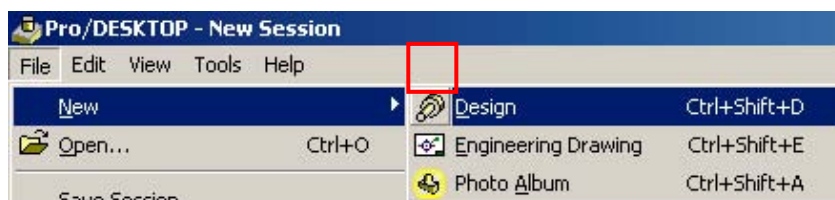


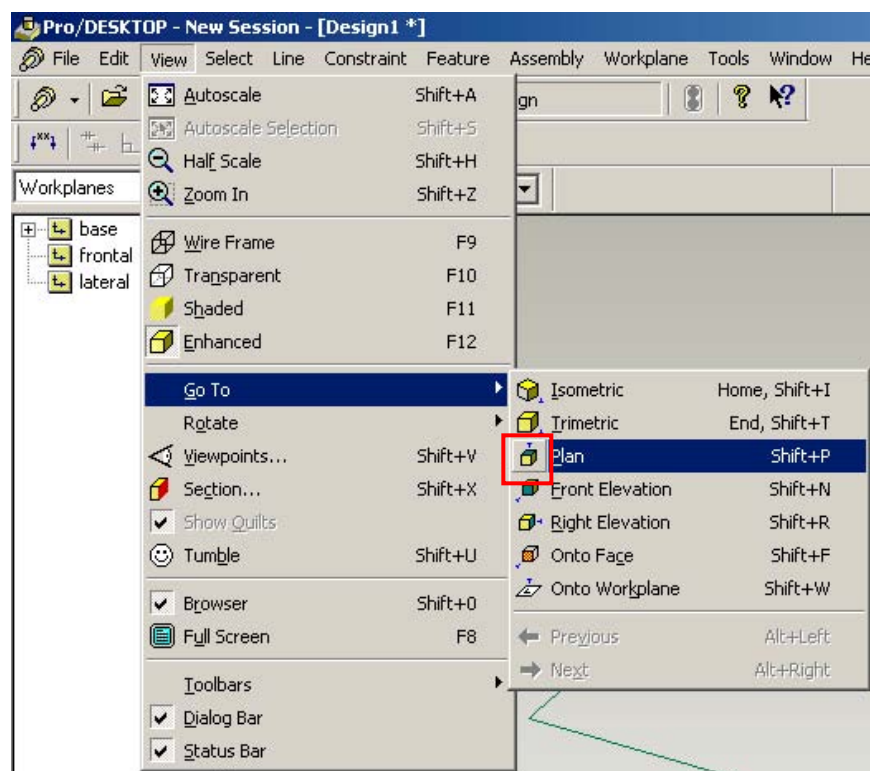
## PRO-DESKTOP Spatula assignment

Draw your spatula shape by:-

1. Open up **PRO-DESKTOP** from your programmes menu. Then click on the file menu > new> design.



2. The new design window will now open. Double click on '**design 1**' the bar and this will maximise the window. Now change the view, click on the '**view menu**', then select '**Go To**' and select '**Plan**'. Or alternatively use the '**plan view icon**' from the '**view onto work plane icon**' or simply press (Shift P).

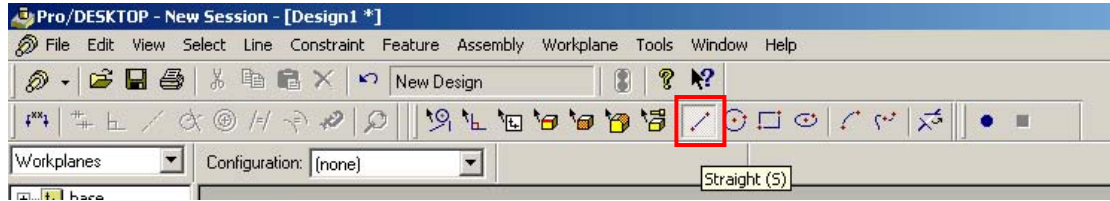


View menu

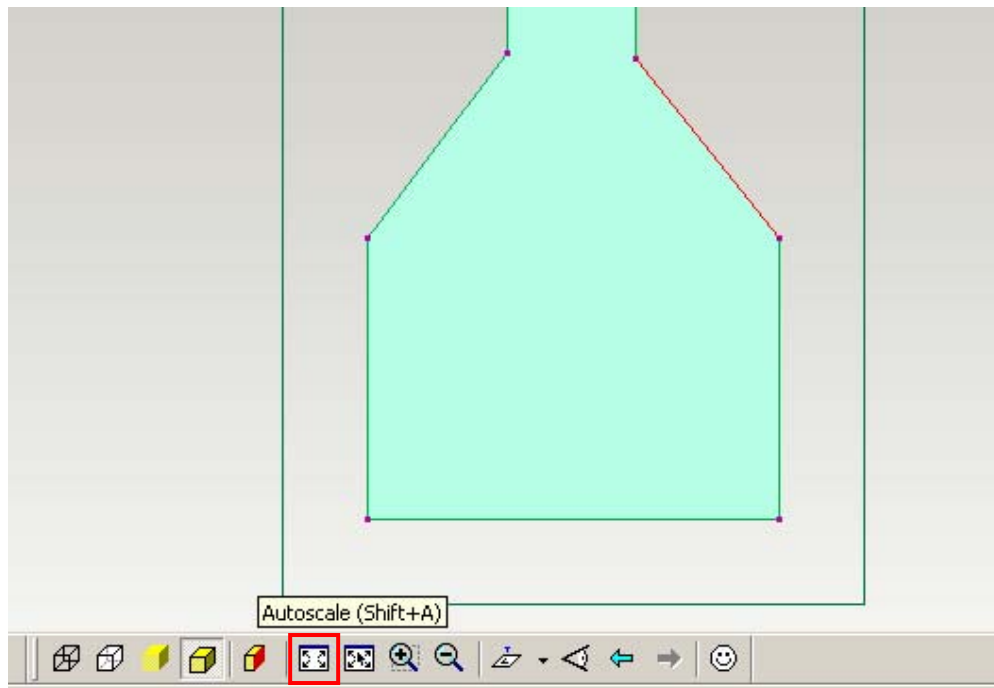


Work plane icon menu

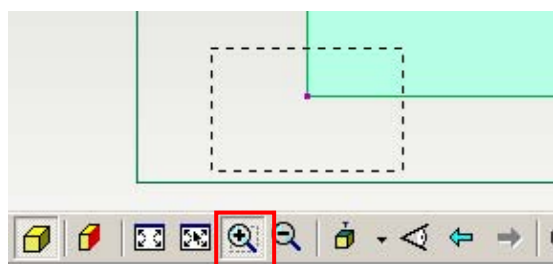
3. Now select the **'straight'** line tool on the right hand side of the bar.



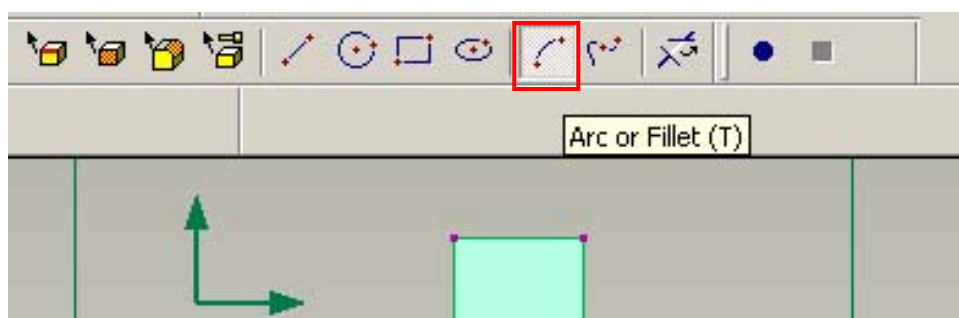
4. Now **'draw a very rough shape'** of your spatula using the straight lines. Note you will see dimensions when you draw, this will help you draw if you have similar sizes within your drawings. We will curve them later. When drawing select the last point of the last line so new line joins it. Tip: hold down shift when drawing your shape to make vertical or horizontal lines. To zoom in on your drawing click on the 'auto scale' icon below.



5. Once you have **'drawn your shape'** of your spatula make sure there are no gaps! If there are use the **'straight line tool'** to fill them.
6. Next **'zoom'** in on a corner that you will add curves to. Click on the **'zoom'** icon and then click on the **'corner'** you wish to curve, then still clicked down **'drag the zoom tool out'** to select an area to zoom into.



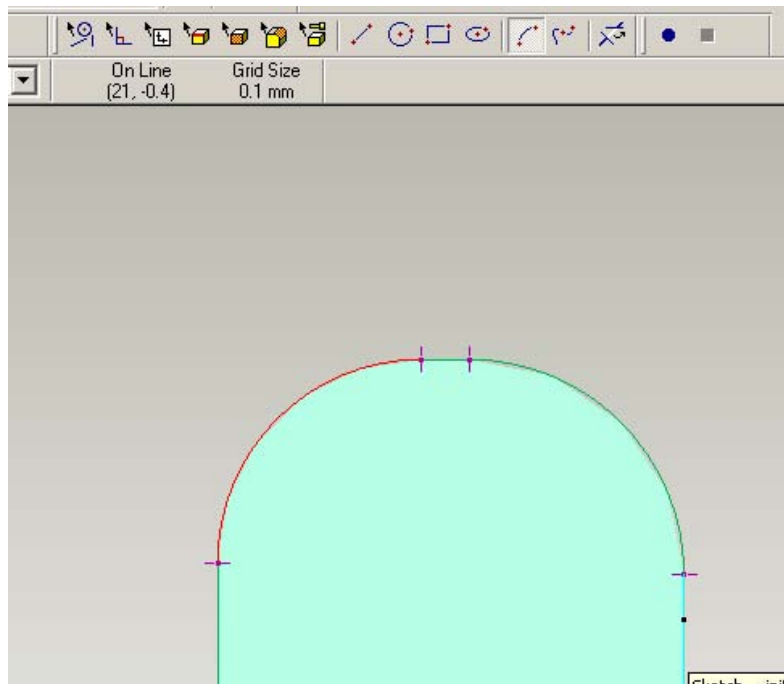
7. Now click on the 'arc or fillet' icon, this is a curve tool and will round your edges.



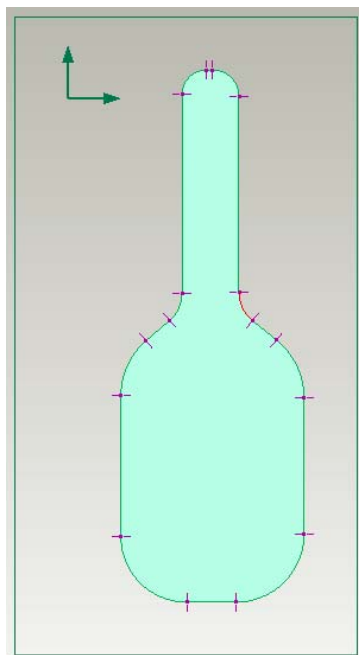
8. Now click on the 'save' icon and save you file. Please save it in your 'my documents' folder under a new folder called 'spatula'.



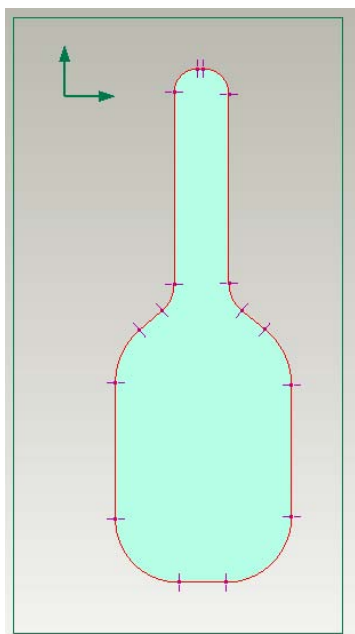
9. Click on the 'corner of your spatula' once then release then click and hold. You can now move the mouse to change the shape to how you like. You can also change the shape by using the 'select lines' tool. Note: when you curve a line please note the number the curve goes to, then when you do the opposite side you can get it to a similar curve by aiming for the same number.



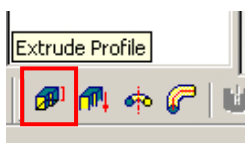
10. Now you have 5 minutes, curve all your corners with the **'arc tool'**, once you are happy with it press **'save'** to save your work.



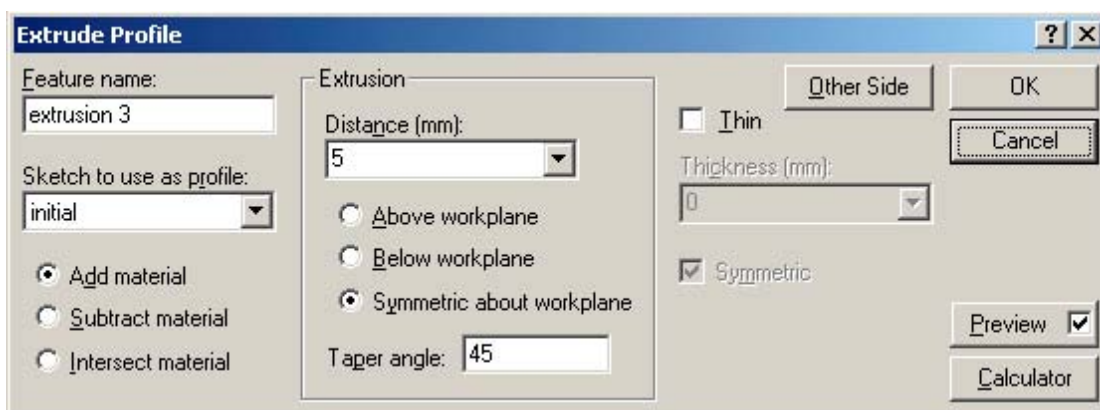
11. Now once you are happy with your spatula shape, we will give it some thickness. This is called **'extruding'** let's make it 3D! Now click on the **'select lines'** tool on the right. Draw a **'big box'** around your Spatula to highlight it. Notice all the lines go red.



12. Now click on the 'view menu' then select 'Go To' and select 'Isometric' you will now be able to see your spatula in 3D. Now click on the 'extrude profile' icon. A new window will pop up enter the information below. Now ensure you click on 'add material' then set a distance of '5mm' then click on 'symmetric about workplace', then add a 'taper angle of 45' then click 'ok'. The taper will make your spatula look like it has been sanded down.

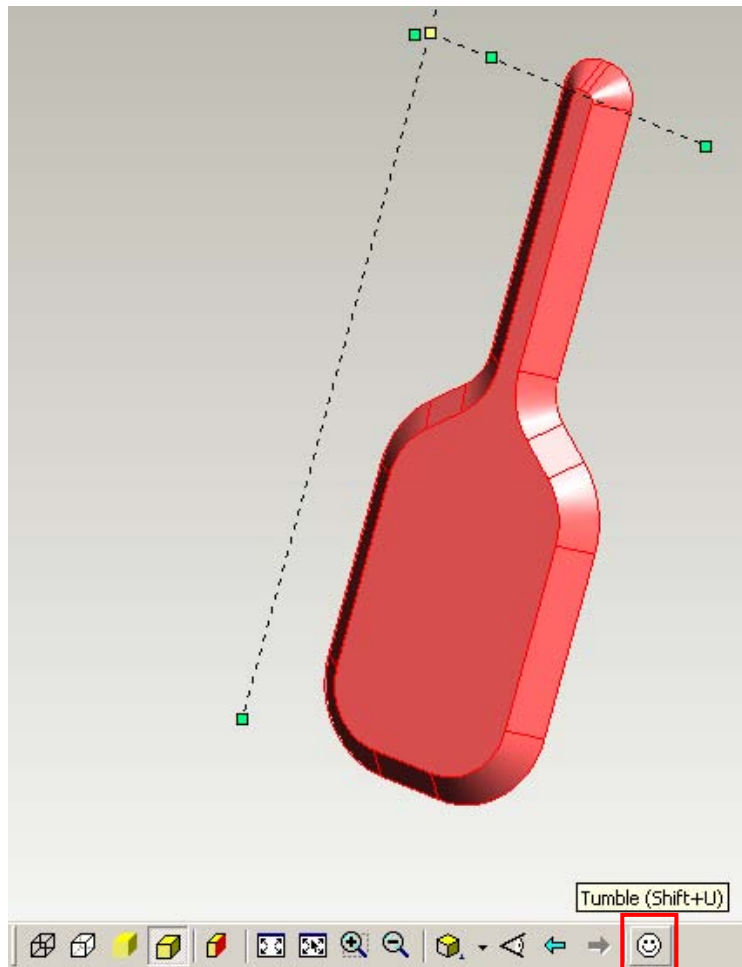


Extrude icon



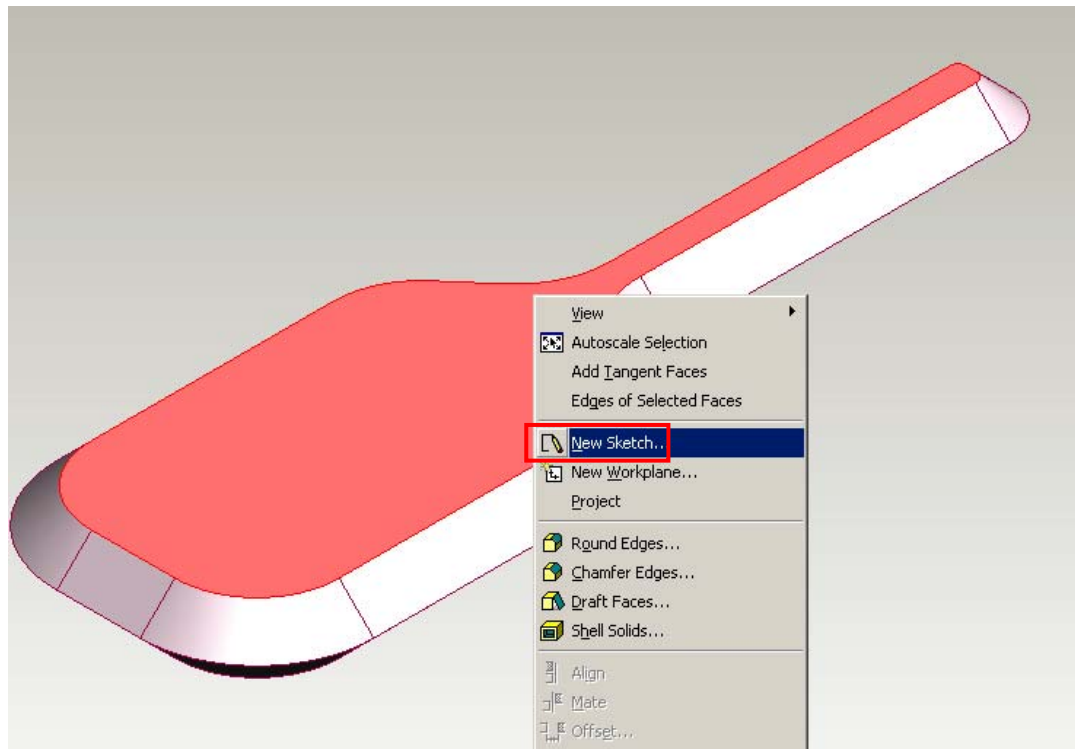
Extrusion details

13. What have you just done? Well you extruded it and gave it depth, let's have a look. Now click on the 'smiley' face icon, this is called the 'tumble' icon. This will give you a 3D view of your spatula model. Then click on the 'tumble' icon again to stop it tumbling.

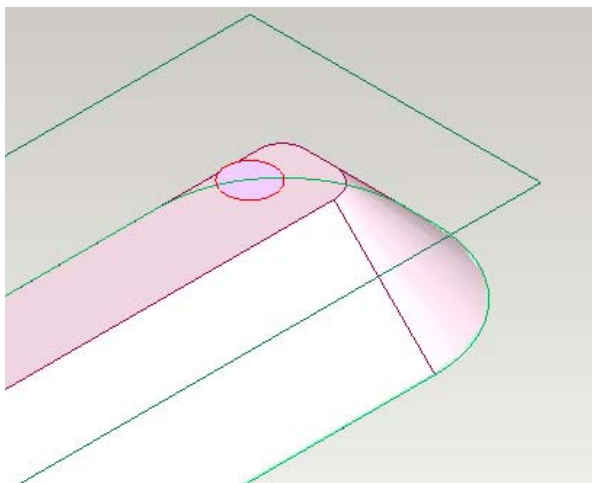


14. Now click on the '**view menu**' then select '**Go To**' and select '**isometric**' you will now be able to see your spatula in '**isometric view**'. You may need to click on the '**auto scale**' icon to get your spatula to fit the window again.
15. Now we will add a hole. Click on the '**select faces**' tool. Then click on the '**outside spatula line**' at the top, then '**right click on the spatula**' again and choose '**new sketch**' from the menu. Name your new sketch '**hole**'.



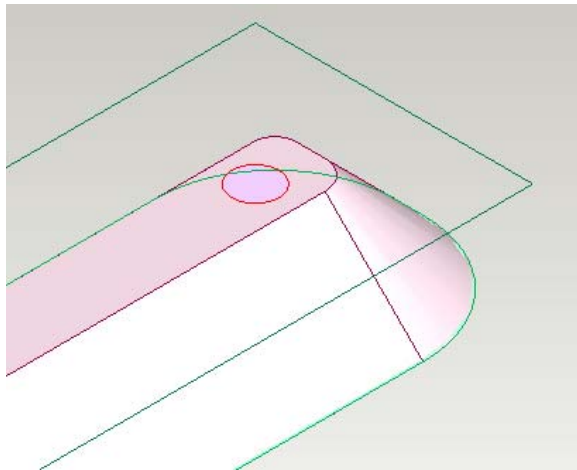


16. Now click on the '**zoom icon**' and '**zoom**' into the end of the handle. Click '**outside the handle**' to zoom in. Next click on the '**circle drawing tool**' and draw a circle at the end of the handle.

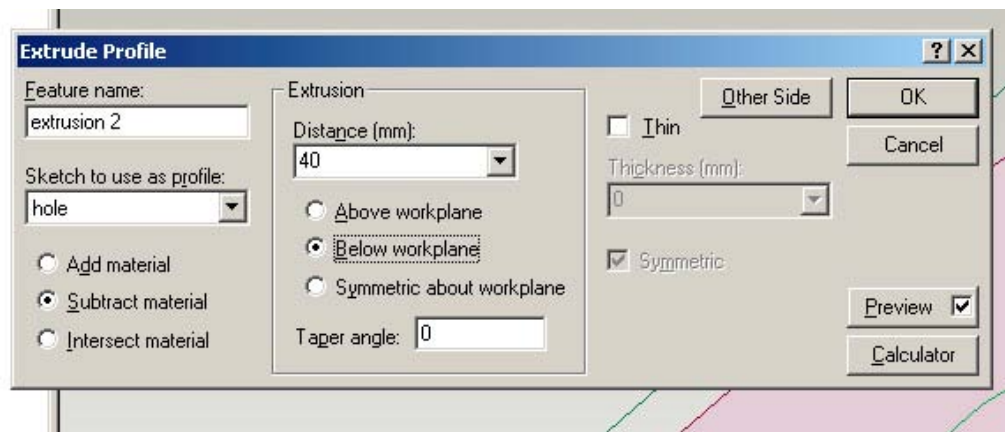


17. Now click on the '**select lines**' tool. Then '**roll over**' the middle of the circle until you get a cross, and '**then drag your circle**' to the centre on the handle.





18. Now click on the 'extrude' icon and enter the information below into the extrude window. Enter 'subtract material' enter 'below work plane' then enter a distance of '40mm' and then click on 'ok'.

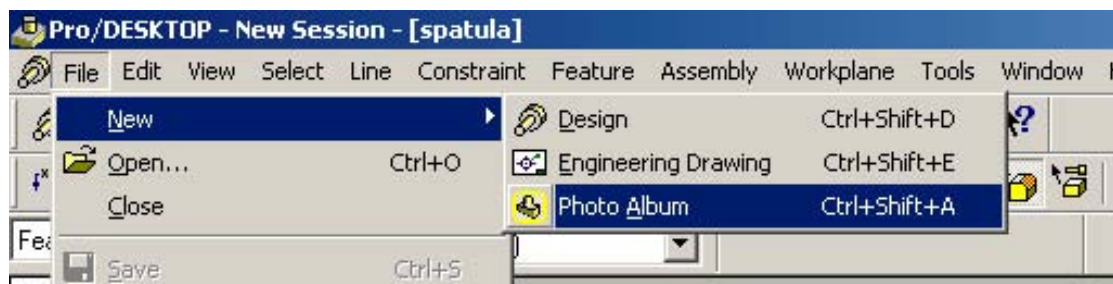


19. Now click on the 'auto scale' icon and you can see that you have made a hole in your spatula. Now click on 'save' and save your work.

Well done you have now made a spatula!

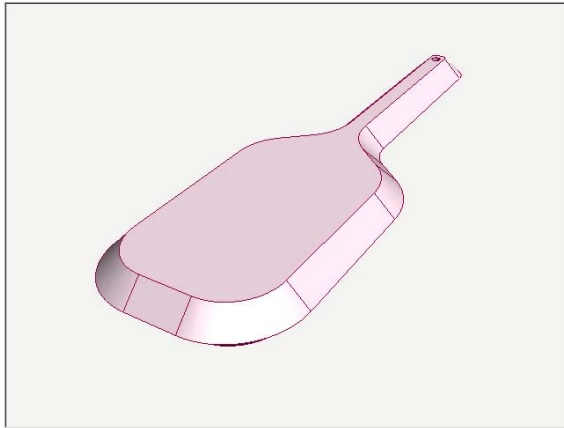
### Rendering your spatula

20. Now let's render our Spatula. Click on 'file then new then photo album'

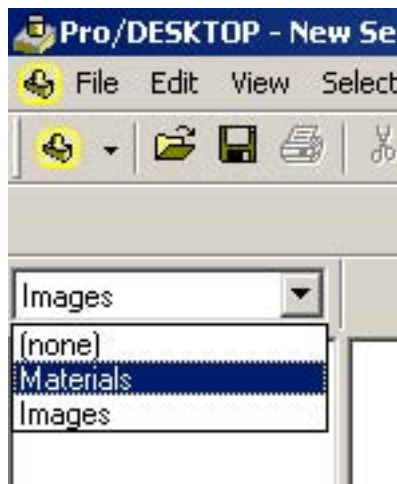


21. Now click on the 'image menu' and select 'new image'. A new image window will now appear. And you will see you spatula in the centre.

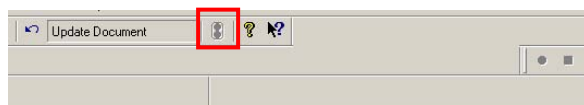




22. Now click on the **'images drop down menu'** and select **'materials'** the material menu will now appear.



23. Now open up the custom menu by clicking on the **'+' icon'**, then select **'zebrawood'**. Now **'drag the selection over to the spatula'** only **'click on the spatula'** when it is all selected. Now click on the **'traffic lights'** at the top of the program to view your rendering.



24. Now open up the **'special menu'** by clicking on the **'+' icon'** then select **'clouds'**. Now **'drag the selection over to the background'** only **'click on the background'** when it is all selected. Now **'click on the traffic lights'** at the top of the program. Now play around with your textures to produce your own rendered version. You may choose any you wish.



25. Now **'click on the file menu'** and press **'save'**. Save your album name your file as **'spatula rendered'**. Now **'print off your file'** once printed **'write your name'** on the sheet and **'hand it in to your teacher'**.

**You have now produced a 3D spatula well done!**