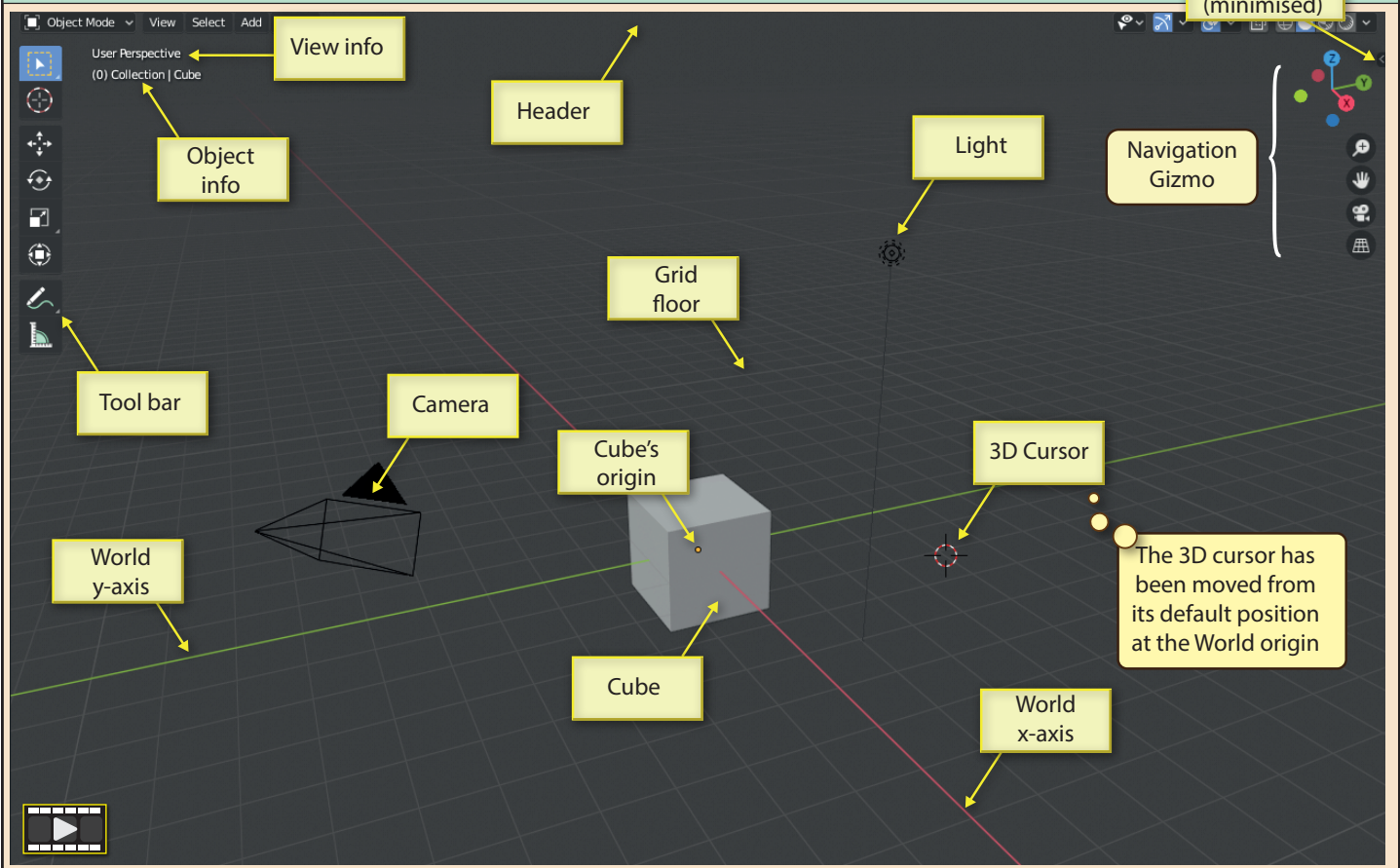
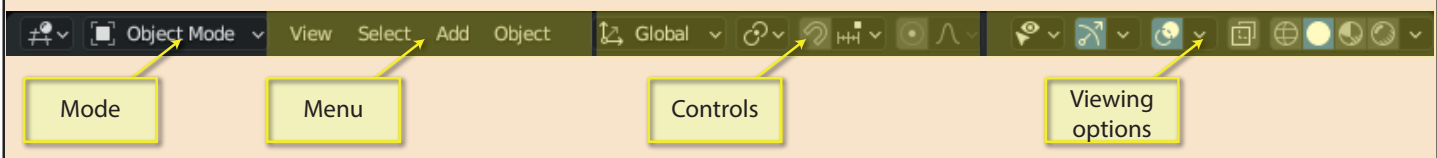


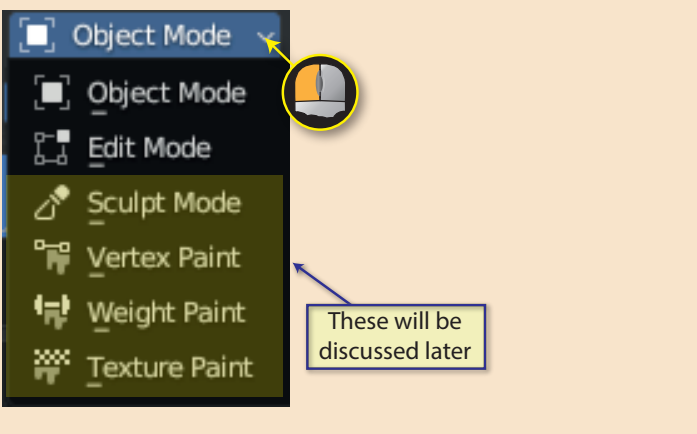
The default workspace is **Layout** and this contains the **3D Viewport Editor** which is our view into the 3D world. It is here that we will create our 3D model. There are several elements within this Editor as labelled below.



The **Heading area** of the **3D Viewport** contains four main areas. These show the current mode, a menu heading, edit controls and viewing options.



We'll be discussing each of these sections of the heading in more detail in a later chapter but for the moment we need only know that the **Mode** option dropdown has two entries of immediate importance: **Object Mode** and **Edit Mode**.



We work in **Object Mode** when we want to manipulate a mesh as a single object.

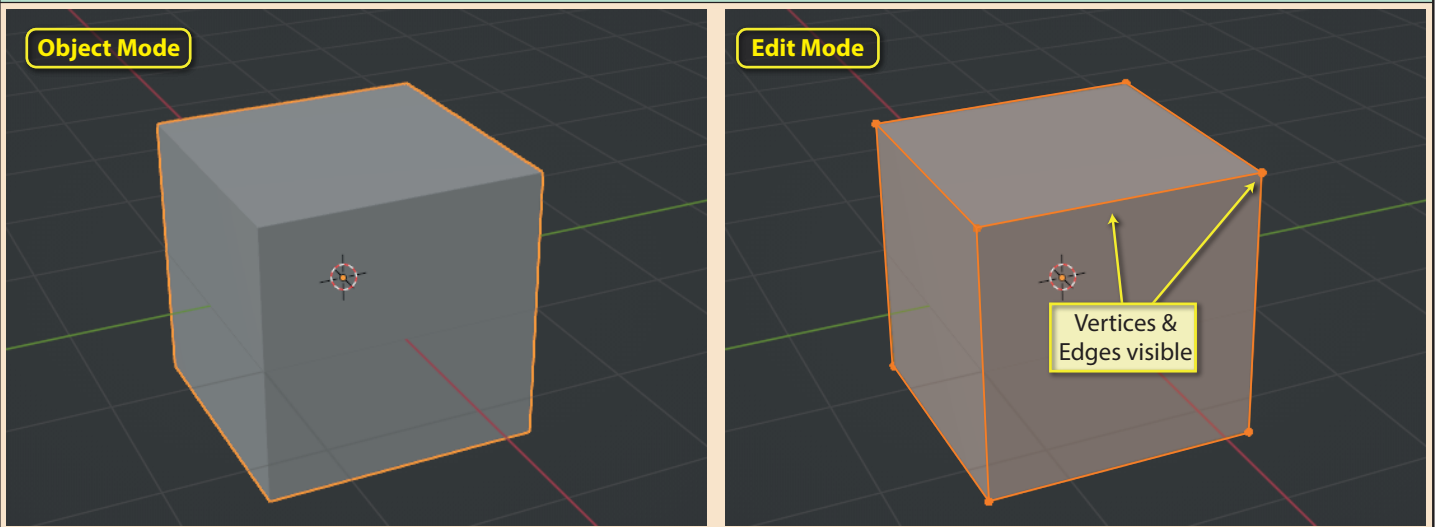
In **Edit Mode** we can manipulate the individual vertices, edges and faces within the selected mesh.

Although we can use the dropdown list in the **Heading** area to switch between **Object** and **Edit** modes, a quicker option is to press the **Tab** key which toggles between the two modes.

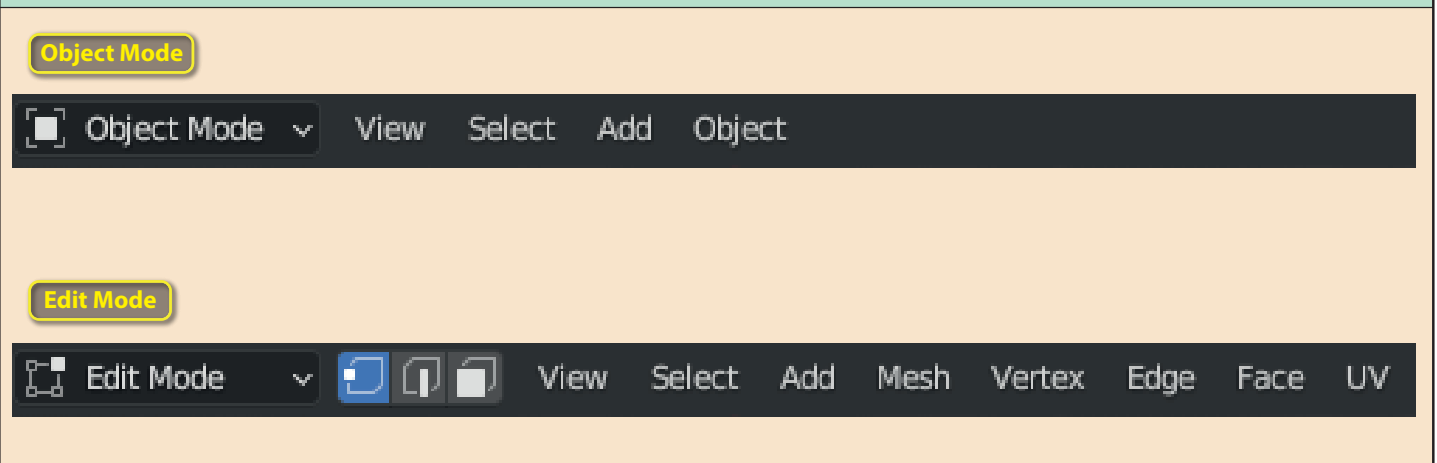


Switches between **Object** and **Edit** modes

Below, we can see how the image in the **3D Viewport** changes between **Object Mode** and **Edit Mode**.

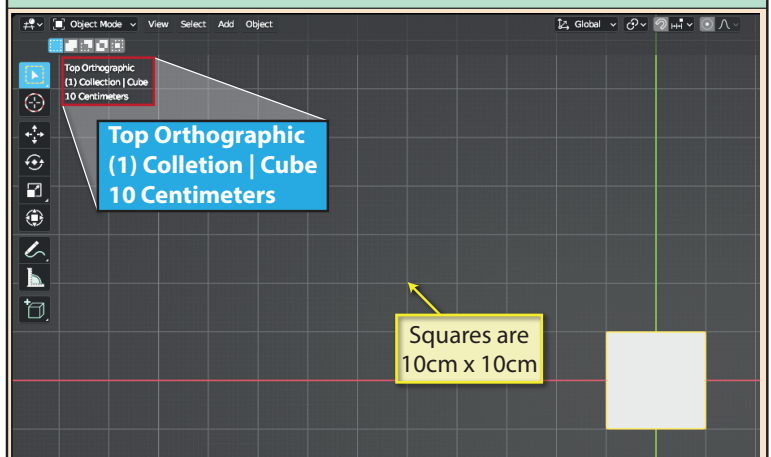
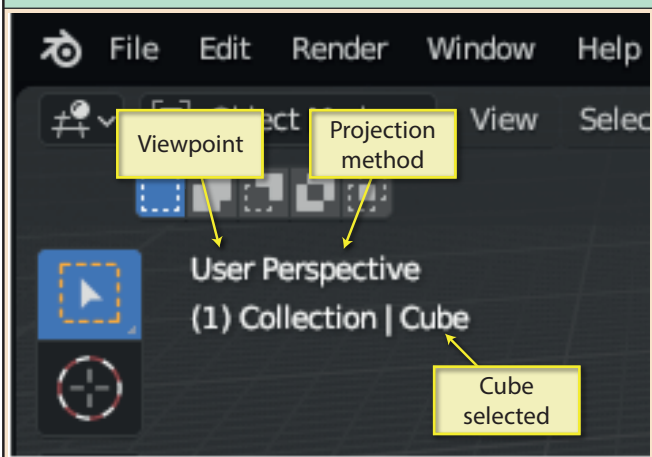


Notice that the menu options in the **Heading** area change depending on the mode we are using. Again, these will be discussed in detail in a later chapter.

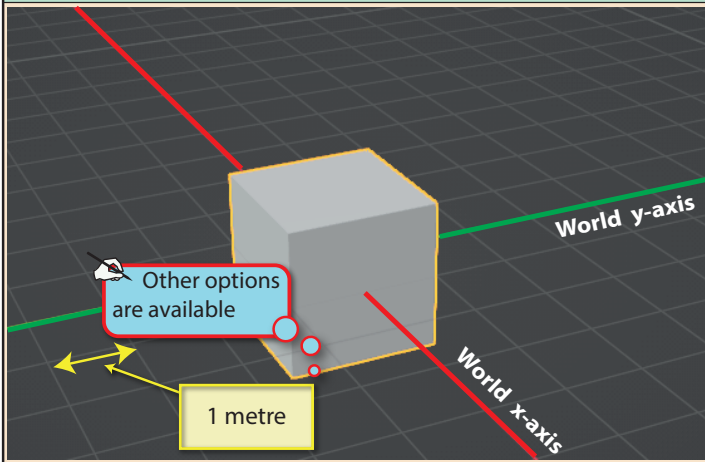


Below the heading is the main area of the **3D Viewport**. Near the top-left of this area are two lines of text. The first line gives viewpoint and projection details; the second line, the currently selected object.

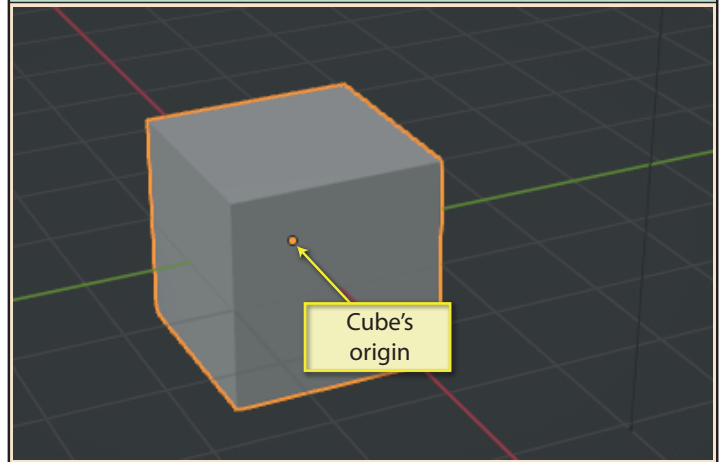
When we are in a named viewpoint such as *Front*, *Left* or *Top*, an extra line of text appears. This gives the size of the squares in the grid that is added to the background as an aid to measurement.



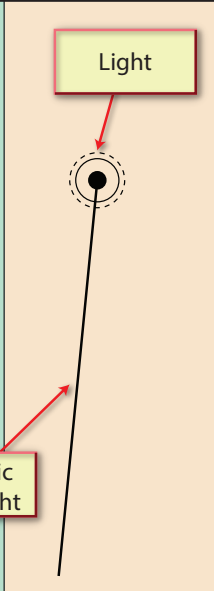
In the main area of the **3D Viewport**, the **World x** and **y** axes are shown on the **grid floor**, but the **z-axis** is missing on start-up. The squares on the grid are **one Blender unit** in width and depth. By default, each Blender unit is equivalent to one metre.



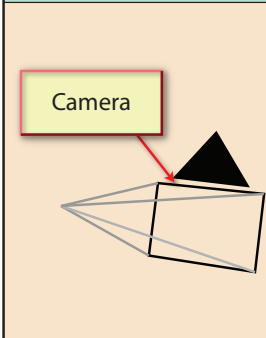
Blender automatically adds a **Cube** object to a new project. The **Cube** is one of the primitives available in Blender. The orange spot at the Cube's centre, is its **origin**. When we set coordinates for a mesh, it moves in such a way as to place its origin at that point.



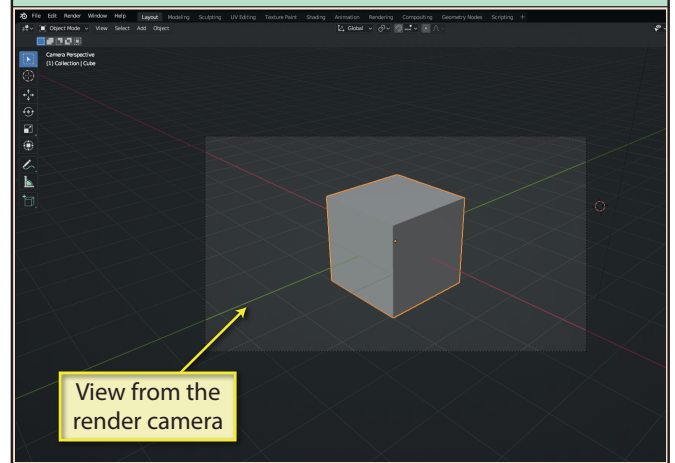
The light is responsible for lighting the objects in our scene. The line projecting from the centre of the light source indicates the direction of the light. The type of light (by default it's a **Point light**), its brightness and direction can be changed.



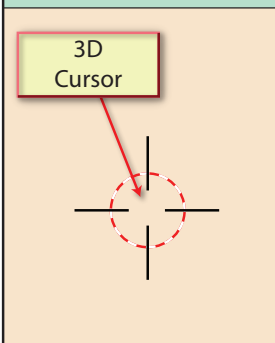
The view from the **camera** is what appears in the rendered image. We may think of the view we are seeing in the **3D Viewport** as coming from a second, invisible camera.



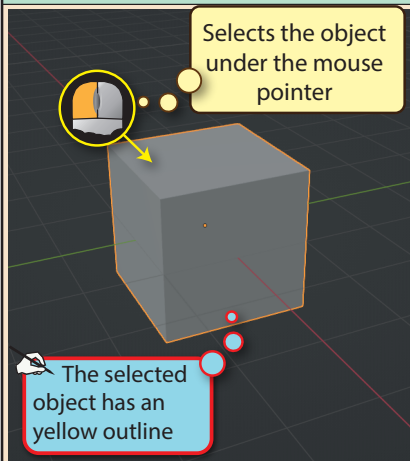
The view from the render camera is shown within the lighter coloured rectangle below. It is this area that appears in the final rendered image.



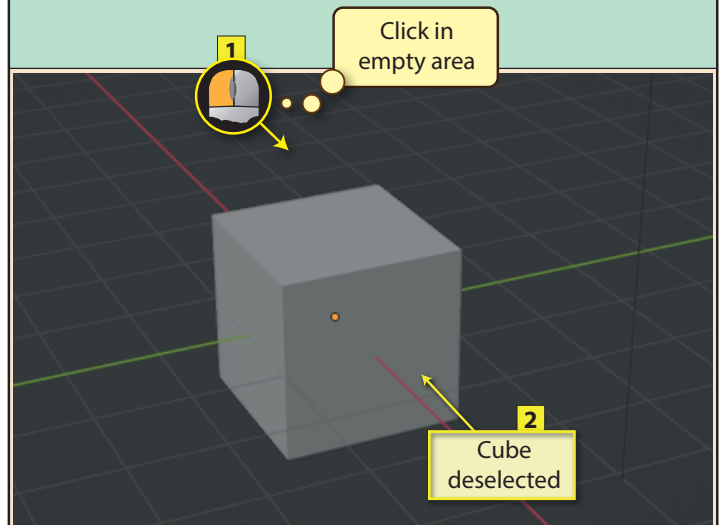
The **3D cursor**'s position determines where any new object is initially placed. An object is placed so that its origin is positioned at the centre of the **3D cursor**.



Although we can select a scene object by clicking on its name in the **Outliner Editor**, a much simpler way is to left click on the object itself.

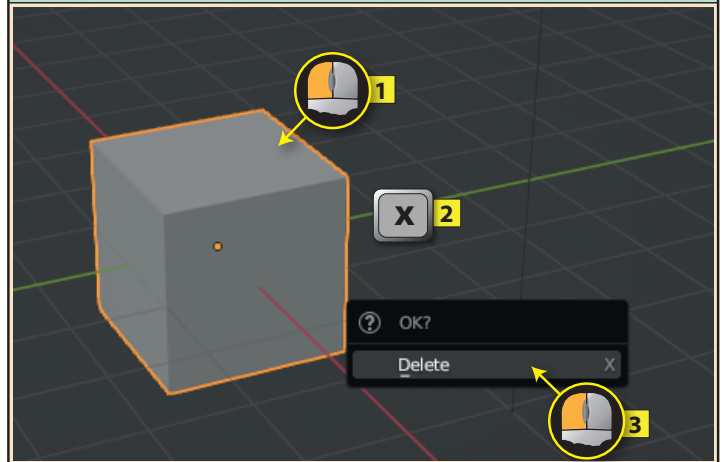
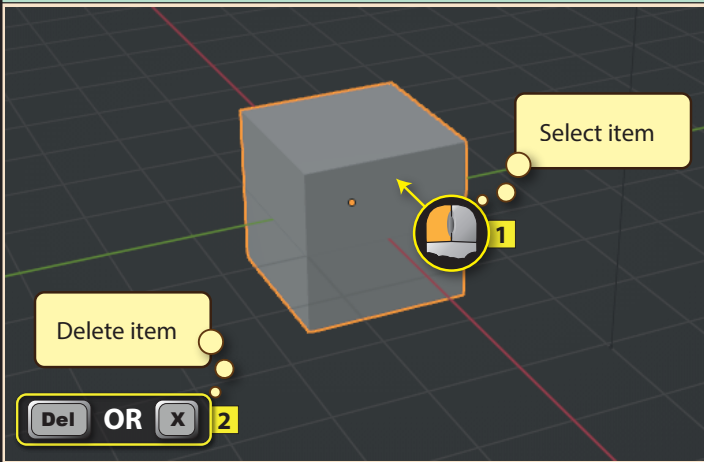


To deselect an item, all that is required is to left click in any empty area of the scene.



To delete an item from within the *3D Viewport*, we must first select it and then press either the **Delete** key or the **X** key.

While the **Delete** key deletes the item immediately, if the **X** key option has been used, then Blender will require confirmation of the action before removing the object.



We can add new meshes to our scene by selecting the **Add|Mesh** option from the *3D Viewport's* own main menu.

