Tips on Shifting Gears:

There is more to shifting gears than pushing and pulling some levers or twisting your grip shifters. Shifting requires coordination between your hands and feet so you can shift smoothly. The basic principle is you have to be pedalling for the gears to shift because the chain needs to be moving forward for the derailleurs, which move your chain to different gears, to do their job. Here is an <u>important trick</u> that will make shifting smoother – back the pressure off the pedals slightly at the moment of shifting. This is called "<u>soft pedalling</u>." If you are pedalling too hard when you shift gears, your pushing power will override the derailleurs and there will be no shifting, just grinding noises!

I will go through some gear shifting but first I have to explain the shorthand terminology I will use in my explanation:

- -ring one of the 3 chainrings at your pedals that is selected by your <u>left shifter</u>.
- -cog one of the 7, 8 or 9 cog wheels on the rear wheel that is selected by your <u>right</u> shifter. I will assume you have 8 cog wheels for this explanation.
- 2L -the gear number on the left shifter. This would be the second gear on the left.
- -3R the gear number on the right shifter.

<u>The Basics</u>: Small gear numbers are used when you are in a low gear moving slowly while larger gear numbers are used when you are in a high gear moving fast. If you're going uphill and it becomes hard to pedal - shift down. If you are spinning the pedals way too fast - shift up.

To <u>start your ride</u> you should be in the middle ring 2L and one of the middle cogs, such as 3R. As you move faster you will move the right shifter to 4R. As you shift with your hand, simultaneously ease up on your pedalling for a split second (soft pedal). You should hear and feel the shift complete smoothly. Now you can resume pedaling.

Now let's say you're coming to a <u>steep hill</u> with your gears in 2L and 4R. Before you reach the base of the hill you should shift to the small ring 1L in front. You will find yourself pedalling faster because you are now in a lower gear. As long as you can keep up with your pedals you are fine. If you find you cannot keep up with your pedals, you shifted to 1L too soon and you will lose momentum. You will learn when to shift to 1L with practise. As you start to slow down going up the hill shift the rear derailleur (right shifter) to a lower gear being 3R and be ready to shift quickly down to 2R or even 1R if the hill steepens. **Remember to soft pedal each gear change.** You can shift the rear derailleur on the hill because there are 8 cogs back there and each change in size is very small so the chain can move from one cog to another quickly and easily, particularly when you soft pedal. However, the change in size of the 3 rings in the front is large so you should <u>not</u> use your left shifter on the hill. If you do, you will likely have your chain come off. This is why you shift to 1L <u>before</u> you start up a steep hill. On a steep hill you will be pedalling fast but moving very slowly. Fast pedalling, which is called high cadence, is good because it is easy on the knees and you can do it for a long time.

Once you reach the top of the hill and the terrain flattens, <u>first shift the rear derailleur</u> (right shifter) back to a slightly higher speed cog, such as R2 or R3, <u>before you shift the front derailleur</u> (left shifter) back to the middle ring 2L. If the terrain remains flat, you could stay in 2L and shift the rear derailleur again, going to 5R or even 6R.

When you are going <u>downhill you</u> need to shift the front derailleur up to the big ring L3. If you really pick up speed you can shift the rear derailleur to the higher speed cogs 7R or 8R.

Just remember to soft pedal when shifting, particularly on hills, and that shifting the left shifter makes a big impact and shifting the right shifter is to fine tune your gear selection. You will use the right shifter much more often than the left shifter. Keep playing with both shifters, even on flat ground, until you get to know what the different gears can do for you. I personally believe that too many riders do not shift often enough and end up pedalling too hard which is not good for the knees. Biking should not be hard work. Shift those gears and let the bike do the hard work for you!