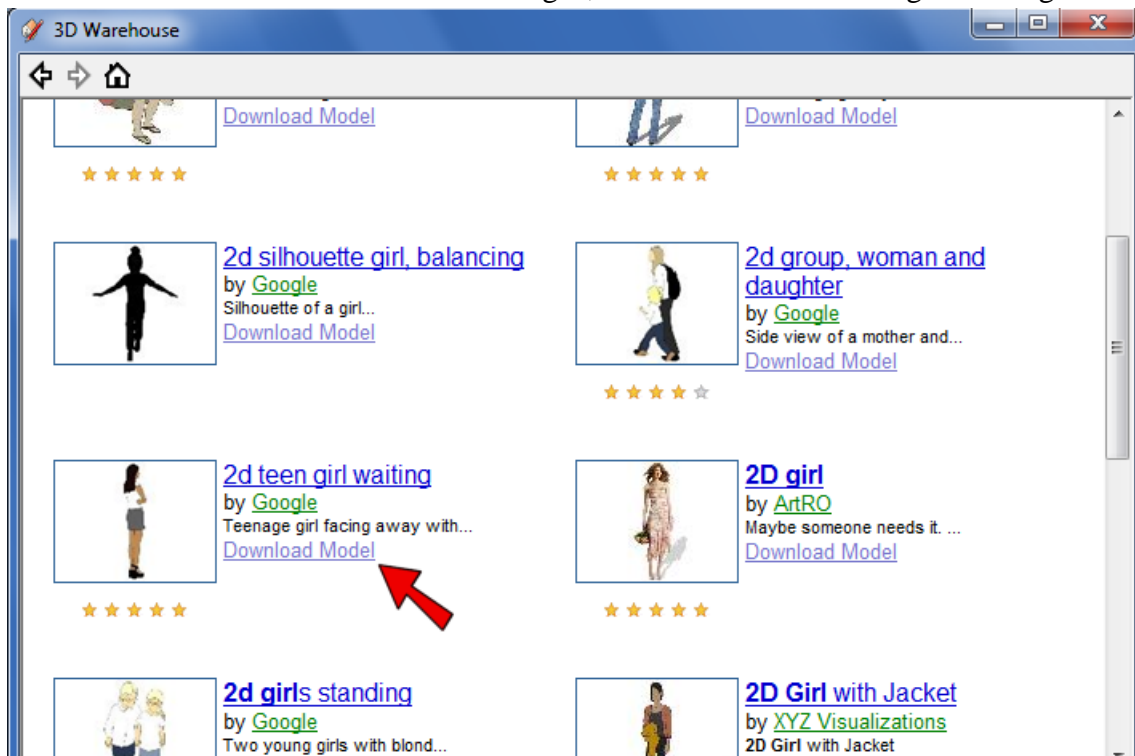
- When asked to load the model directly into SketchUp, click **Yes**.



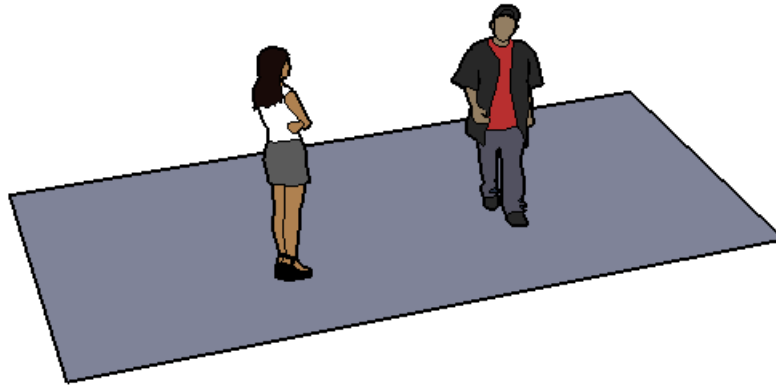
- He comes into SketchUp with his foot attached to your cursor. Click somewhere in the middle of the floor to place him there.



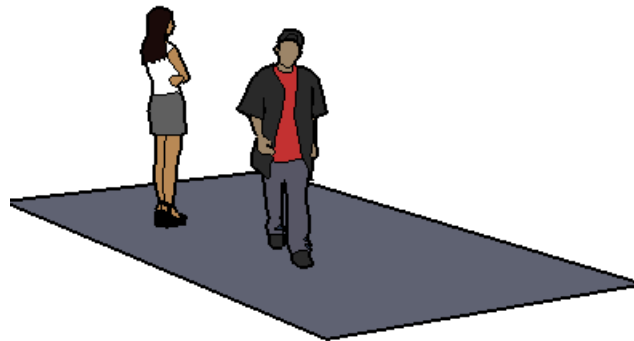
- Next use the **Get Models** tool to search for a 2D girl, and download “2d teen girl waiting.”



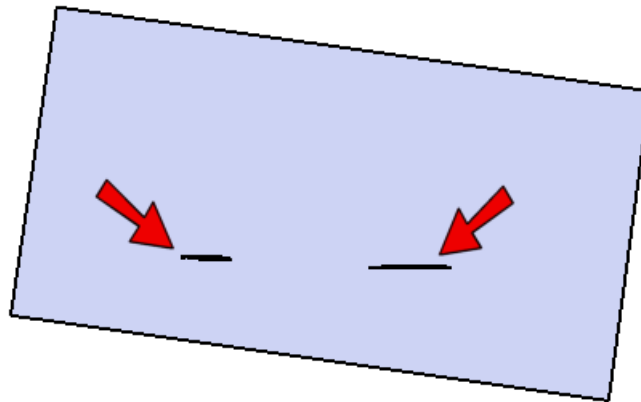
6. Place her to the left of the boy, facing him.



7. To see what these “face camera” models are like, orbit around the model. No matter where you’re looking, the boy is always facing you, and the girl is always facing away, toward the right.



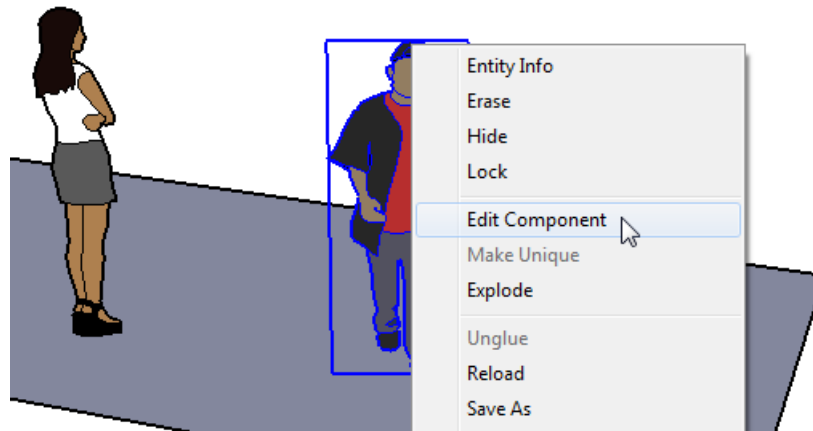
8. Now orbit to look down at the model - only in a view like this can you tell these people are really flat.



One of the very first projects I wrote for this project series, back in November 2009, showed how to make a person model like this, starting from a digital photo. If you'd like to see this project, send me an email and I'll send the project to you.

Step 2: Add Faces

1. Both of these people were imported as components, and components need to be opened for editing before they can be changed. Right-click on the boy and choose **Edit Component**.



2. To add one eye, activate the **Circle** tool and draw the eye. I'm making his right eye pretty large.



3. Add the other eye (same size or different), and add smaller circles for pupils. My zombie has a blank stare, so no eyelids. Black and white are easy colors to use for eyes. (If you want two identical eyes, just create one and use the **Move** tool with the Ctrl or Option key to copy it.)



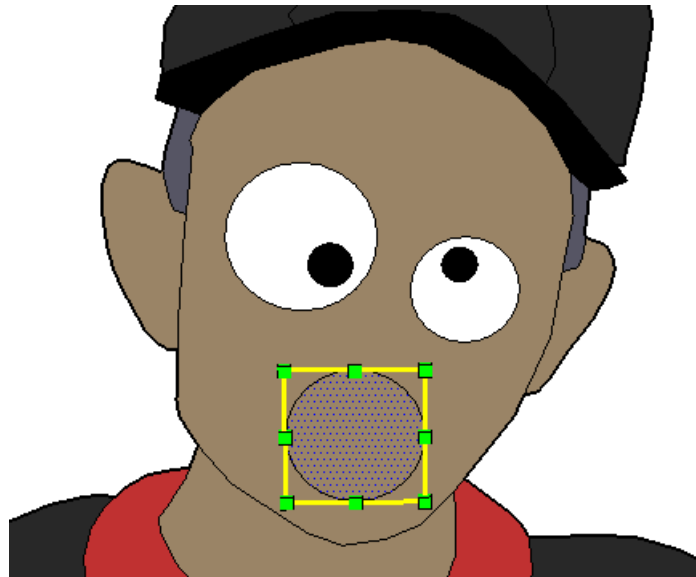
4. The mouth is to be an oval, so start with another circle.



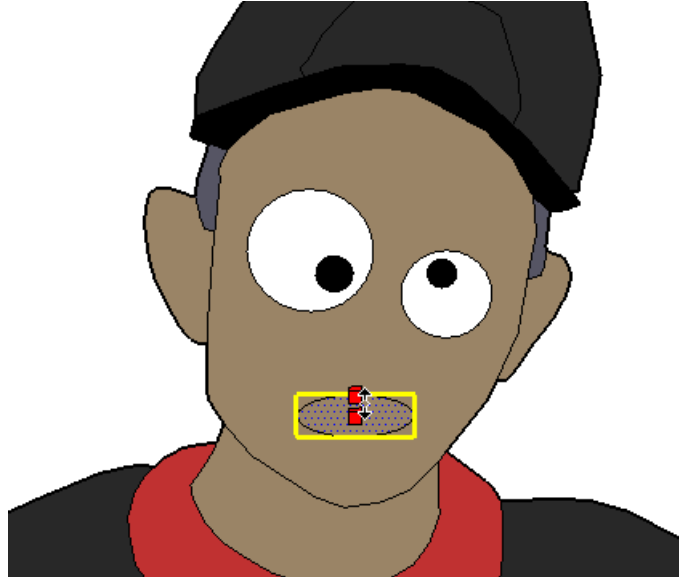
5. To squash the circle, start by activating the **Select** tool and select the mouth.



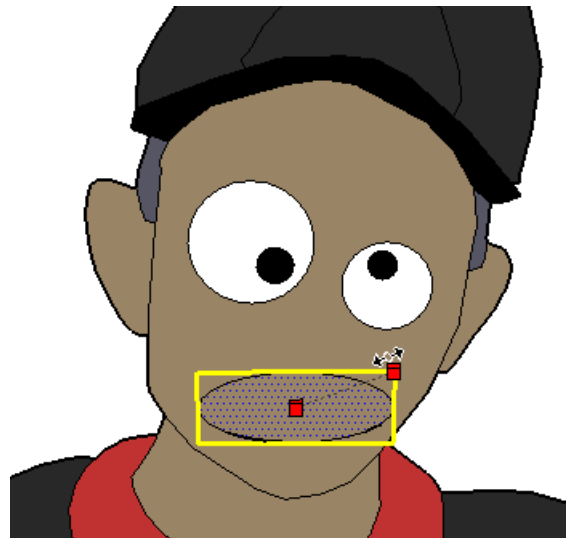
6. With the mouth selected, press the S key to activate the **Scale** tool. Now you should see a yellow box with green drag handles around it.



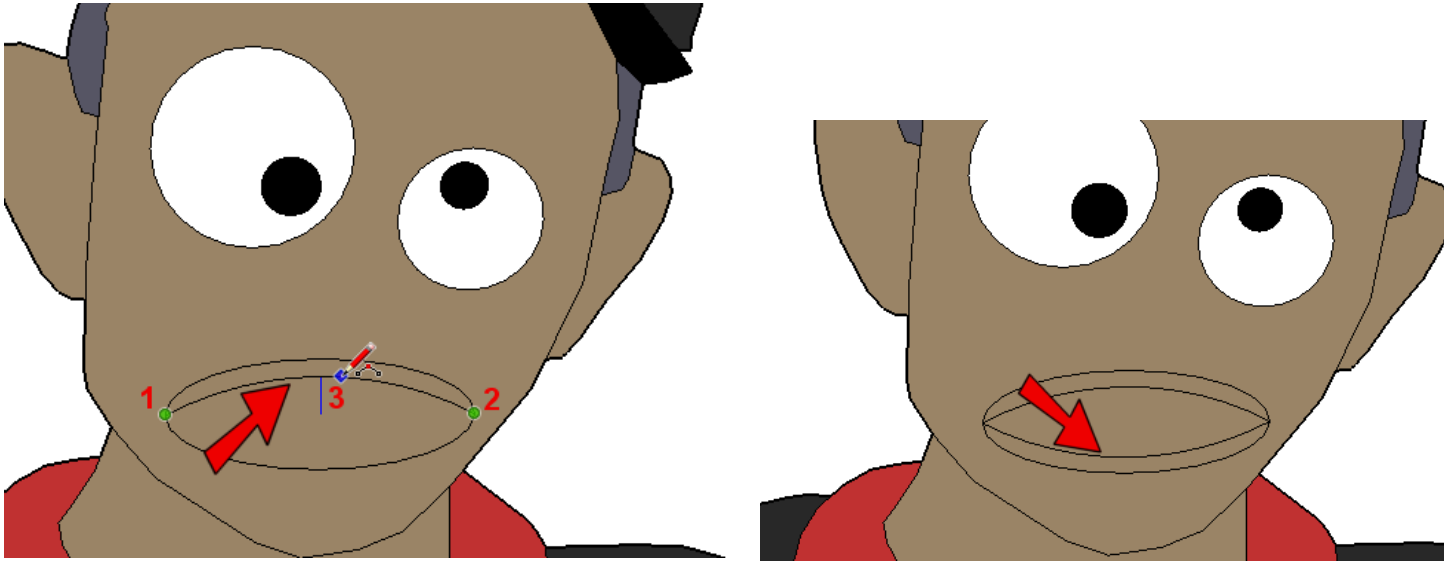
7. Press and hold the Ctrl key (PC) or Option key (Mac) to scale about the center, and pull down the top center drag handle. This shrinks the circle into an oval.



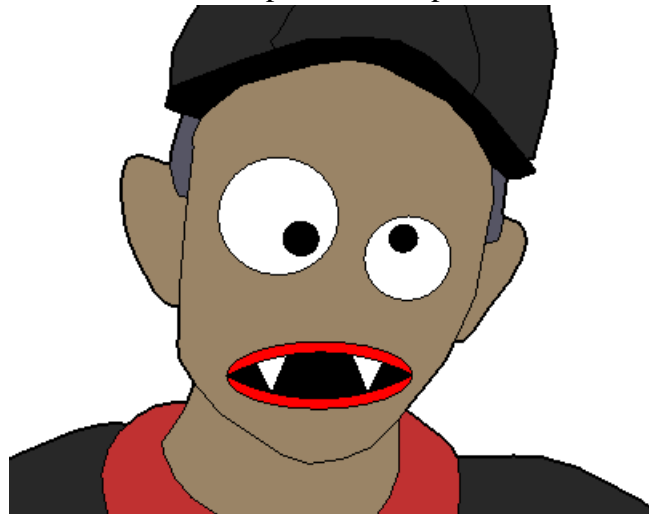
8. With the **Scale** tool still active, drag one of the corner handles outward to increase the overall size of the mouth.



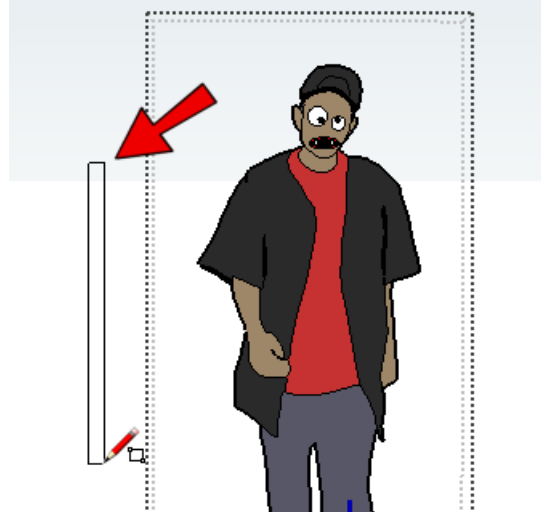
9. Lips can be made with the **Arc** tool, by clicking three points: start, end, and middle.



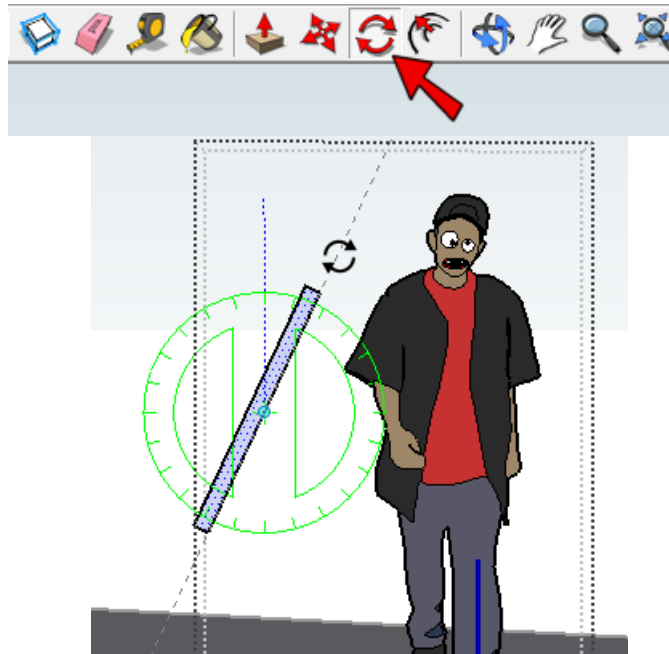
10. I used the **Line** tool to add some lines for sharp teeth, then painted the whole mouth.



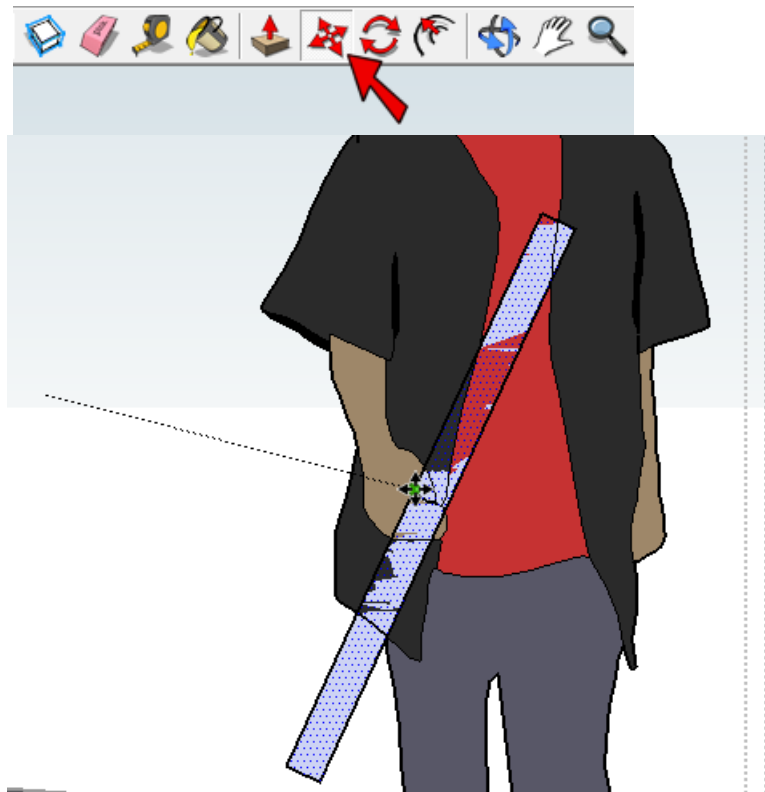
11. I believe zombies are usually armed, so I'm giving my guy a stick, or maybe it's a metal bar. With the boy directly facing you, use **Rectangle** to create a shape like this, in blank space.



12. Select the **Rectangle** and activate the **Rotate** tool. To rotate the rectangle click three points: the first click near the center of the rectangle, a second click anywhere to start the rotation, and a third click to end the rotation.



13. With the rectangle still selected, activate the **Move** tool. For the first move point, click the left edge of the rectangle, near the midpoint. For the second move point, click the boy's hand at the point where the thumb starts.



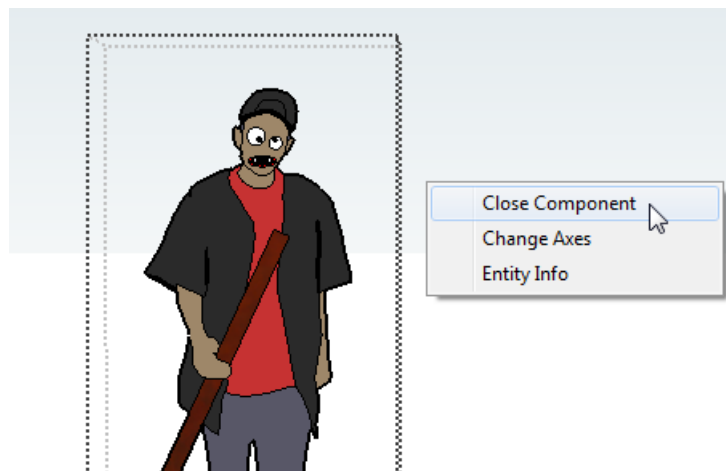
14. The stick and some of the lines on the boy are broken by other lines. So choose a color for the stick and color the parts that are showing.



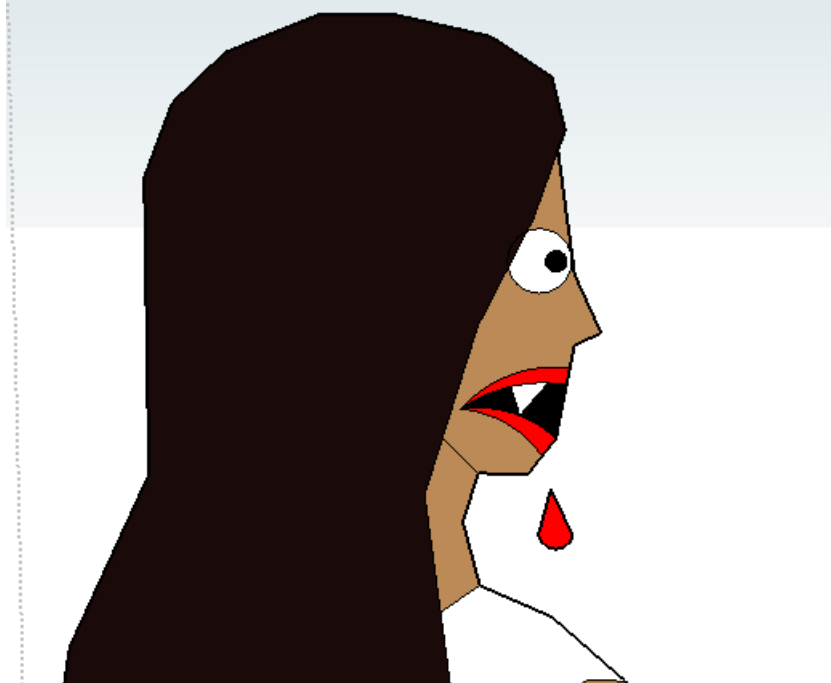
15. Then use the **Eraser** to erase lines that should be “behind” something else.



16. When the boy looks the way you want him, right-click in blank space and choose **Close Component**.



17. For the girl, I added one staring eye, a half-mouth, and a drop of blood comprised of two lines and one arc.



18. After closing the girl component, here is my spooky pair:



19. Save your file - this model will be used in the other May project: making an animation of a two-way dialog!