**Activity 11: Bike**

**Collection Areas:** Winn’s Cycle Shed, number 29 on the map.

**Curriculum Links:**

* ***Technology:*** Technological Practice, Technological Knowledge, Nature of Technology.
* ***Social Sciences.***

**Topics/Themes:** History, transportation, Changes from now and then, Women's suffrage.

**Resources Pack:** Interesting facts cards, Questions for Viewing, Guide for Teachers / Helpers

**Time estimation:** 10-15mins

**Goals:**

Students will be able to:

* Gain an understanding of the societal and cultural impact the bicycle has had.
* Describe how the technology of the bicycle has changed and the impact this has made on the accessibility and function of the bicycle.
* Develop knowledge of the history and development of bicycles through the years.

**Guide for teachers/helpers. What to do at this activity:**

1. Let the students have a look at all the bikes.
2. Ask them some of the questions for viewing to prompt their thinking.
3. Encourage them to find as many fact cards as they can. Urge them to read the cards properly and to remember some of the facts to share with the class at a later time.

**Questions for viewing:**

* Think back to the early days, no cars etc, how might have a bike improved your day to day life?
* Can you find the oldest bike? And what do you think is the newest bike? What are the changes you can identify between the two?
* Think about what challenges cyclists may have had 100 years ago (eg, bumpy, muddy, unsealed roads, clothing that wasn’t designed for cycling, no suspension on bikes, no gears).
* What might the bicycle look like in 50 years from now?
* Find the ‘Boneshaker’ (note to teachers, this bike is the metal frame bike with a portrait behind it, labelled ‘boneshaker on the picture’). Why do you think it was called a boneshaker?
* What can you identify as being the biggest difference between your own bike and The Boneshaker? (prompt students to notice there is no chain or rubber tyres on The Boneshaker)
* Can you find a bike with no brakes?
* Can you find the tandem bike?

**Activity: Interesting facts for kids to find within the Cycle Shed:**

1. The first bike had no pedals, the rider pushed it along with his feet.
2. The Penny Farthing was the first machine to be called a bicycle.
3. The first bike was nicknamed ‘the boneshaker’ because it was so uncomfortable.
4. The first bikes were not called bicycles, they were called velocipedes.
5. The first bike tyres were made of wood!
6. The word ‘Penny Farthing’ came from the two British coins; a penny (the larger coin, representing the large wheel at the front) and the ‘farthing’ (representing the small wheel at the back.)
7. In 2011, Austrian racing cyclist Markus Stöckl drove an ordinary bicycle down the hill of a volcano. He attained a speed of 164.95 km/h. (this may be an interesting person for downhill enthusiasts to research post-visit)
8. The longest “tandem” bicycle seated 35 people, it was more than 20 meters long.
9. German man Baron Karl von Drais invented the first two-wheeled, human propelled machine in 1817.
10. John Howard is an Olympic cyclist from the United States, who set a land speed record of 244km per hour while riding in the slipstream of a lead car.
11. There are more bikes than people in the Netherlands.

**Post-visit Activity:** Design a bike for the future, or your dream bike.

Research how the bike was an important tool within the women’s suffrage movement. The book *Wheels of Change; How woman rode the bicycle to freedom (with a few flat tyres along the way)*, by Sue Macy (2011) could be a great resource.