## **EVOLUTION OF THE BICYCLE**



In the early 1800s horses were in short supply due to a string of poor harvests and a scarcity of animal feed. Karl von Drais began experimenting with human powered vehicles. With the realization that forward motion and balance could be maintained on just two wheels Drais created the Laufmaschine (running machine) a two wheeled vehicle propelled by the rider's legs striding along the ground. The machine was also known as a draisine, velocipede, or dandy horse and quickly became a craze after Drais demonstrated the machine in Paris in 1817.

In the 1860s a brilliant new invention appeared: pedals! It is still not known who exactly invented the use of pedals but the first manufacturer to produce a machine with pedals was Pierre Michaux in 1867. The pedals were attached to the front wheels. This pedal velocipede was soon nicknamed the "boneshaker" due to its jarring ride.





The "need for speed" soon resulted in larger front wheels. The larger wheels provided more speed per pedal stroke. In 1880 the "ordinary" or "penny farthing" became popular. Wheel had diameters as large as 5 feet in diameter.

In 1885 John Kemp Starley introduced the Rover Safety Bicycle which was the first commercially available rear wheel chain driven bike. Other manufacturers soon followed with new designs.





New innovations came rapidly; gears that could be shifted while riding, pneumatic tires, fiberglass futuristic designs, and many more.



Bicycles continue to evolve with new materials such as titanium and carbon fiber. Electric bikes now allow riders to have pedal assist provided by an electric motor. Where and how will bicycles take us in the future? Only time will tell.