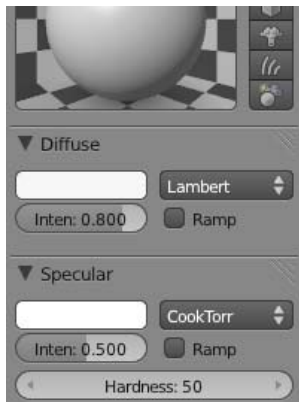


## Chapter 9- Animation Basics

The previous section dealt with basic object animation. Deforming meshes, following paths, creating bone structures (armatures) and creating child-parent relationships will be discussed later. Animation can be a frustrating thing to perfect. Practice is the best way to learn it and by asking questions.

### Animating Materials, Lamps and World Settings (and more)

Earlier we mentioned that everything can be animated in Blender and those animation tracks can be viewed in the Graph Editor. *If you can change a number or a color in a box, it can be animated.* Let's spend some time looking at some of these things.



**Above:** No Material Keys.

**Top Right:** Keys applied to Diffuse Color and Intensity and Specular Hardness. Key frames displayed in yellow.

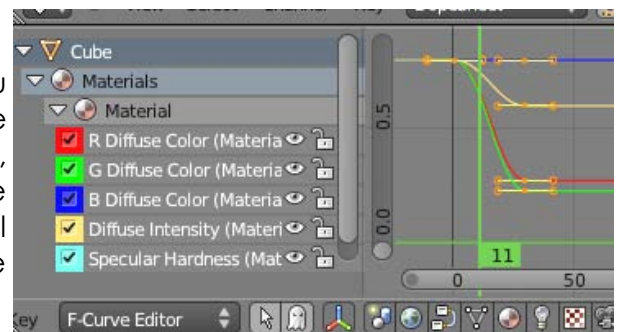
**Right:** Animated features are displayed in green on non-key frames.



For my example, I'm changing the material settings on a cube. At frame 1, I'm setting a key frame on the *Diffuse Color* and *Intensity* and *Specular Hardness*. In order to put a key frame on any data block, simply place your cursor over the block and hit "I". You will notice the block will turn yellow, indicating that a key frame is present on that setting at that frame number. The block will remain green for all other frames, indicating that the setting is animated. This will even work for check mark boxes.

To see the animated effects, you will need to place your cursor in the buttons window and press "Alt-A". The numbers will scroll showing the setting has been animated. You may not be able to see the final effects until a movie is rendered out. This process will work for any window setting.

Notice the Graph Editor to the right. You can open the Material graphs for the cube and see all the settings you applied, provided you have set the buttons at the bottom of the window to display material keys. These keys can be edited the same way discussed on the previous pages.



These techniques are useful for animating items such as changing spot lamp size, intensity and color, rolling fog and clouds in the *World* settings, and waves in the *Texture* settings.

#### **RoboDude Says:**

*Remember that you can always undo a bad animation key by using "Ctrl"-Z !*

