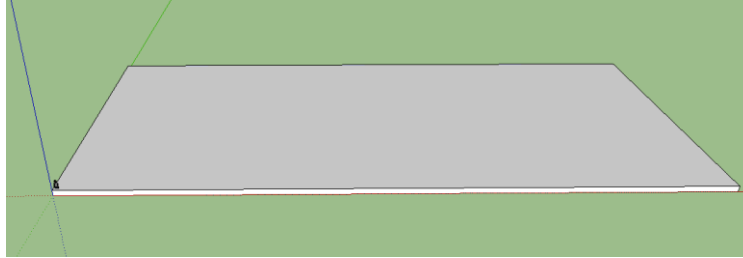# **Parthenon: PART 1- CREPIDOMA (pedestal) :**
## **4 layers** ©David McDavitt

1. Orbit to top-down view
    Use RECTANGLE to start a rectangle from axis
    Type 72.59m, 33.94m [Enter/Return]
2. Use PUSH/PULL to pull step up 0.68m up (type it)

3. Use OFFSET to draw smaller rectangle on top (type 0.75m) smaller
    -pull it up 0.68m
4. Again, use OFFSET to draw smaller rectangle on top (type 0.75m) smaller
    -pull it up 0.68m
5. Use OFFSET to draw smaller rectangle on top (type 3.19m) smaller
   -pull it up 0.68m
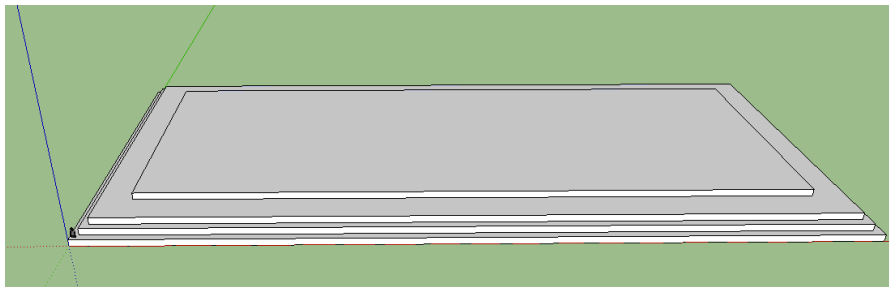
6. TRIPLE-CLICK (all turns blue) choose MAKE COMPONENT (label it CREPIDOMA)

Parthenon: PART 2-   COLUMN

***make column in grass, away from crepidoma base

1. Draw rectangle (click once, move mouse, then type 2.06m, 2.06m)
2. ORBIT under the rectangle
3.Use PUSH/PULL to pull it down (type 0.46m)
4. Use LINE (Pencil) to draw line from midpoint of a side across bottom face (make sure line is in color-
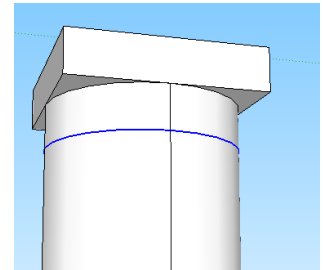
straight)
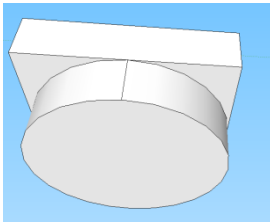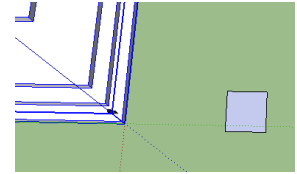
5. Use LINE (Pencil) to draw another line from perpendicular midpoint of a side across bottom face
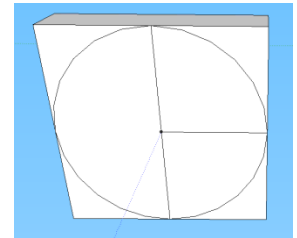
6. Use CIRCLE to draw from middle cross of lines to one edge (move along a line)
7. Use ERASER to touch/erase the two midpoint lines, so only circle remains
8. Use PUSH/PULL to pull down (type 0.46m)
9. Press ALT (control on some comp), and pull down again (type 9.57m)
10. Use ARROW (and SHIFT) to highlight all of line around top of column shaft, orbit around
11. Hit s (scale), and press ALT (Control on some comp), push in (type 0.8m), ESCAPE
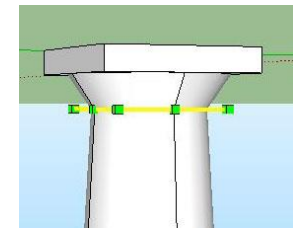
12. Add ridges (paint bucket, METAL, corrugated- resize to 3 feet- hit create material button top RIGHT-   black cube+) >>>OR colorize (red shaft, black/yellow capital
13.   Triple click (or surround with arrow)- chose MAKE COMPONENT: Save it as "doric column"
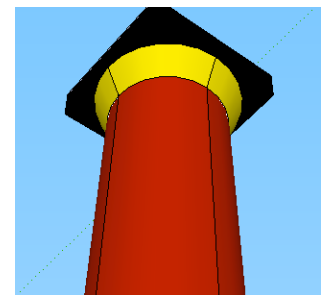
Parthenon: PART 2-   COLUMN… continued

****(lowest level of columns): 17 along each long side, 6 more across front and back

14. Click on ***bottom edge*** of column, and MOVE tool, slide it to middle of 3rd step up, click mouse to make it stop

15. Now click edge closest to the end of the step, and MOVE it along to snap to edge (make sure you see a GREEN or RED movement line, not dotted black= not straight)
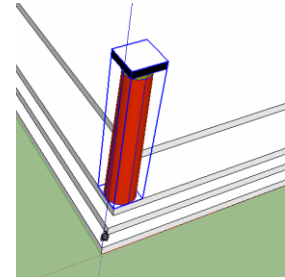
16. ORBIT and ZOOM OUT so you can see the column and whole long side of step 3

17. Choose bottom edge of column

18. Press ALT (Control on some comp) and pull a copy of the column out to other end (along colored line)- SNAP to edge of step
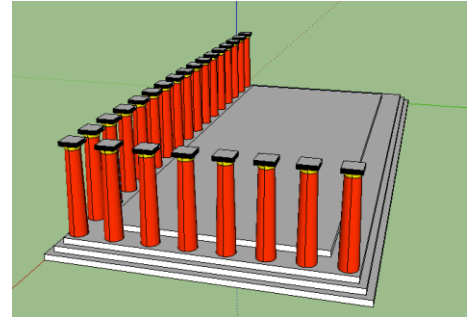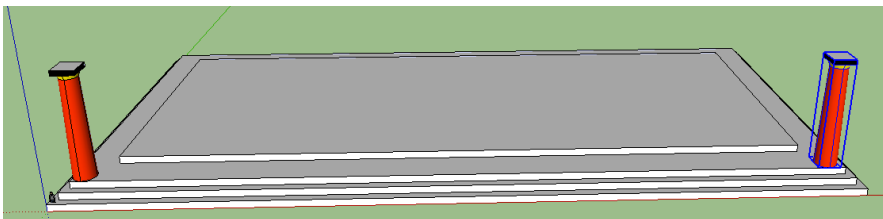
19. Type   /16   to make 16 more copies in between (hit return/enter)

20. Press ALT (Control on some comp) and pull a to other end of SHORT SIDE- snap to end

21. Type   /7   to make 7 more copies in between (hit return/enter)

22. Press ALT (Control on some comp) and pull a copy of the column out to other end (along colored line)- SNAP to edge of step

23. Type   /16   to make 16 more copies in between (hit return/enter)

24. Repeat for last short side (place new copy OVER TOP of first column)

25. Then use ARROW to select and delete one of the copies of first column
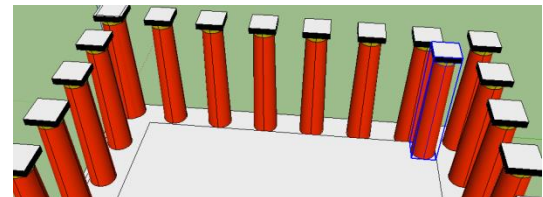
Top level columns:

26. Use ARROW to select one column, copy & paste (in edit), and move it onto top level

27. Press S (Scale), click a corner and start to move it smaller (type 0.95)- click return/enter

28. Click bottom edge and MOVE column over to edge (choose edge nearest edge moving to)

29. Choose perpendicular bottom edge of column, and slide into corner
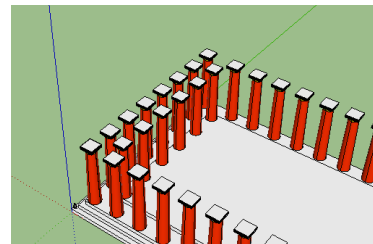
30. Press ALT (Control on some comp) and pull a to other end of SHORT SIDE- snap to end

31. Type   /5   to make 5 more copies in between (hit return/enter)

32. SHIFT and click all 6 new columns, copy, CONTROL slide copies across to other side
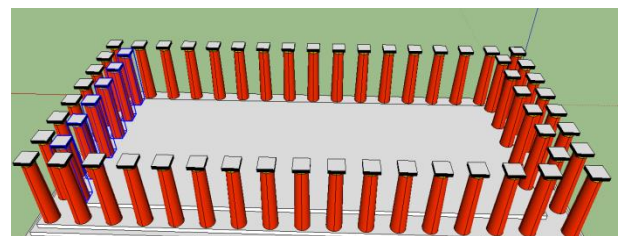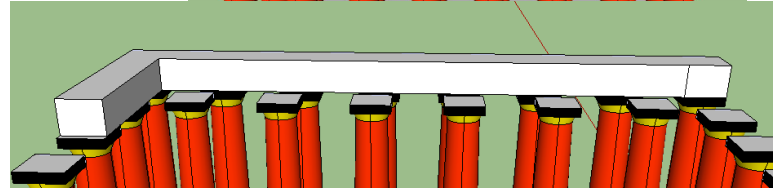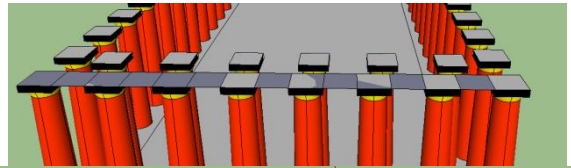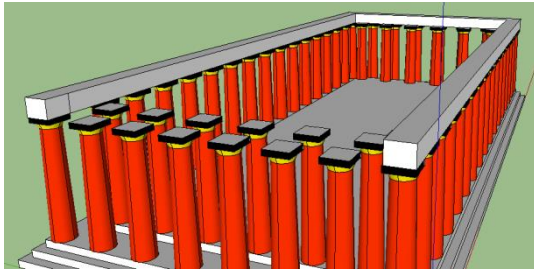
Parthenon: PART 3:WALLS & ENTABLITURE

1. On top of front columns (a short side), use RECTANGLE to draw across all the column capitals in the row

2. PUSH/PULL up (type 1.63m)

3. ORBIT around to the back edge of rectangle you just made, use RECTANGLE to draw a square the same size as the column capital

4. PUSH/PULL it out along the long side above columns

5. Repeat to go all the way around all sides

6. TRIPLE-CLICK the new rectangles above columns, and MAKE COMPONENT (Outer Architrave)

7. COPY and PASTE this 'Outer Architrave' on top of itself- CLICK at corner, and SNAP to existing corner

8. Click New architrave, and RIGHT CLICK (APPLE 2-finger click//PC: CONTROL click)- hit EXPLODE

9. Choose MAKE COMPONENT, name it METOPES

10. On inner top columns, use RECTANGLE to draw across all the column capitals

11. PUSH/PULL these up (type 0.88m)

12. TRIPLE-CLICK new rectangle, MAKE COMPONENT, name it "Inner Architrave"

13. COPY & PASTE it, place on top of opposite side

14. Draw another rectangle on top, pull up 1 meter so matches outer architrave

15. MAKE COMPONENT (g)- name FRIEZE

16. HIDE inner columns and top rectangles: double click (shift to add), right click (cntrl Click) choose HIDE

17. Use TAPE MEASURE to make marks where wall outline is: Hit CNTRL, 4.29m from corners on long sides of top crepidoma (start moving mouse, then type measurement)

18. Use TAPE MEASURE to draw from marks 1.36m towards center, then 1.36m at right angle towards center

   Use PENCIL to draw outer walls all the way around, and across door areas

19. Use PENCIL to draw 17.72m up towards opposite wall

20. Draw all way around to shapes turns blueish

21. Use TAPE MEASURE to mark 2.04m from interior corner (short wall) in, and another 13.6m to get to other wall of room

22. Use RECTANGLE to draw inner room 1, SNAP tape measure, marks
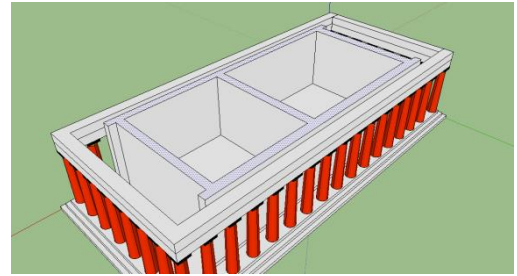
23. Use TAPE MEASURE to mark 1.15 (middle wall thickness), and 2.04m from opposite inner corners (diagonal corners)

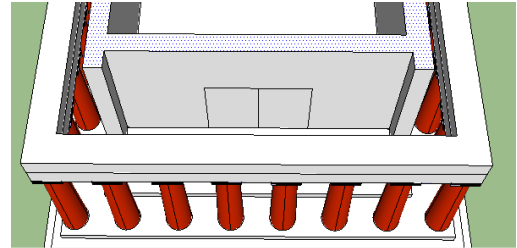24. Use ARROW to select/delete inner floors
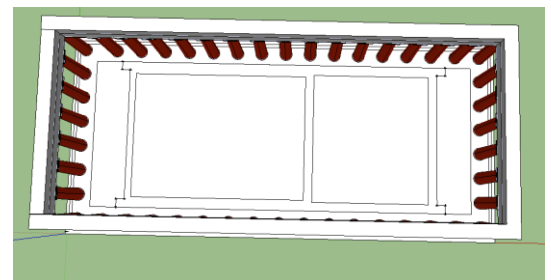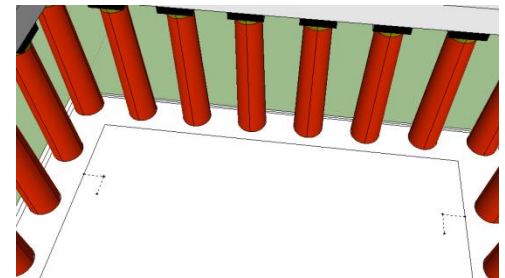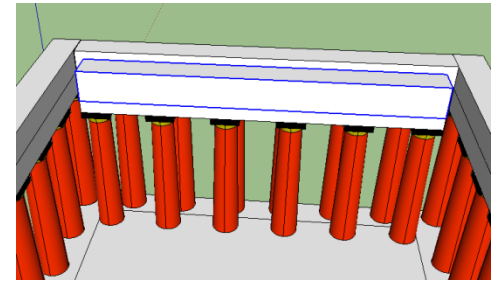
Parthenon: PART 3:WALLS & ENTABLITURE – continued

25. Use PUSH/PULL to pull walls up to match column/architrave tops (touch top of columns with PUSH/PULL to match
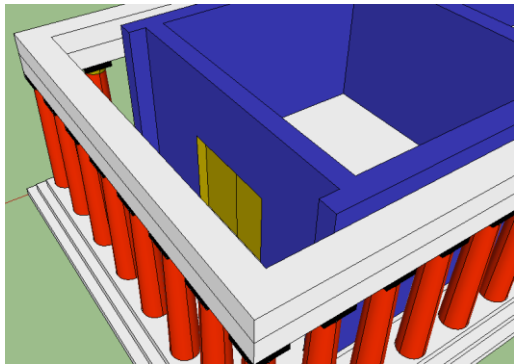

26. Make doors (both short sides) 7.32m high, by 4.12m:
      Use midpoint and use RECTANGLE to draw two halves
      of the door (2.06m wide, 7.32 high)

27. PUSH/PULL doors in a little, or select and delete them
      *Walls- BLUE   Door-Bronze (yellow/orange)
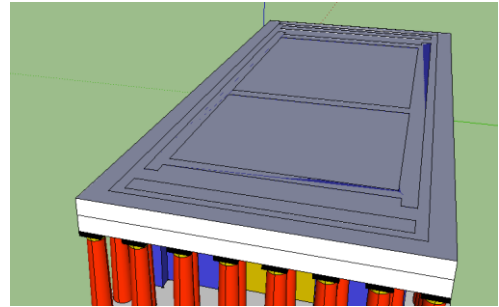
28. VIEW→HIDDEN GEOMETRY, RIGHT-CLICK (DBL FINGER CLICK) UNHIDE inner columns
   VIEW→HIDDEN GEOMETRY again (turns off)

29. Triple-Click inner walled rooms, MAKE COMPONENT[g] (Temple)

Parthenon: ROOF & PEDIMENT

1. Use RECTANGLE to draw rectangle across whole top from corner to diagonal corner
2. PUSH/PULL rectangle up 0.68m

3. PUSH/PULL each *edge* of new rectangle out, and move PUSH/PULL tool to edge of second step (lines it up)
4. Double-Click top rectangle, MAKE COMPONENT (g), call it ceiling
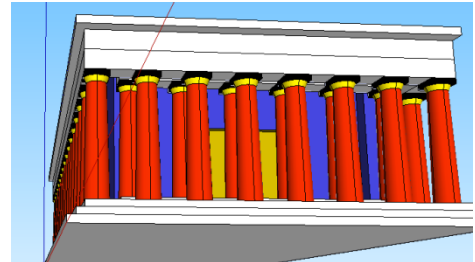
5. PUSH PULL up 5m
6. Use PENCIL to draw from midpoint (short side) to corners, PUSH/PULL triangles away to make roof
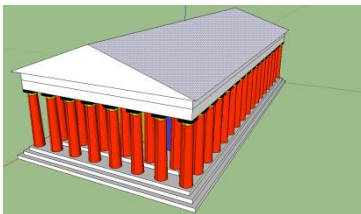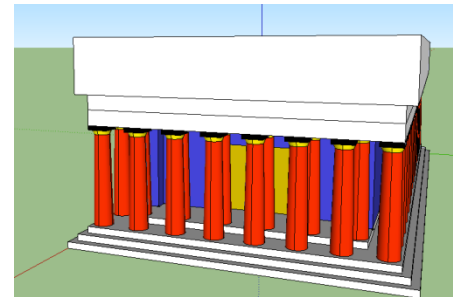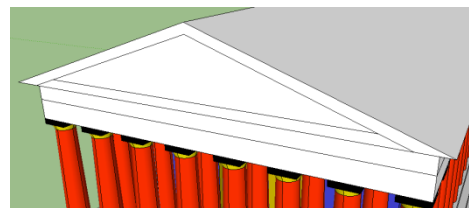
7. Use OFFSET to make a triangle inside, type 0.68m

8. Connect diagonal lines of triangle to bottom (PINK LINE=same angle), ERASE original bottom line of triangle

9. PUSH PULL in small triangle, type .9m

>>>DECORATE IT

Original Project by **Matthew Gudenius**
https://www.youtube.com/watch?v=dMVl1YbOYpo

Text Directions by David McDavitt