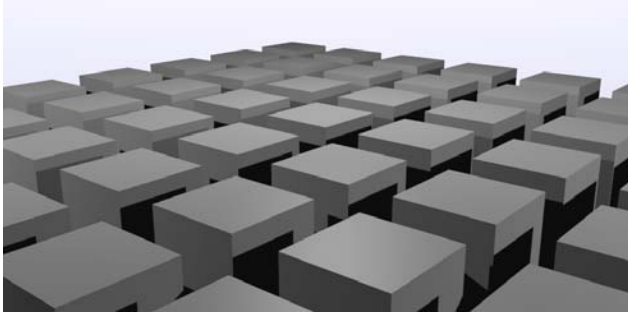


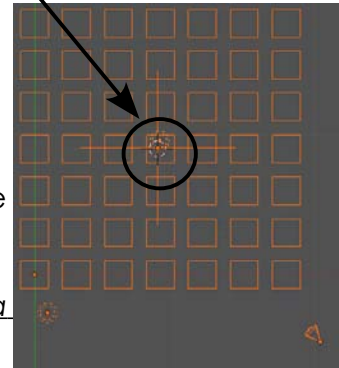
## Chapter 19- Working With Nodes

### Using Nodes for Depth-Of-Field Camera Effects

A great node feature is creating *Depth-of-Field* effects. Just like a camera shot using a low F-stop setting that creates blur behind and in front of what the camera is focused on, we can create in Blender.

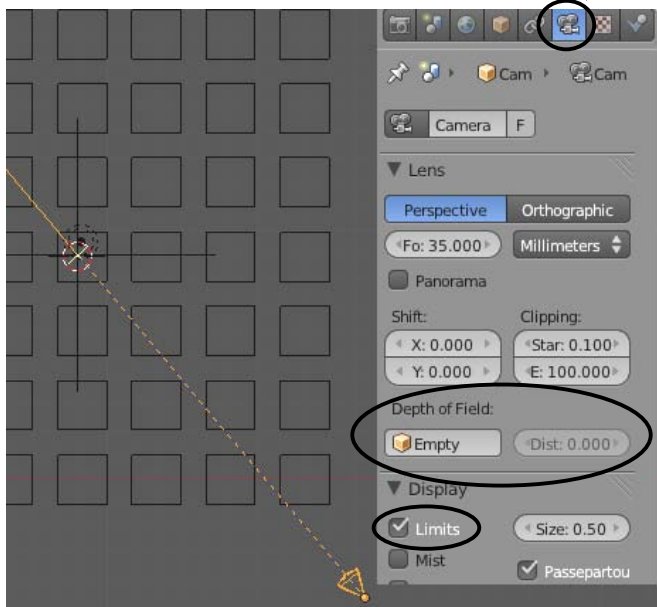


To start this scene, I've created a grid of cubes using the *Array* modifier. The camera is tracked to an *Empty*, placed directly on the center cube.



Notice everything is in focus above. We want to blur the foreground and background.

With the camera selected, go to the *Camera's Object Data* panel to set a few things.



You have 2 ways to set the *Depth of Field*. You can select an *Object* for the camera to target (*great for animation*) or you can set a *Distance*. In order to see the actual target point on the screen, turn on "*Limits*" in the *Display* panel. The target point will display on the dashed line. Remember that all numbers can be animated so you can change the distance during a movie, much like you would see done professionally. It's now time to work on the nodes.

In the *Compositing* screen configuration, enable nodes by checking the "*Use Nodes*" button, also set for "*Compositing Nodes*" (discussed earlier in the chapter).



Delete the line connecting the *Render Layers* and *Composite* panels. We are now going to add 2 nodes. Add a "*Map Value*" node from the *Vector* node set and a "*Defocus*" node from the *Filter* node set.