

Name: \_\_\_\_\_

Your Unit Percentage: \_\_\_\_\_ %  
(Self-Assessment)

Period: \_\_\_\_\_

M.T.H.S. - 3D Modeling  
Mr. S. Carlson

Date: \_\_\_\_\_

**Unit 3: Boolean Operations in Rhino****Unit Instructions and Activities Checklist (6 day unit)****Unit Objectives:**

The student will be able to:

1. Create basic 3D graphic objects using Boolean commands -- Union, Difference, and Intersection.
2. Render Boolean objects in various colors and use textures.

**Textbook:** *Rhino - NURBS 3D Modeling* by Margaret Becker pp. 123-124

**Directions:** Each Rhino Unit has 4 exercises to complete, combine neatly, date, self-assess, initial, and turn in. Read carefully and follow all of the exercise directions below. **In ALL exercises View > Zoom > Extents > All and then Synchronize views neatly. Always CENTER your models and viewports so they are as LARGE as possible but with nothing cut off. Always print in LANDSCAPE format.**

No.	Exercise Description	Date	Percent	Your Initials
1. (1 day)	<b>Model 3-1: Swiss Cheese (10%)</b> Review Boolean handout as necessary. Create a triangular slice of Swiss cheese that is taken from a larger cylinder of cheese using Boolean commands. Try to make it look realistic like from a Tom and Jerry cartoon and include rendering in a cheese-like yellow color. <b>For turn in:</b> a. Print Perspective V/P rendering w. white background.		10?	
2. (2 days)	<b>Model 3-2: Castle (35%)</b> Review Boolean handout as necessary. Create a small castle using Boolean commands. Try to make it look realistic like from an adventure video game and include rendering in a castle-like color. <b>For turn in:</b> a. Print Perspective V/P rendering w. white background.		35?	
3. (1 day)	<b>Model 3-3: Internet Building or Furniture Item Sample (15%)</b> Decide between modeling a building or an item of furniture. Find a photo of your choice from the Internet. <u>Copy, paste, and size it into a Microsoft Word document so that it is less than a 1/4 of a full sheet so as to not waste ink. Type in your name, period, and the name of the object that you are modeling. Also copy and paste in the website address at the bottom of the sheet. Get instructor signature OK on this sheet.</u> <b>For turn in:</b> a. Print your Word document as formatted per instructions.		15?	
4. (2 days)	<b>Model 3-4: Internet Building or Furniture Item Model (35%)</b> Now create your model and try to make it look realistic like from an animated movie and include rendering in colors that match the sample. <u>Make your model as identical looking to the sample as possible in every way.</u> <b>For turn in:</b> a. Print Perspective V/P rendering w. white background.		35?	
5.	<b>Extra Credit &amp; Assembling Your Work for Submission:</b> <u>For 10% Extra Credit complete Worksheet 3 and then Neatly Assemble the 4 or 5 papers Above In Correct Order And Staple To This Sheet. +5% For Collating And Stapling That Is Very Neatly Done. Place your individual self-assessment percents in boxes and the unit total at the top above.</u>		5-15?	