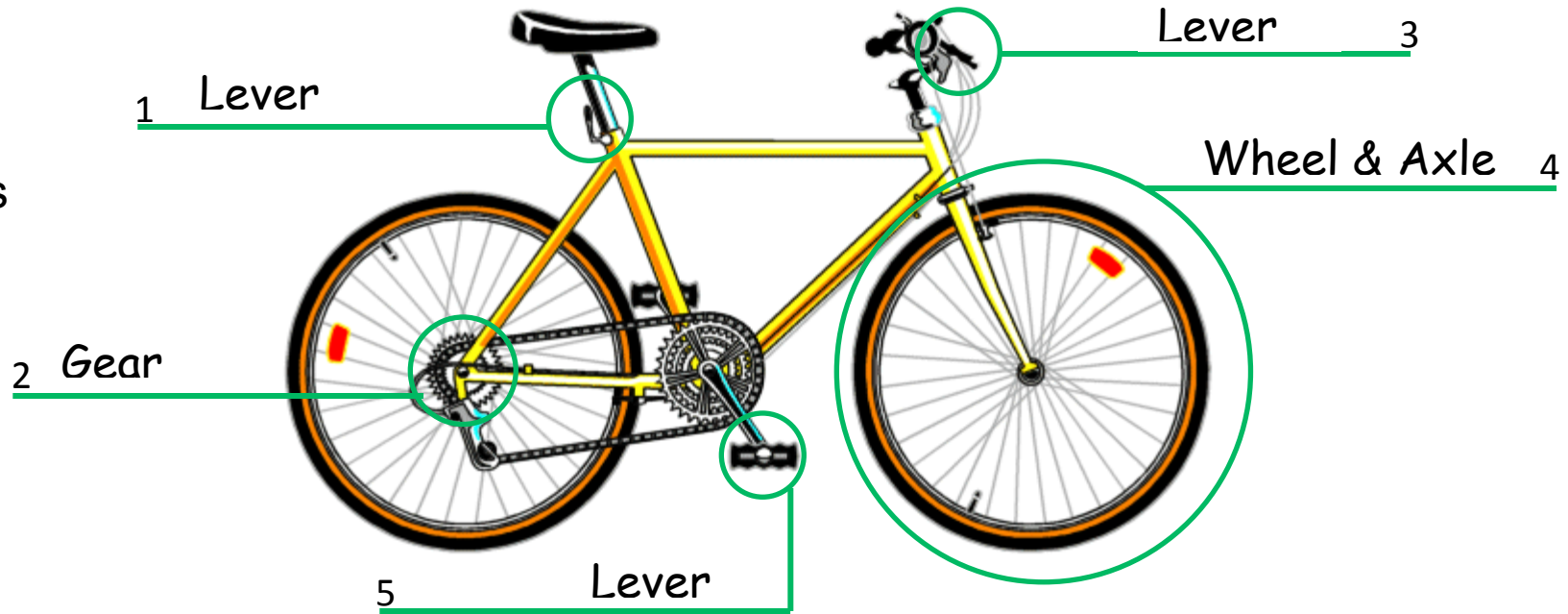


Bicycle

Label the simple machines on the picture.



Describe how each simple machines works as part of this complex machine.

1 Applies force to the handle under the seat to hold it in place

2 By switching gears, the rider can make it easier or harder to peddle

3 Applies force to the brake, slowing the bike

4 Allows the wheel to rotate, creating motion

5 By pushing down on the peddle, the rider can increase momentum

Describe how the machine converts energy (the cyclist's power), through mechanical means, to do work.

Pushing down on the peddle increase the momentum, which is transfer to the gears that can control the speed of peddling. Because the gears are attached to the wheels, the energy is transferred to the wheels that freely rotate on their axles until the force of the brake is applied.