Relating Science and Technology to Society and the Environment

- 1.1 Assess the impact on society and the environment of simple machines that allow movement
- 3.1 Describe different ways in which objects move (e.g., turning, spinning)



Velocipedes were the forerunner to the pedal bicycle. They became known as "boneshakers" because they were made with wooden wheels and iron frames.

The bicycle is a simple form of transportation. You can get to places easily without the use of gasoline. A bicycle is a device that can increase force to make it go uphill or speed. It converts energy from one form into another. Any object in motion is using kinetic energy.

History:

In March 1869 the hottest new craze around was the velocipede. Riding academies started springing up to teach and practice the art of riding.

The Toronto Globe of 6 March 1869 reported on the "Grand's Riding Academy," where pupils were instructed in the art of velocipede riding.

Velocipede mania reached Newmarket in 1869 too and a school of instruction was set up at the Mechanics' Hall.

The velocipede mania has reached Newmarket and a school of instruction has been held this week in the Mechanics' Hall. Large numbers of our young men tried their skill to the amusement of the onlookers.

Velocipede Mania Ad Newmarket Era, March 19, 1869



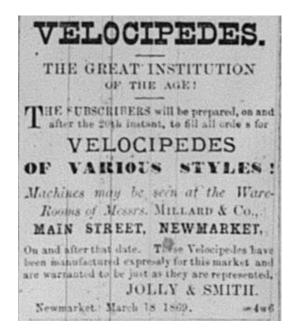


An ad appearing in the Newmarket Era described them as machines!

In Newfoundland 1869 a man by the name of Edward Morris recorded in his diary that the people of St. John's were anxious to see the newly imported velocipede.

The New York Times reported people would have to wait for more than a month to obtain one.

Newmarket Era March 19, 1869 (right)



To learn the characteristics, parts, and how a velocipede works click here:

<u>Velocipede | What it is, what it is for, characteristics, parts, how it works (euston96.com)</u>

<u>Bicycling | The Canadian Encyclopedia</u>



Photo, c1880 source:



A long time ago Main Street was very narrow and horse drawn vehicles were still in common use. The velocipede was hard to manoeuvre on rough roads so people started to ride them on the sidewalks. This became a nuisance to pedestrians.

In 1871 complaints were made about the use of velocipedes on the Main Street sidewalks. Cities and Towns began to pass laws against riding on sidewalks.

Complaints have been made to the Inspector against parties running velocipedes on the side-walk on Main street. Before taking legal proceedings we are requested to intimate that unless the nuisance is abated the parties will be prosecuted.

Newmarket Era May 5, 1871 (right)

The Eaton's catalogue of 1899 shows a boy's velocipede cost \$1.80. (Approx. \$30.00 today)

Q. The Eaton's ad states that their velocipedes are the best. Why?

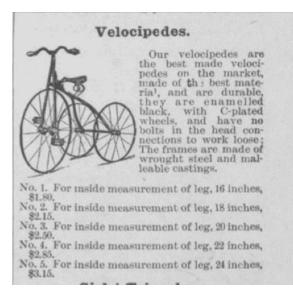
A.

Velocipedes were still popular in 1912. Hint: You can learn from this ad what types of toys were popular in 1912.

Q. How many toys in this ad would Kinetic Energy apply to?

A.





Eaton's Fall and Winter Catalogue 1899-1900



Questions:

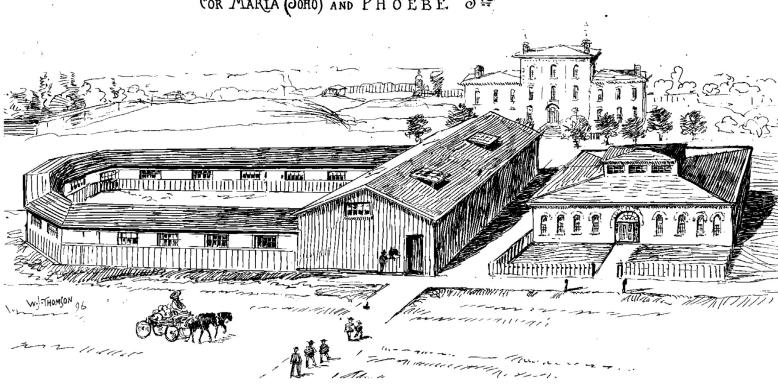
How would you make the velocipede move? A.
How would you make it turn? A.
How would a velocipede be good for the environment? A.
Give an example why the velocipede was bad for Newmarket's environment?
Why do you think the riding schools were needed? A.
What is a definition of kinetic energy? A.
Any object in motion is using what type of energy? A.
Would you want to ride a velocipede? A.



Bonus Activities

Try the Colouring Page from the Toronto Public Library: Velocipede Rink Toronto c.1860 Toronto

VELOCIPEDE RINK AND BATHS
COR MARIA (SOHO) AND PHOEBE STS





Velocipede Rink, 1860 (Toronto, Ontario). Indoor velocipede (a type of bicycle) rinks were built in Canadian cities offering riders of the rough and rickety "boneshaker" bicycles a smoother surface to ride on.

Digital Archive Ontario: tpl.ca/dao

Click here to put the Velocipede jigsaw puzzle back together again



Bonus Activities

For additional Velocipede learning resources check out these links:

<u>Velocipede Rink, Phoebe St., west of head of Soho St., Toronto, Ont. : Digital Archive : Toronto Public Library</u>

Toronto Bicycle Club: Digital Archive: Toronto Public Library

Bicycling

The Development of the Velocipede | Smithsonian Institution (si.edu)

