NOISE REDUCTION

Color: Reduces color noise
Start by slowly moving the Color slider until all the color noise is either gone, or at an acceptable level. In my photo, it looks like the Color slider works at about 20. Once you decide where the Color slider works best on *your* photo, move to the Detail slider.
Detail: Color noise threshold
The Detail slider (below the Color slider) is used to see if we can bring back any edge color detail. This is completely trial and error, & if you push this Detail slider too far, you'll actually reintroduce noise in the form of artifacting back into the photo. Personally, I don't go past 50 on this, but try the slider on your photo: starting at 0, move it slowly, and see if it makes any difference. If you can't see any change, leave it at 0.
Luminance: Reduces luminance noise
When you are happy with the reduction of color noise, jump up to the Luminance slider, and start moving this one to the right. Remember, slow is the key. This is where your eye comes in to play again. You have to decide the best balance between loss of noise/grain and loss of detail in your photo. Once you get to the happy medium, you can move onto the luminance Detail slider.
A word of caution (*here's that tradeoff I was telling you about before*): if you push the Luminance slider too far, humans and pets will come out shinier and plastic
Detail: Luminance noise threshold
Next, start sliding the Detail slider left and right (the default is 50, which is usually good), to see if you can get back more (edge) detail without re-introducing noise. Once again, there is no formula; it's your photo, your artistic vision, your slider value.
Contrast: Luminance contrast
Lastly, slide the Noise Reduction Contrast slider to the right to see if you can recover a little more detail. As its name implies, this slider puts detail back in your photo based on boosting luminance contrast. It can work really well to reveal details that were softened in the above steps.

ADDING GRAIN- BLACK AND WHITE
Grain is an organic characteristic of the analog film process. It's almost like a fingerprint exclusive to the type of film you're using. Perhaps that's why film grain is gaining a growing acceptance among new photographers in this digital age of imaging.
Amount
The amount of grain is controlled by, you guessed it, the "Amount" slider. Think of this as the number of crystals you are adding to your image. The higher the amount, generally the higher ISO look the effect. Here's a +40 grain amount on an image shot at ISO 640. It is a good idea to use a large increase in the amount of grain while adjusting the next two sliders and then back it off from there until you reach the desired amount.
Size
The size of the grain plays a big part in how apparent it will be in your final image. Larger crystals will be more noticeable even at low amounts. It's virtually the same concept as high and low "grit" sandpaper. Now here's a +40 boost in grain size from the last image.
Keep in mind that the further to the right you move the slider the larger each grain will become. This can diminish small details in your photo so use with caution.
Roughness

Grain roughness is closely related to grain size. The difference is that the roughness slider controls how raised the grains appear to be from the image. Essentially how rough or smooth their surface appears. The next image shows the same +40 amount of grain with the size set back to the +25 default. This time I increased the roughness to +70. The more raised the grain the rougher the overall texture and thus the texture of the final grain effect.

SHARPENING

Amount – the amount of sharpening you want to apply to an image. Zero means no sharpening is applied to the image. The higher the number, the more sharpening you will see. Too much sharpening will increases the noise. I typically set 50 as the default value to my images, but sometimes can increase or decrease the amount depending on the image and noise levels.
Radius – the size of the sharpening area around the edges. The default value of 1.0 means that Lightroom will apply sharpening over 1 pixel around the edge. If you increase the radius to a maximum value of 3.0, sharpening will be spread over three pixels around the edge, resulting in thicker, "shadowy" edges. I use the default radius value of 1.0 most of the time and I recommend to keep it under 1.5. (Hold option or alt key down when using this slider- shows the depth better in terms of how sharpening works)
Detail – as the name suggests, the detail slider controls the amount of sharpening on the edges or "details" of the image. A small value like 0 only sharpens large edges, while a high value like 100 would sharpen even the smallest edges. For example, if you are working on an image of a bird, if you leave the detail at "0", only the edges of thick feathers would get sharpened, while using a larger number above 50 would bring out and sharpen even the thinner feathers. I try to stay below 50 on the detail slider, because higher numbers often considerably increase the amount of noise.
Masking – the most useful and versatile feature that masks out areas that should not be sharpened, similar to the mask tool in Photoshop. This is the tool that would take care of the extra noise produced by "Amount" and "Detail" sliders around your subjects. While it is not very useful for images that have too much detail and too many edges all over the image, it works magic for images that isolate subjects from the background. The softer and less defined the background, the better the results. See examples below.

The "Masking" slider works a little differently with the Command/Alt key. As I have explained earlier, the masking tool is used for leaving the smooth areas intact, while applying sharpening only to the edges. We can control where the edges start by moving the slider from 0 to the right. At "0", no masking is applied to the image and therefore, the entire image is sharpened. If you have a smooth background like the sky, sharpening will certainly add noise to the sky, even when noise is very minimal to start with.

OUTPUT SHARPENING

Output Sharpening feature in the Export window.
Should it be used after sharpening is already applied to an image? If you are exporting the image in its original size, then I recommend turning off Output Sharpening during the export process. If you are resizing the image to a smaller version for the web, then I recommend leaving it checked with the Screen/Standard amount of sharpening applied. When images are reduced in size via Lightroom, the sharpness is also slightly reduced, so sharpening the images a little bit does not hurt. Output Sharpening does not use the same settings you used for the image in the Develop Module though – it just slightly sharpens the entire image.