

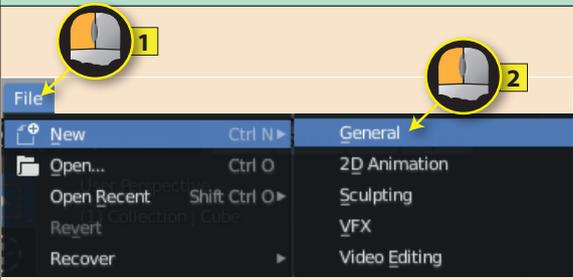
Workspace Details

The **Topbar** contains many items including the **main menu** bar and a set of **workspace layouts** which we can switch between as we progress through the various stages required to create our model.

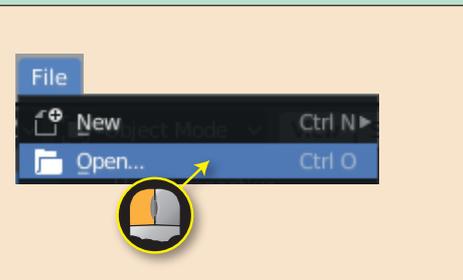
The **main menu** contains several categories but at this point, we will look briefly at only some of the **File** menu options.



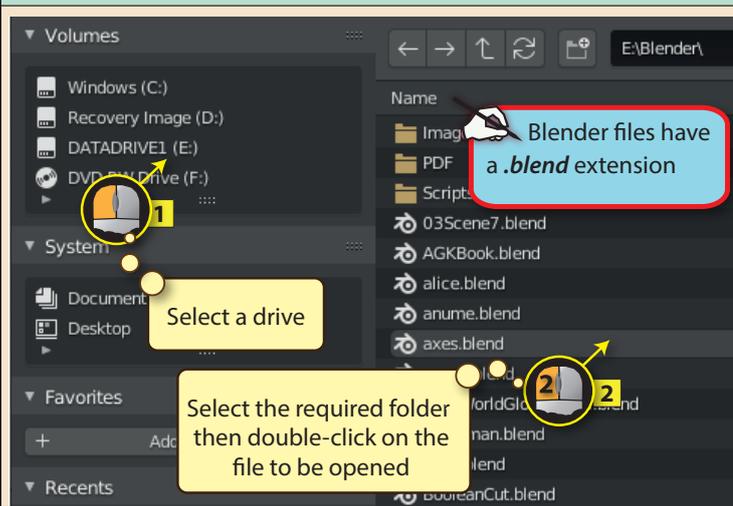
To start a new project we need to select the **File|New** option then select **General** from the submenu.



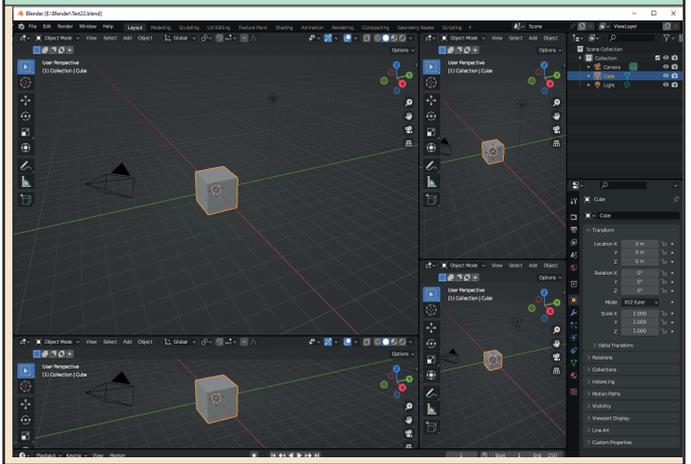
To load an existing project, we use the standard **Open...** option.



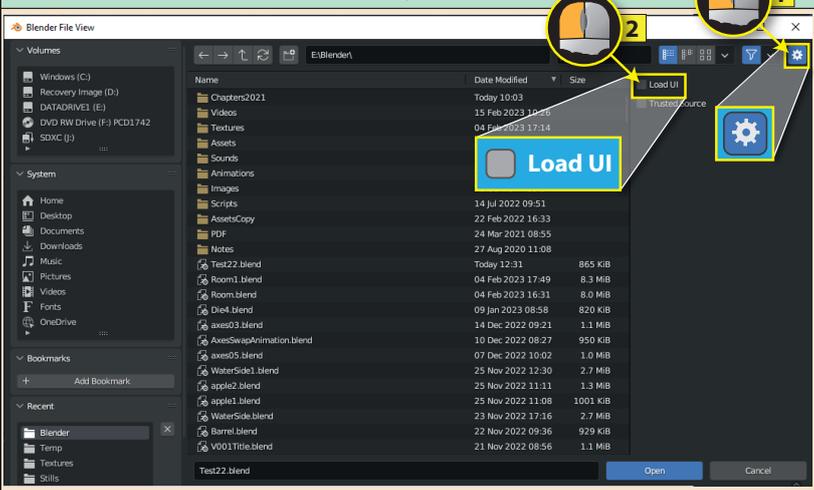
Open... brings up the window shown below. Blender has its own format for selecting drives, folders and files.



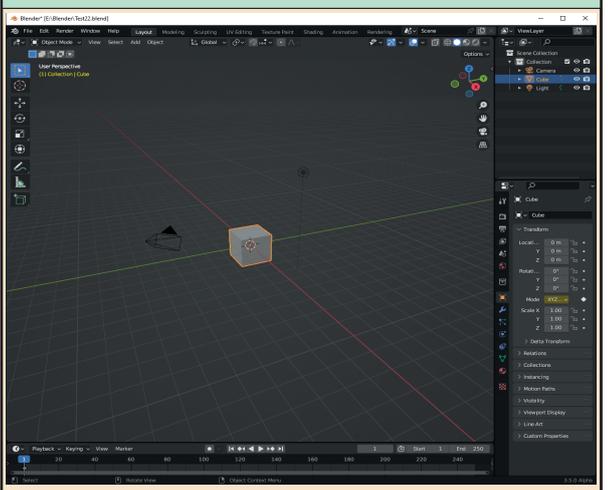
When Blender saves a project, it saves not only the scene we have been creating but also the current layout of the Blender window. For example, if we had the layout shown below when a project is saved...



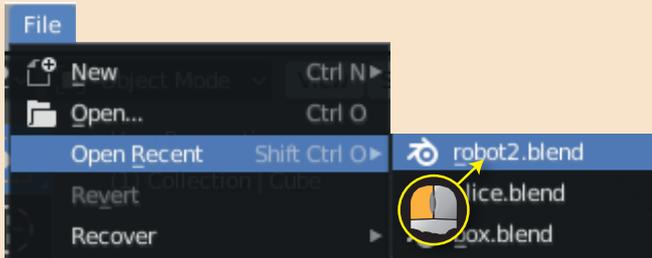
...then, by default, it would later load the file with exactly the same layout. However, if we click on the **Settings icon** in the **Load File dialog box** and uncheck **Load UI** before loading our file...



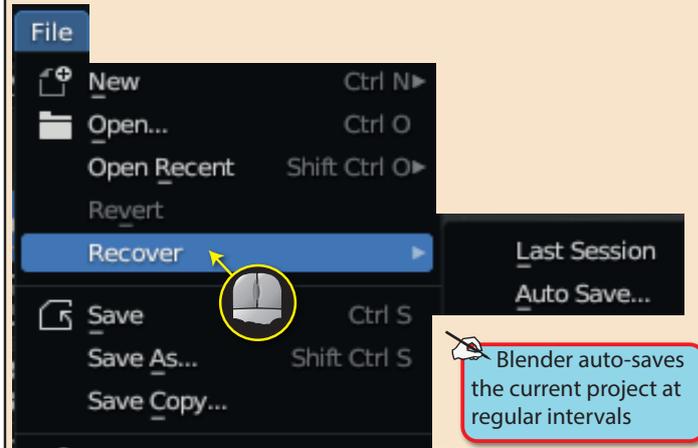
...then only the scene will be loaded and the layout of the Blender window will remain unchanged from its current state.



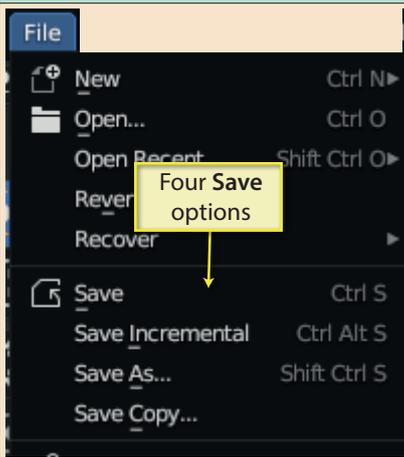
To open a recently accessed project, move over **Open Recent...** then select from the list of projects presented.



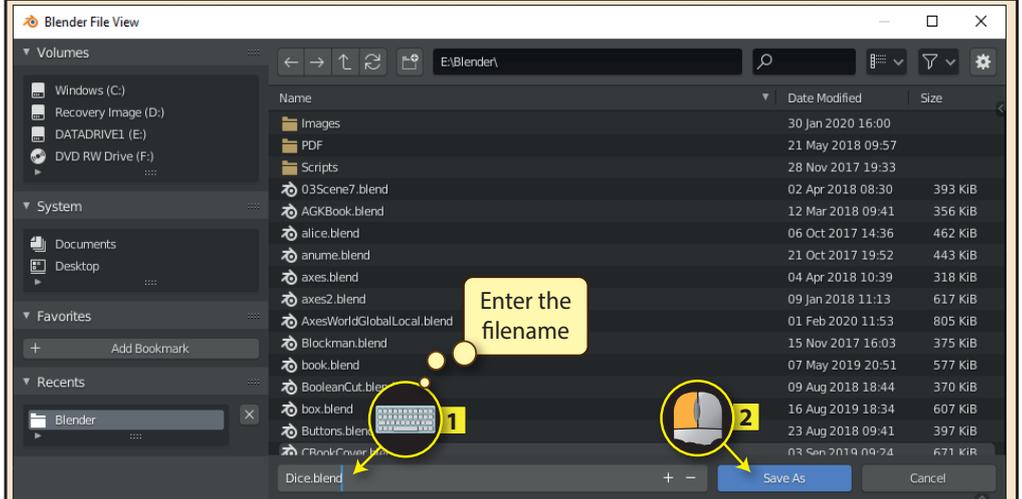
Recover offers two options. **Last session** reloads a file named **Quit.blend** which is saved automatically when Blender is exited. **Auto Save** allows a previously auto-saved file to be reloaded.



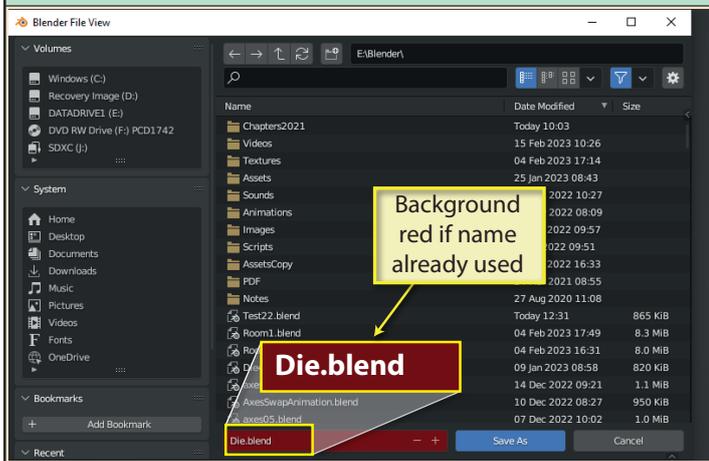
To save the current project select **Save**, **Save Incremental**, **Save As...** or **Save Copy...** from the **File** menu.



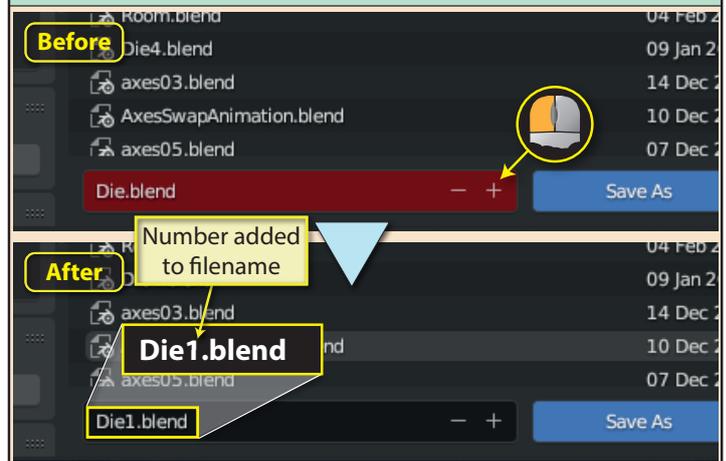
On the first save, we need to use **Save As...**, then select the drive and folder before entering the filename for our model and pressing the **Save As** button.



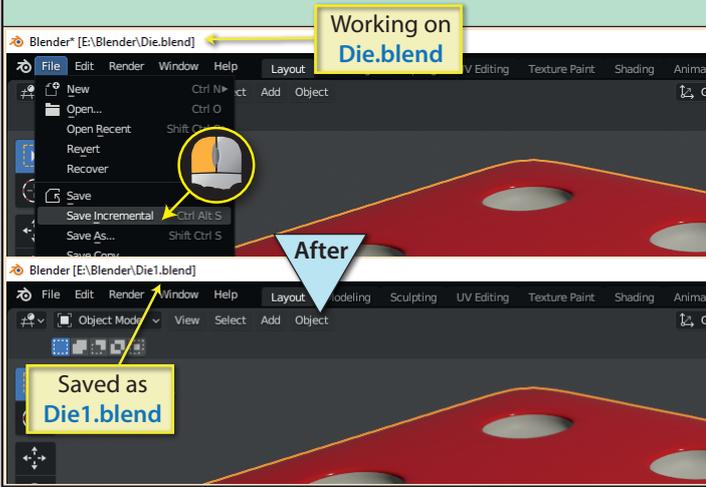
If the filename matches an existing filename, the name will appear with a red background.



To save a file as a later version of an existing file, press the **+** symbol to the right of the filename. This adds an incrementing numeric to the end of the name.



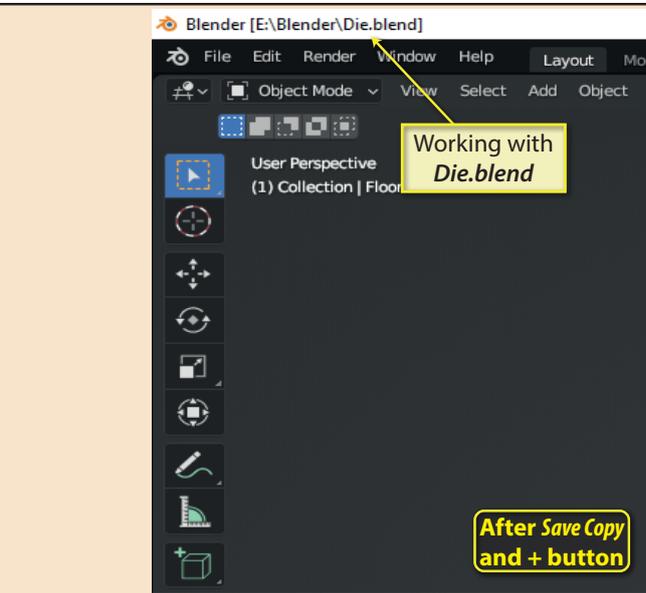
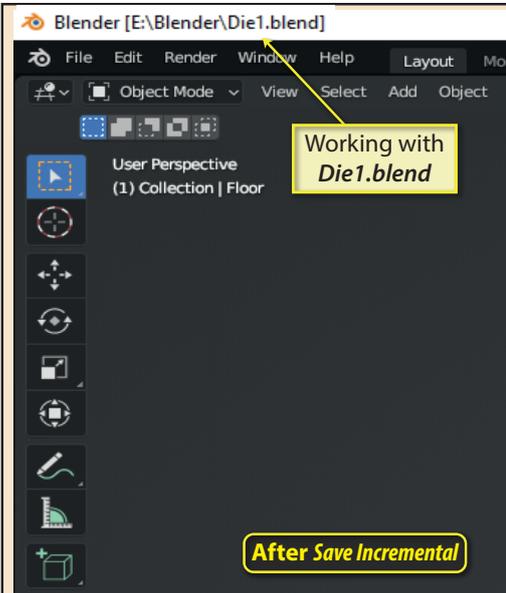
Save Incremental performs the same action as pressing the + button does when we've used **Save As**. In the example below, **Die.blend** is saved using **Save Incremental**. This creates the new file **Die1.blend**.



Save Copy at first appears to produce exactly the same results as **Save As**, but there is a subtle difference between it and the second option.

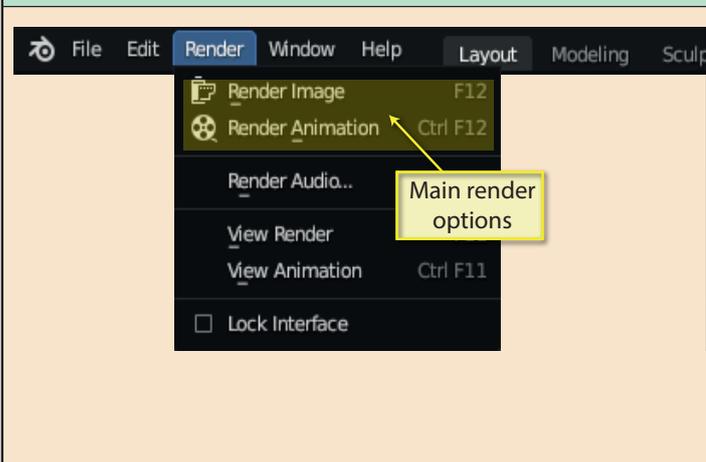
Let's assume we are working on a file called **Die.blend** and then choose the **Save Incremental** option (or **Save As** and the + button) which names the new file **Die1.blend**. If we continue to work on the scene currently showing in the **3D Viewport**, we will be working with the file **Die1.blend**.

However, if we use **Save Copy** on our **Die.blend** project and press the + button to save the file as **Die1.blend**, before continuing to work on the scene, we would be working with the original file, **Die.blend** and **Die1.blend** would be saved as a backup storing a copy before any new changes were added.

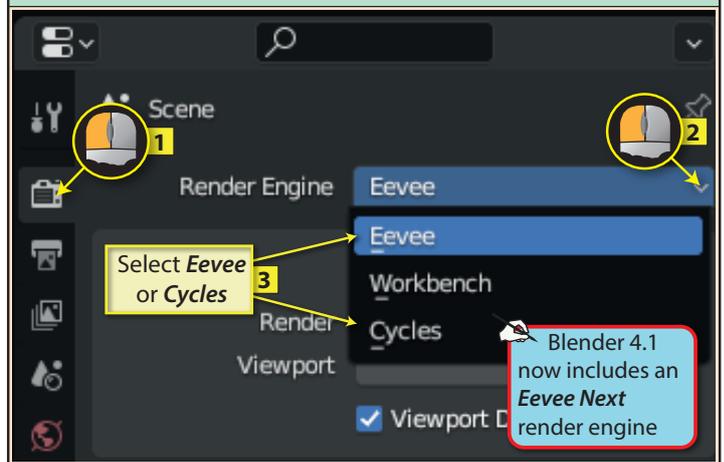


Save will use the same filename as the current project and so overwrite the previously saved copy.

Another main menu option that will prove useful later is **Render**. The two main options here are **Render Image** (used to create a still image) and **Render Animation** (used to create an animation).

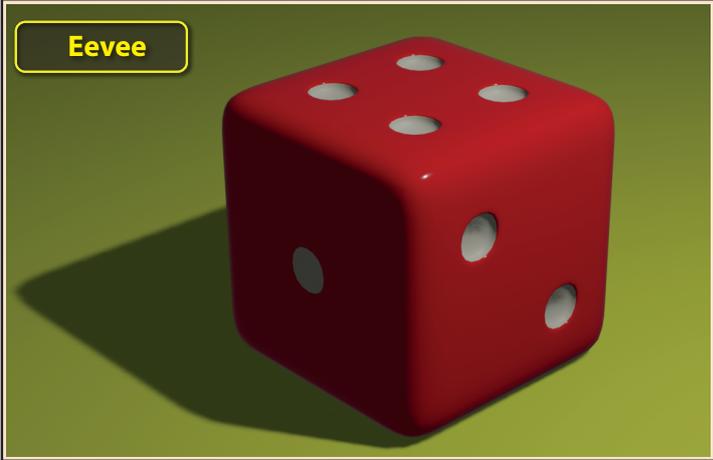


When we select **Render Image** the rendered scene appears in a separate window. When rendering, we can choose between the **Eevee** and **Cycles** render engines. This choice is made in the **Properties Editor's Render page**.



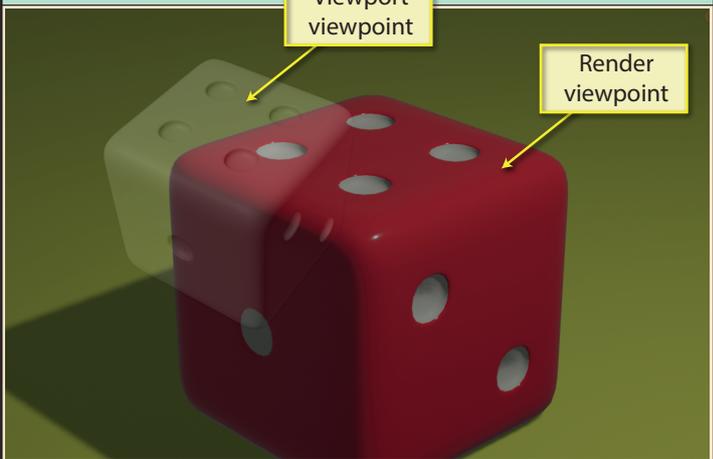
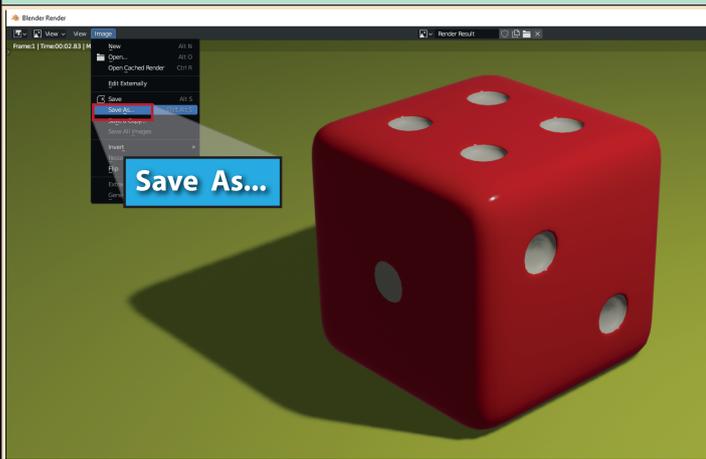
The **Cycles** render engine gives the more accurate result, but may take some time to arrive at the final image.

The **Eevee** engine is much quicker, but gives less accurate results.

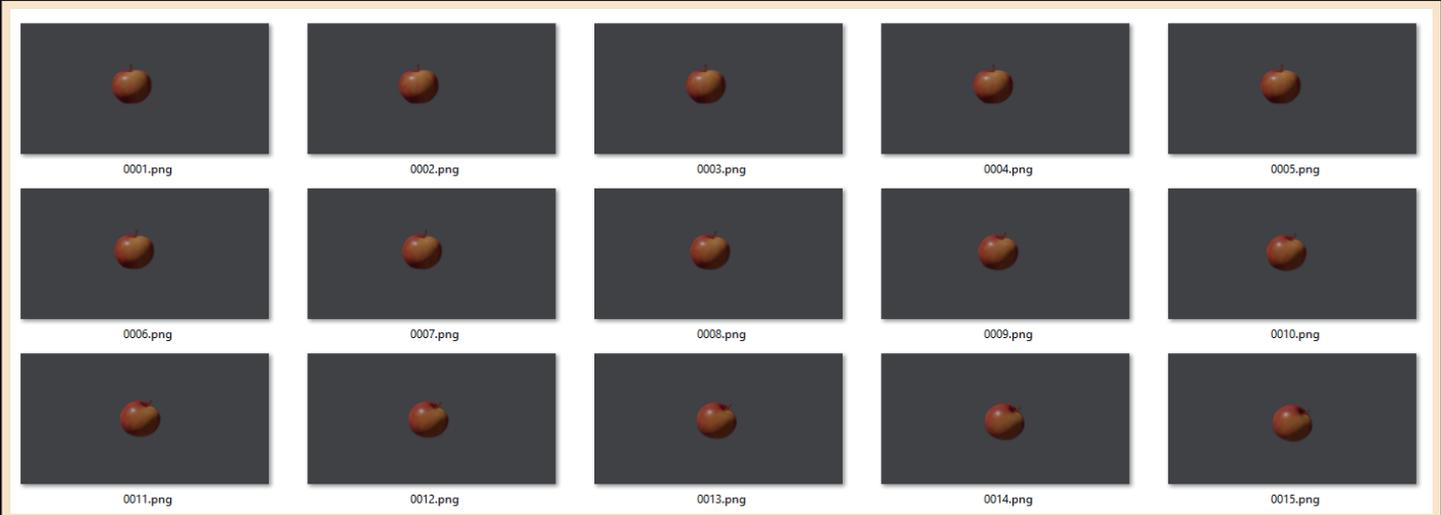


When we select **Render Image** the rendered scene appears in a separate window and this new window's menu allows us to specify where the image is to be saved.

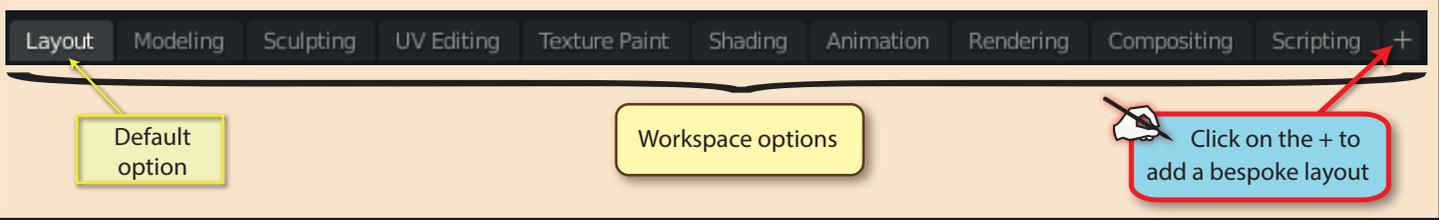
The render image's viewpoint is determined by the **Camera** object in our scene and this will almost certainly be different from the viewpoint used in the **3D Viewport**.



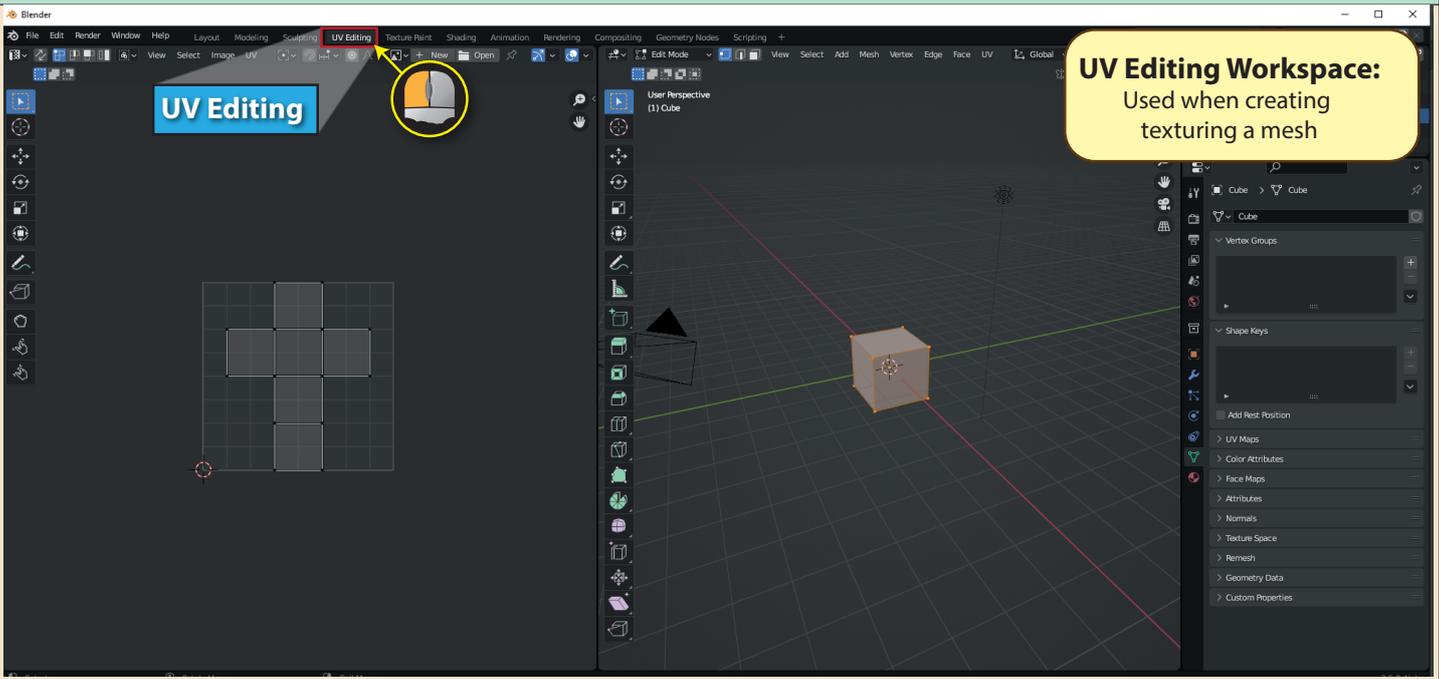
The second render option in the menu is **Render Animation** and, as the name suggests, this is used to render an animation video or a set of still frames showing the state of the animation at set time intervals (see below). More on animation in a later chapter.



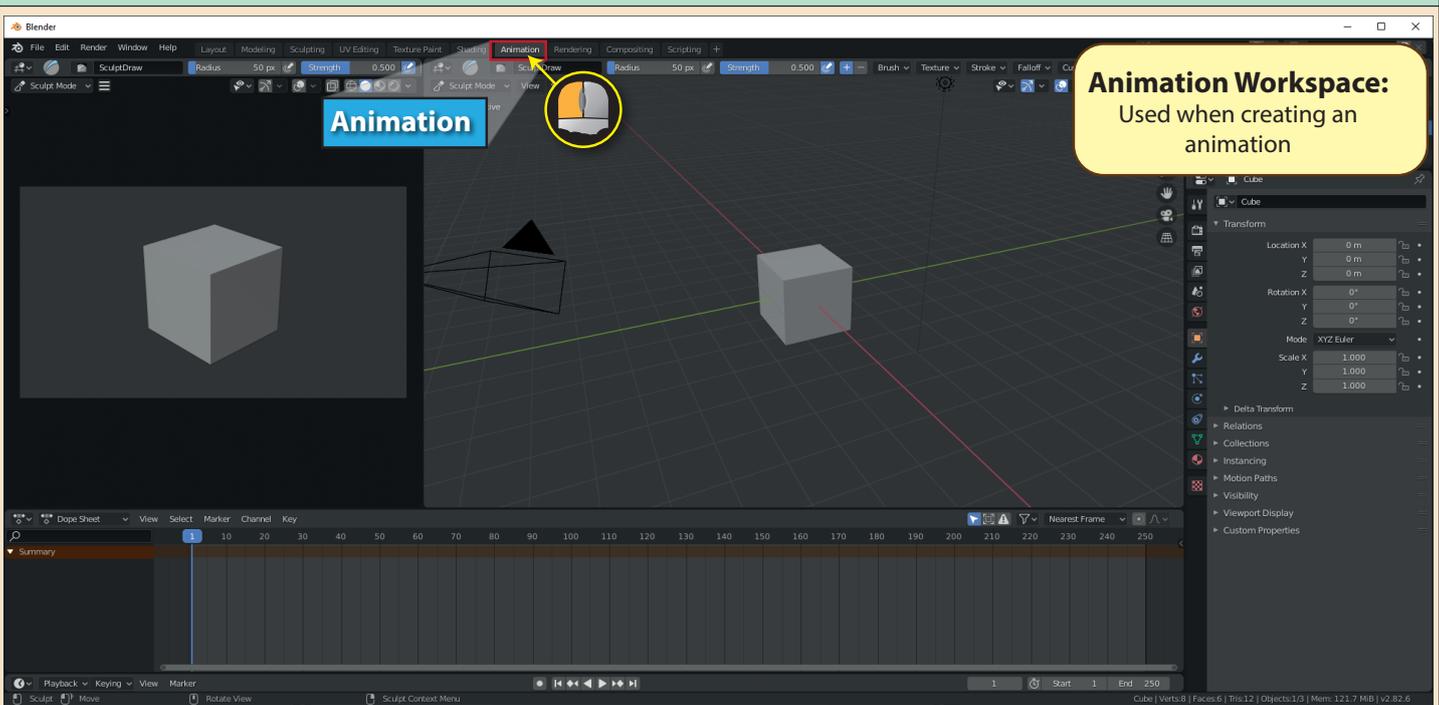
The second section of the top bar contains a set of tabbed pages known as **workspaces**. Each workspace has a different arrangement of editors. The different layouts are designed to be used at various stages throughout the creation of a scene.



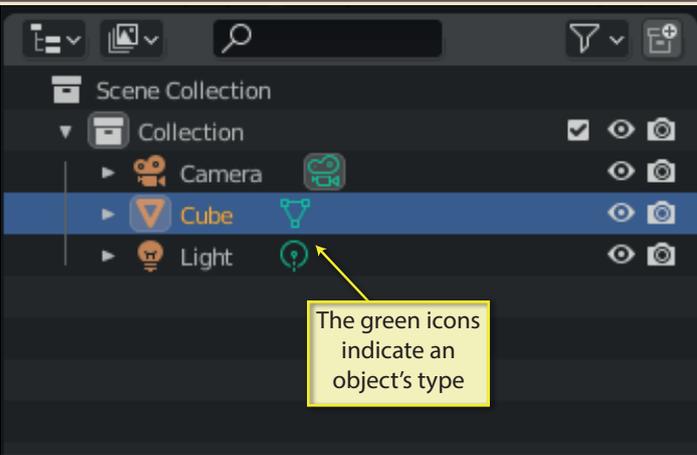
Below is the workspace created by clicking on the **UV Editing** layout option.



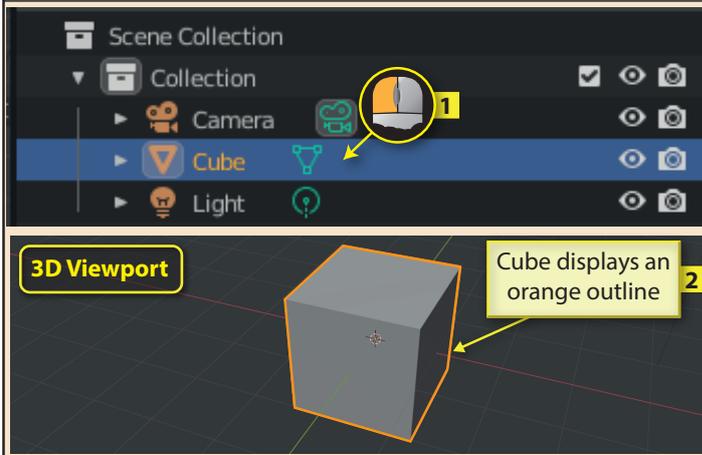
The **Animation** workspace option.



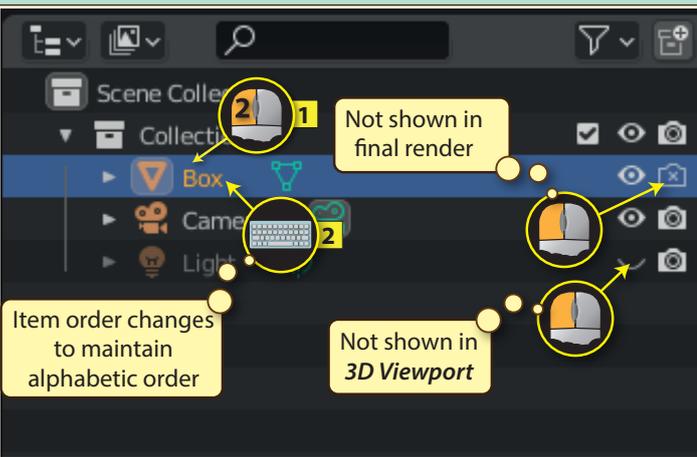
The **Outliner Editor** is near the top-right of the Blender window and lists all of the objects currently within the scene. When a new scene is created, there are three items already included: a **camera**, **cube** and **light** and these are grouped together in **Collection**.



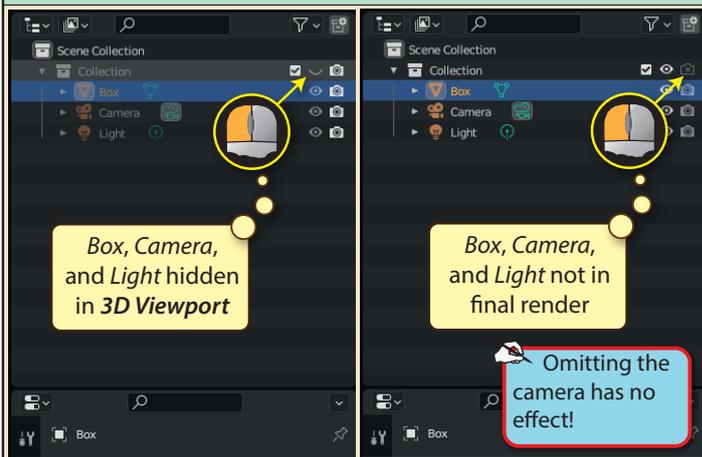
Clicking on the name of an item in the **Outliner** will select that item in the **3D Viewport**. We can tell that an item is selected by the orange outline around it. Holding down the **Shift** key while clicking allows multiple items to be selected.



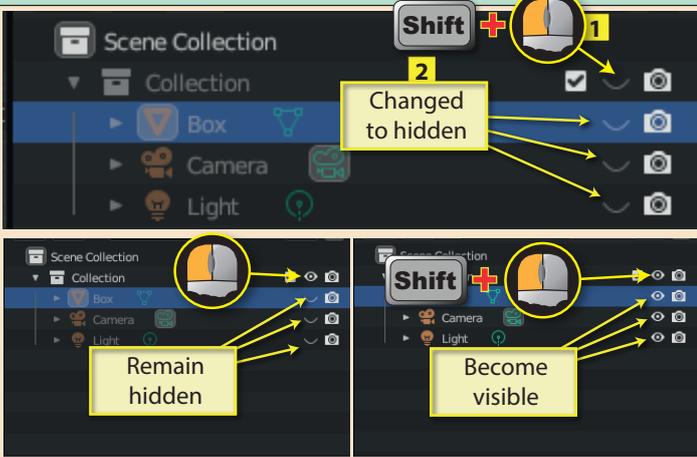
Within the **Outliner** we can change any item's name, make it visible/invisible in the **3D Viewport**, or have it included/excluded from the final render.



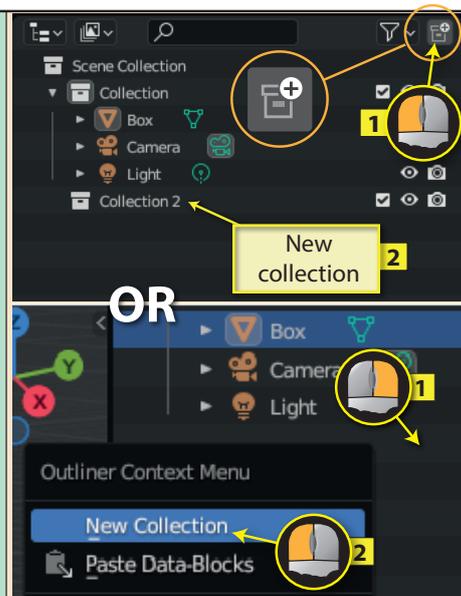
While clicking on the **Eye** or **Camera** icons of an object affects that object, if we click on the same symbols to the right of **Collection**, all of the objects listed under **Collection** are affected.



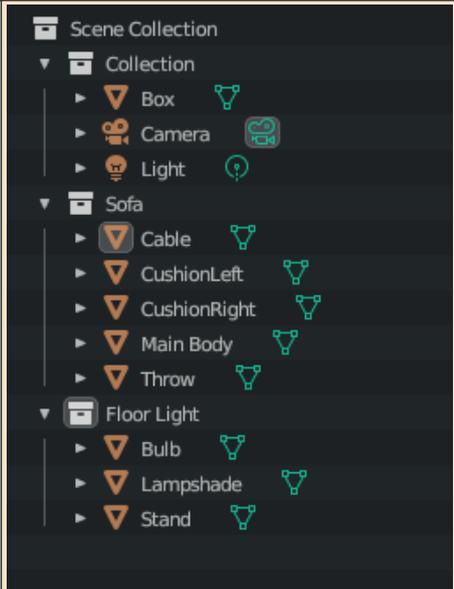
Holding down **Shift** when we click on **Collection's Eye** or **Camera** changes that setting on every object in the collection. Clicking without **Shift** will reset **Collection's** icon, but not the icon of the objects in **Collection** - for that, we must hold down **Shift** again.



In a complex scene containing objects that are constructed from a number of meshes, it can be useful to create a collection for each object. A new collection can be created by clicking on the **New Collection** icon (top-right) or by right clicking to produce a popup menu and selecting **New Collection** from its options.

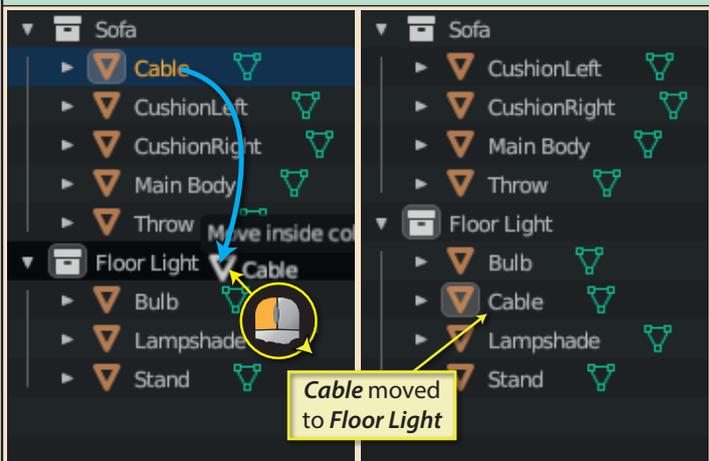


Typical use of collections is shown in the example given here where the elements that make up a sofa and a lamp stand have each been assigned an appropriately named collection.

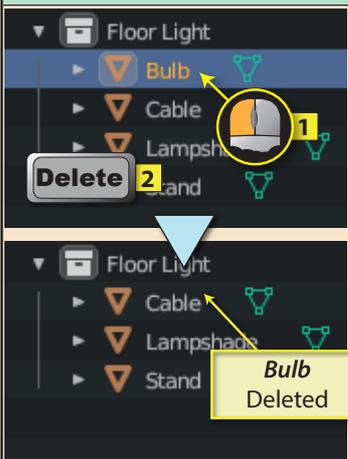


New meshes are added to the last collection to have been selected.

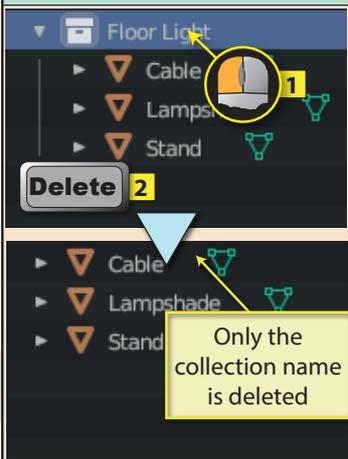
If we want to move an object to a different collection, all we need to do is drag the object into the required collection. For example, here *Cable* is dragged from *Sofa* to *Floor Light*.



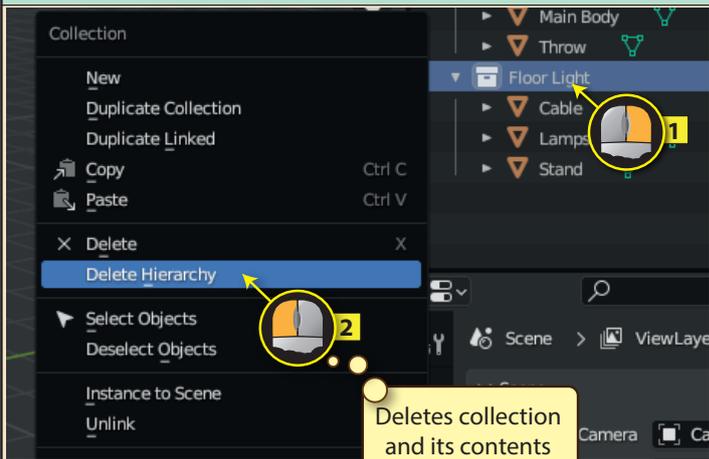
Selecting an object from anywhere in the *Outliner* and pressing **Delete** will delete that object.



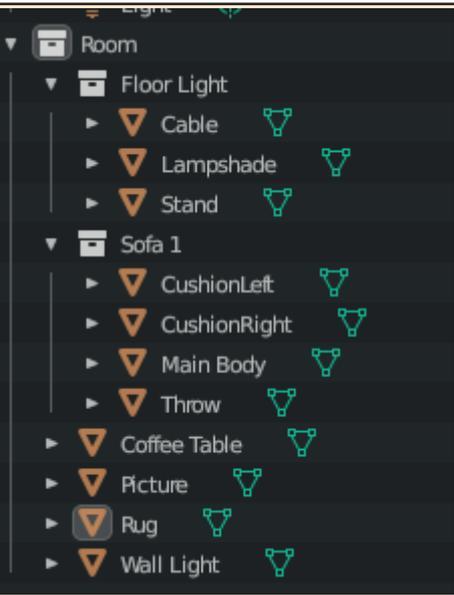
Deleting a collection name removes the collection but not its contents. These items now belong to no collection.



To delete a collection and its contents, we need to right-click on the collection name and select *Delete Hierarchy* from the popup menu.

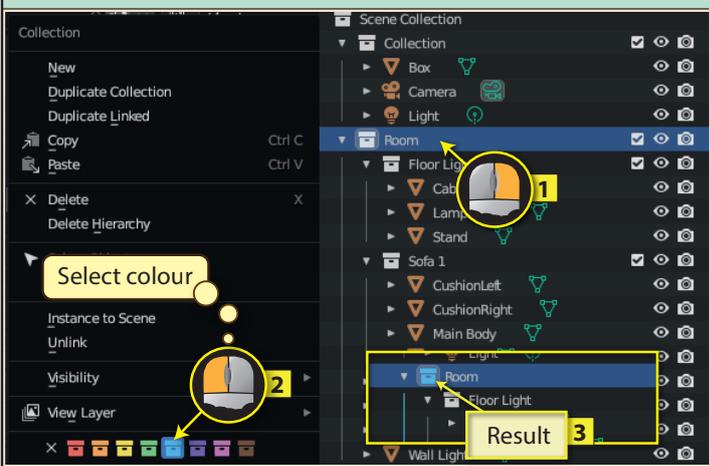


We can even nest collections. For example, below we can see the sort of structure we might end up creating if our scene shows the contents of a room in a house.



A collection can be placed within another collection by dragging it to the required position.

The icon associated with any given collection can be colour-coded. Select the collection, right-click and select the required colour in the popup menu.



The **Properties Editor** has by far the largest number of options of any editor panel.

A vertical list of icons on its left side act as a set of tabs with each one taking us to a related group of different options.

The icons shown here are those that appear when the Cube is selected.

Exactly which icons appear depends on the scene item currently selected.

In this frame we can see the set of icons associated with the **Light** object.

We'll look in detail at each option in a later section.

Clicking on one of these icons will display a set of properties on the right.

By default, the **Object Properties** icon will be selected.

Most property headings have several sub-properties.

Where a property title is collapsed, it displays a right-pointing triangle. Clicking on this will expand the property to show its set of subproperties.

Near the base of the Blender window is the **Timeline Editor**. This is only used when we are creating animations.

At this early stage in the learning process we may ignore the options shown here.

The lowest area in the Blender window is the **Status Bar**. This is used to display some of the options available to the user as a next operation.

Shows that left-clicking on an object will select it

Dragging over multiple objects will select them all

Dragging with the middle button will rotate the viewpoint

Right-clicking will produce a popup menu