LESSON



GEARING

Optional

How many people live on a hill, like to go fast, or have to go up hills to get to school or other places? When riding a bike, shifting gears allows you to adjust the difficulty of pedaling so you can climb hills and go fast down them.

Most of our bicycles have more than one gear. Gears affect our ability to turn the pedals.

Low gear (like 1st gear) is the easiest to pedal and is used when going slow or when going up hills. The chain is closer to the bike in lower gears. It is always good to get into lower gears when you are stopping the bike so you can quickly and easily start.

High gear is harder to pedal and gives the ability to go fast, especially when coming down hills. The chain is farther away from the bike in higher gears. (Note that the distance that the chain is from the bike does not determine gearing, it's just coincidence and an easy check.)

You can change gears by using the gear shifters. The right shifter changes the back gears (smaller increments, first to second) and the left shifter changes the front gears (larger increments, e.g. from range of 1-7 to range 8-14). Usually, if you move the right shifter away from you or the left shifter towards you, it becomes easier to ride.

Try shifting the right shifter and look at the rear derailleurs as it moves closer to the bike and it would be easier to pedal. Yet it will not move the chain unless you are pedaling. Have one student lift the back tire and one pedal. In general, only shift while pedaling!

The only way to learn is experiment. Just remember....

High Gear (21st Gear) Low Gear (1st gear)

Easy to pedal Hard to pedal

Slow Fast Uphill Downhill BACKGROUND

WHAT: Discussion about using the gears on a bicycle.

PURPOSE: Gearing makes for efficient cycling. Gears are important to understand, especially when climbing or descending hills.