

DRAFT

Bike Mentor Project

Originally prepared by:

Wellington City Council

In 2018.

**Some updates added by Greater
Wellington in 2025.**

Contact schooltravel@gw.govt.nz if
you are interested in running this
programme.

***Haere taka mua, taka muri;
kaua e whai***

Be a leader not a follower

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Introduction

Overview

Aim

To build confident young cycling leaders who are keen and able to encourage or support their peers to try cycling for fun or transport.

Objectives

Students:

- Learn on-road cycling skills and become confident, responsible riders
- Are able to do a bike safety check, and a helmet check
- Are able to handle basic bike maintenance, including fixing punctures and other common issues
- Are able to support and encourage their peers to try cycling, challenge themselves and cycle more often for fun or transport
- Are engaged in the five key competencies as outlined in the NZ Curriculum: thinking, relating to others, managing self, using language, symbols, and texts, and participating and contributing.
- Understand how their choices impact on themselves, their community and the environment and are enabled to take action, engaging in citizenship and exploring enterprise and globalisation

The School builds relationships throughout the community to support the Bikes in Schools project and continues to encourage sustainable and healthy transport options for students.

The Council is able to assess the effectiveness of the programme and further develop initiatives to enable young people to cycle.

Success factors

The goals of this programme are to enable more students to be confident and safe on a bike, and enjoy cycling, whether for fun or transport. We will measure success using the following outcomes.

Outcomes:

- Schools are engaged in this programme, learn more about training available, and the school travel programmes.
- Students are engaged in and learn cycle skills, basic mechanical skills and leadership skills
- Students help run events or promotions to encourage active travel within their school or community
- New cycling infrastructure is used by a wide range of users, including 10-17 year olds
- Levels of incidental exercise through active travel increase.
- Level of road safety awareness increases
- Facilitation, teamwork and leadership skills are developed
- Connections with community, citizenship and participation increase



Course Outline

Leadership workshop

- **Team Building** – introduces students to the project and provides resources to develop the team's collaborative and supportive group structure. (1 hour)
- **Facilitation** – This module shows students how to lead meetings and support their peers as they begin to work with larger groups of students. (1 hour)
- **Vision and Messaging** – This module teaches students how to plan their campaign by developing specific goals, tasks, and timelines, and how to communicate the goals and activities of the program effectively in displays and various media. (1-2 hours)

Greater Wellington cycle skills training – Pedal Ready

- **Grade 1** – basic handling skills in a non-road environment (3.5 hours)
- **Grade 2 (2 parts)** – introduction to on-road cycle skills (7 hours)

Bike maintenance

- **Bike anatomy and diagnosis** – practical session looking at different parts of the bike, how they work and how to identify problems with your own bike. Basic maintenance such as pumping up tyres, quick brake adjustments and oiling chains. (1.5 hours)
- **Bike maintenance and bike checks, part 1** – continuation of the above, identify problems with another bike, and learn basic fixes (fixing a puncture, adjusting seat height, gear adjustment, etc.) (1.5 hours)
- **Bike maintenance and bike checks, part 2** – more advanced bike maintenance skills, such as replacing brake pads, or spokes and buckled wheels, how to care for your bike (1.5 hrs)

Ride

- Students choose a route and go on a (supervised) ride to a destination of their choice. Discussion about roles and responsibilities as a cycling 'advocate' or mentor. (2-3 hours)



PHOTO CREDIT: NZTA CYCLE LIFE

The 'what and why'?

Benefits

Long before it became a sport or recreational activity, riding a bike was an efficient and practical mode of transport – and still is! With the increasing awareness around environmental impacts of motor vehicle use, the demands on limited space in our cities and the health crisis caused by inactivity, cycling offers many opportunities. Below are a few to discuss.

Health

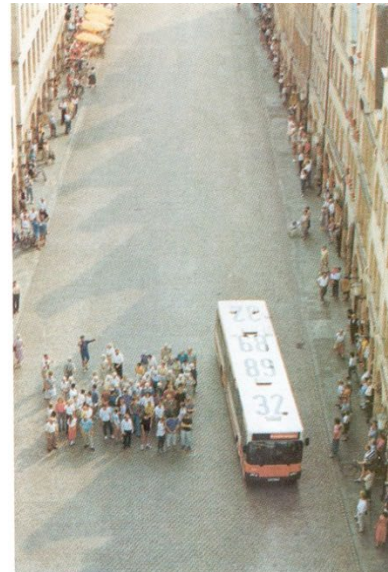
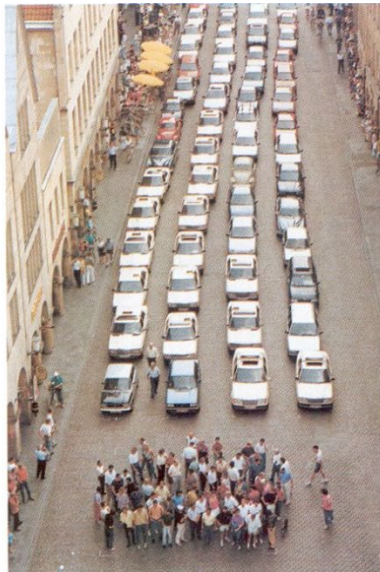
- A good muscle workout and aerobic workout
- Low impact and easy – not much skill required
- A fun way to build fitness – change pace for more/less challenge
- Time-efficient if used as a way of getting places – you work out while you travel
- Can reduce stress levels, anxiety and depression
- Can improve balance and spatial awareness
- Boosts your brain power and helps you sleep better (true for all exercise)

Environment

- Zero emissions
- Raises awareness of air and noise pollution

Social/community

- Saves time – you can travel 3 times as fast as walking for the same amount of energy, and no waiting around for a bus/ride
- Make new friends or strengthen friendships
- Keep an eye on your neighbourhood and flex your citizenship muscles!



This iconic photo was taken in Münster in 1991 to illustrate the public space taken up by bikes vs cars vs bus to transport the same number of people.

→ What would an EBIS version of this photo look like?

Course Content

Cycle Skills Training – provided by Greater Wellington Regional Council

Pedal Ready is a skills based programme designed to increase the bike-riding competency of children and young people. This programme is in accordance with the New Zealand Cyclist skills training guidelines developed by the New Zealand Transport Agency.

Grade 1

Grade One cycle skills training takes between 3-5 hours and is held in a non-traffic environment, usually in a school playground. Training at this level covers:

- bike and helmet safety checks including legal requirements
- starting off and stopping with control
- steering and manoeuvring safely to avoid objects
- looking behind while pedalling in a straight line
- signalling to stop and turn left or right
- using the gears

Outcome: The trainee cyclist can demonstrate full control of their bicycle while carrying out all-round observation, signalling and manoeuvring. They will not yet have been observed using these skills on the road and in traffic. (Not suitable for non-riders).

Grade 2 (parts 1 and 2)

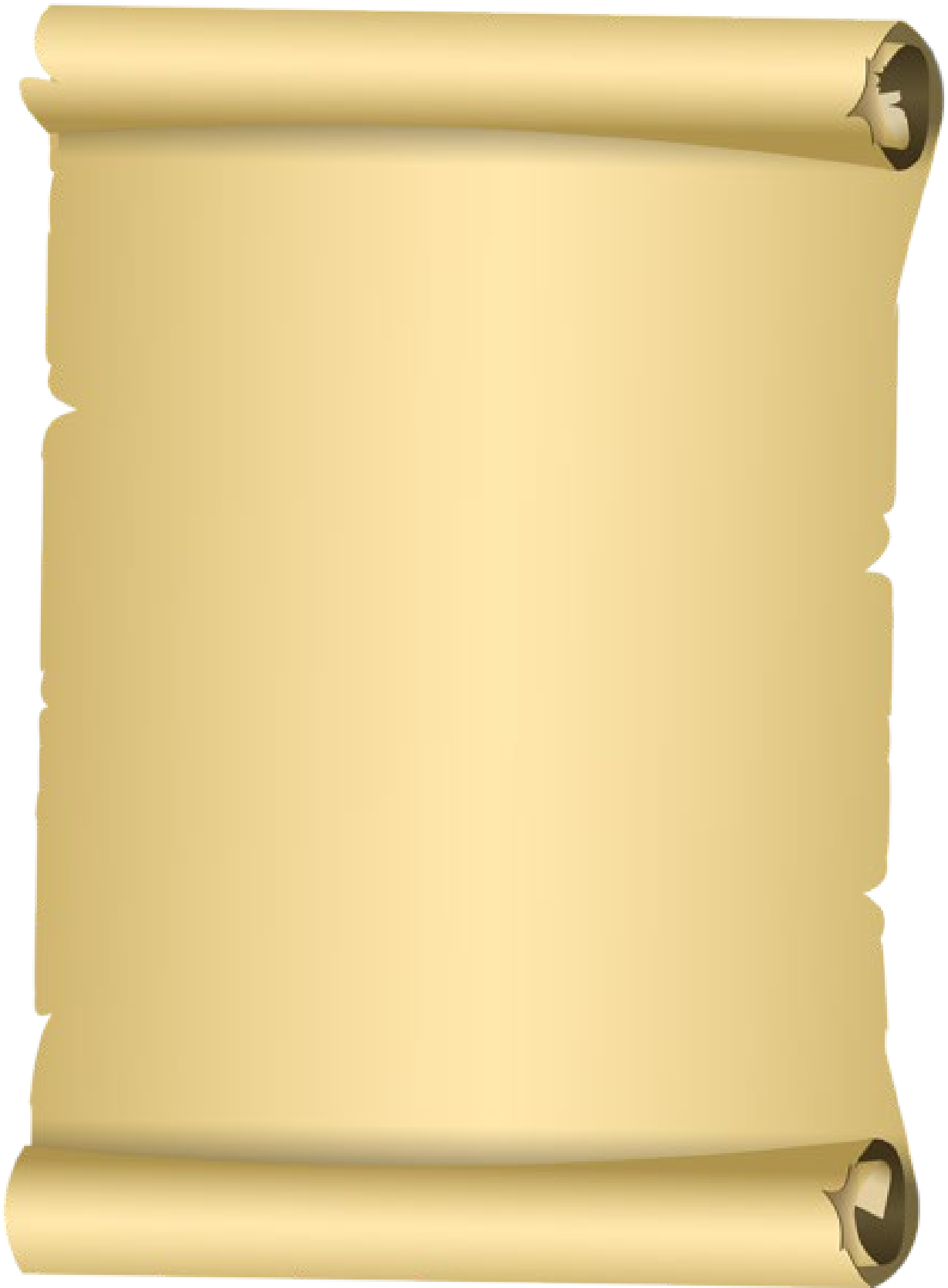
Grade Two training takes 7-8 hours in total, with a minimum of 6 hours riding on local roads and covers:

- competency in all Grade One core skills
- recall an understanding of road signs and the road rules
- starting and stopping on the side of the road
- ride along the road
- pass a parked or slower moving vehicle
- turn left – at a controlled and uncontrolled intersection
- turn right – at a controlled and uncontrolled intersection
- travel straight through controlled and uncontrolled intersections

Outcome: The trainee cyclist can safely perform manoeuvres and turns in a variety of traffic environments. They will be able to choose options to deal with minor hazards and demonstrate this in practice. They will show good understanding of traffic awareness and road positioning in these traffic environments. Grade 2 training is held on quiet local roads in real traffic conditions.

Leadership

Kawa | Group Treaty





GOAL:

S M A R T

Specific	<ul style="list-style-type: none"> • What do I want to accomplish? • Why do I want to accomplish this? • What are the requirements? • What are the constraints? 	
Measurable	<ul style="list-style-type: none"> • How will I measure my progress? • How will I know when the goal is accomplished? 	
Attainable	<ul style="list-style-type: none"> • How can the goal be accomplished? • What are the logical steps I should take? • Is this in line with my long term objectives? 	
Resources	<ul style="list-style-type: none"> • Do I have the necessary resources to accomplish this goal? • What resources do I need to accomplish my goal? 	
Timely	<ul style="list-style-type: none"> • Is this the right time? • How long will it take? • When do I need to be finished? • When am I going to work on this goal? 	

Agenda Generator

Ice Breaker:

Ask people their name and your ice breaker question; go around the table and listen to answers.

Ice Breaker Question:

Agenda Items: Don't forget to ask participants if they have any additional agenda items.

Conversation Starter:

A conversation starter creates dialogue between you and the participants. Starters can be elusive and hard to think of and without them you can be left with awkward silence. A good starter is not a yes or no question but encourages participants to think and engage in the answer.

1. What do you already know about _____?
2. What do you want to know more about _____?
3. What interested you about this club?
4. What is already happening at school around _____?
5. Brainstorm related to an agenda item.

End:

Share an interesting thing that you heard in the conversation and give everyone a take away.

Set the next meeting.

Acknowledge to your team what has been accomplished in the meeting and thank them for their participation.

Follow Up: Note taker, send a follow up email or text with the task list of what individuals have committed to and when and a reminder of the next meeting.

Vision

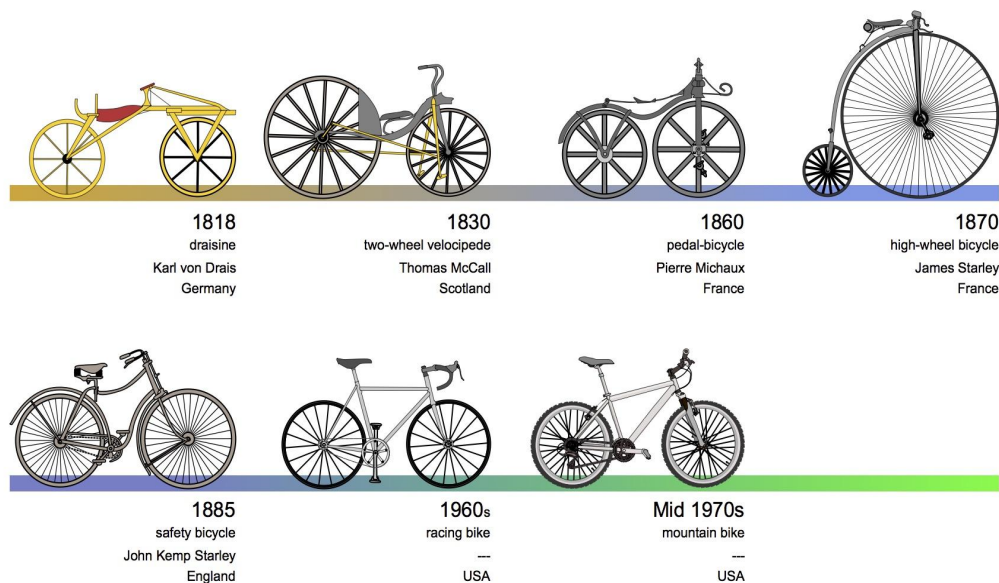
What next?

Who?

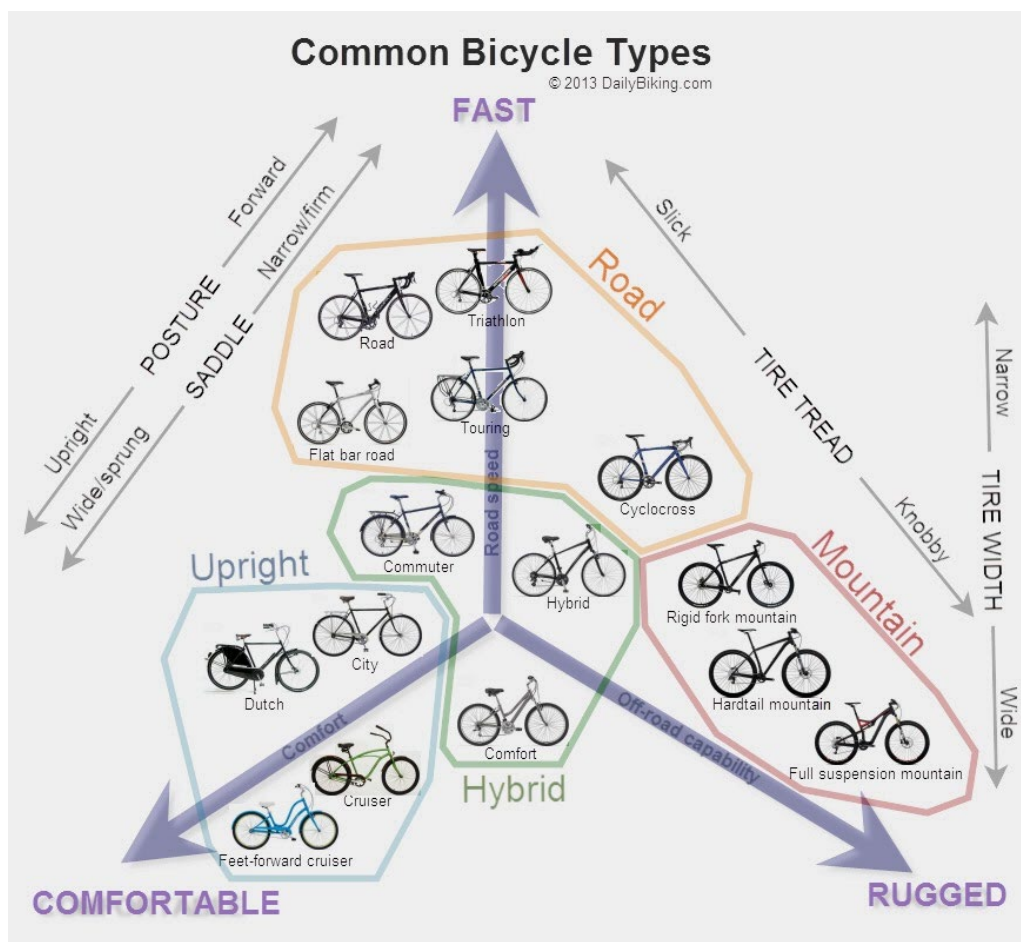
Notes

Bike Maintenance

Types of bikes

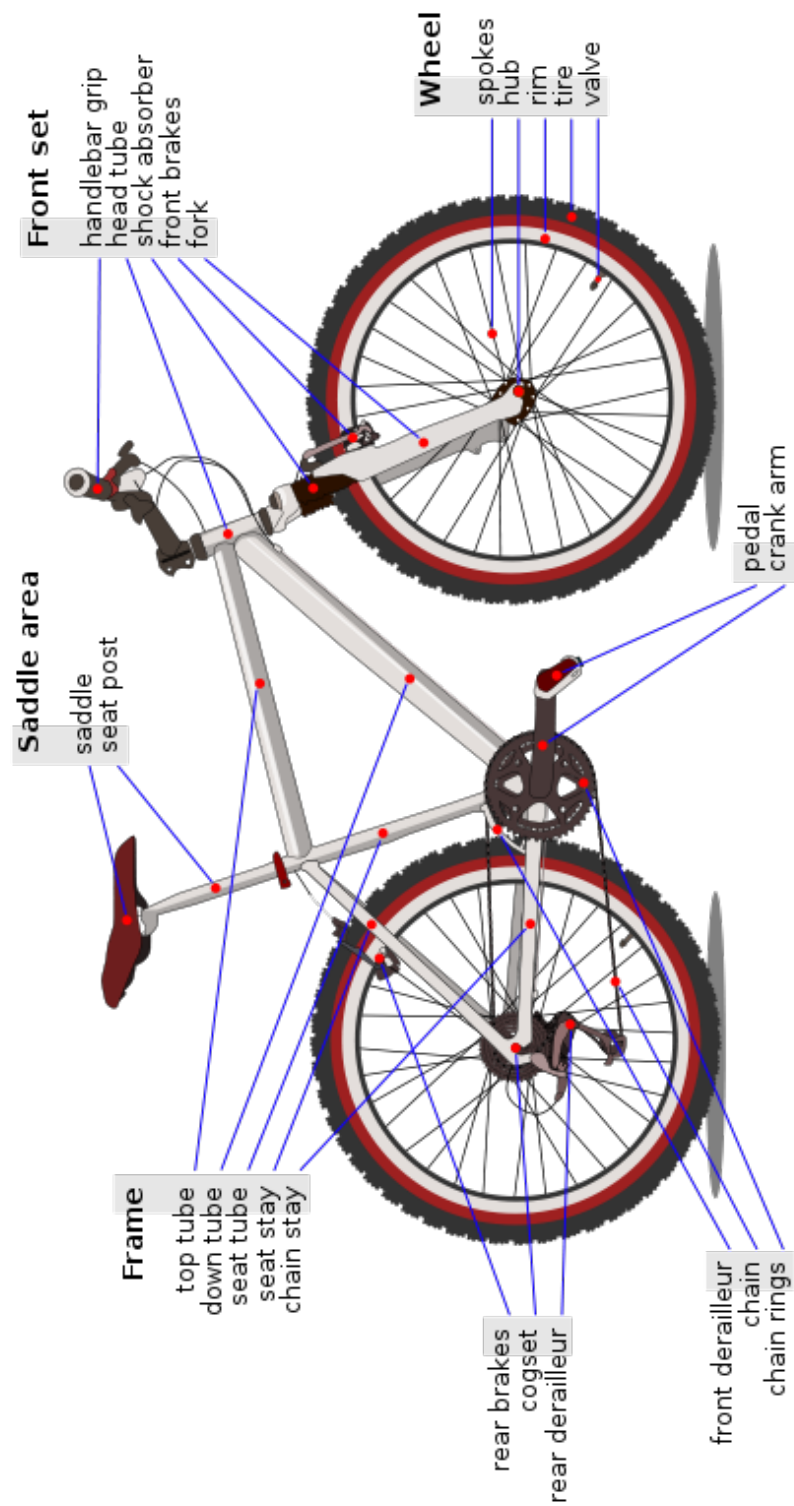


Evolution of the Bicycle across ages, with year, bicycle name, inventor, and country.
 By AI2 (Own work) [GFDL (<http://www.gnu.org/copyleft/fdl.html>) or CC BY 3.0 (<http://creativecommons.org/licenses/by/3.0/>)], via Wikimedia Commons



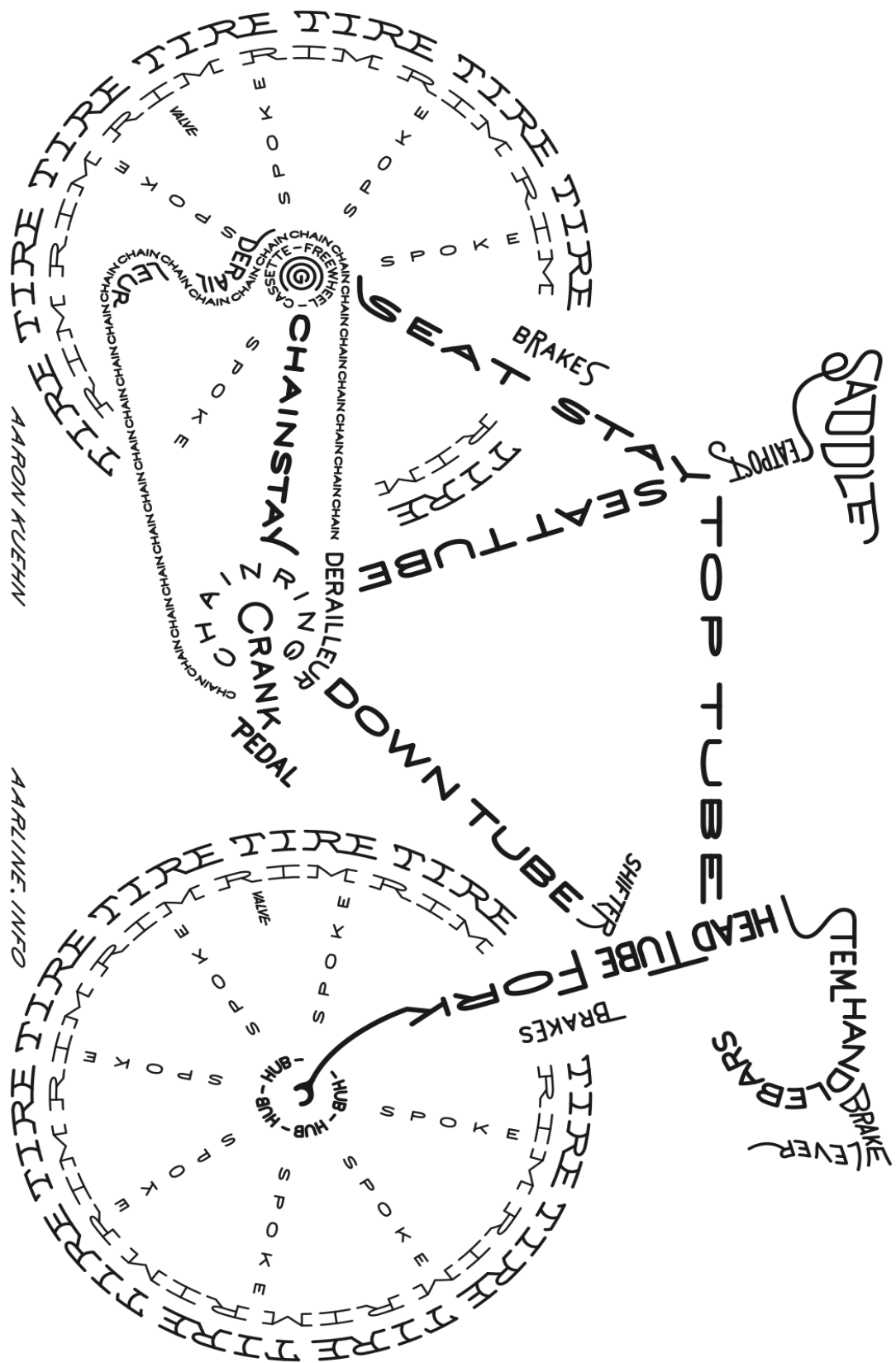
DailyBiking.com

Bike Anatomy



By AI2 - Own work, CC BY 3.0, <https://commons.wikimedia.org/w/index.php?curid=2995998>

Bike Anatomy - a different look



Bicycle Typogram by Aaron Kuehn
<http://aaronkuehn.com/art/bicycle-typogram>

Bike Physics

Some basic physics

Using the example machine showing the effects of balance and why it works.

- How does the cycle balance/stay upright when riding?
- Is it the cycle or is it the rider?
- Can a cycle stay upright without a rider?
- What is Energy how does this help the cycle stay upright and move and forwards?

What makes the cycle move?

- What is a transmission? (Gear train) Example
- Cycle transmission (gears) and energy come together. Example on the bike (young person)
- Power to the wheel! Example.
- How do we put that power on the road – Tires and tubes – examples pumps and tubes
- How do we stop all that power in a hurry – what happens to the power where does it go! (Heat) example.
- Energy is never lost it just changes its form (state) – power – brake – heat (friction)! Use example disc brake.

Notes/sketches/thoughts

A-B-C-D quick (drop) bike safety check

Pedal Ready uses a simple [ABC check](#) to ensure our bikes are safe before every ride. Air, brakes, chain and quick releases.

Do a more thorough check before any long ride, after transporting a bike, or if it hasn't been used in a while. If you find any issues, make sure these are taken care of before riding. Visit your local bike shop, a community bike workshop or visit [BikeReady](#) to learn some basic bike maintenance.

A – Air

Keep tyres pumped to the right pressure – usually written on the side of the tyre. Use a bike pump, not a service station/car pump. Check the tread isn't worn out. Check the wheel spins freely without wobbling, and there are no broken spokes.

B – Brakes

Wheel the bike forwards and check each brake by pulling on the levers one at a time. The brake pads should fully touch the rims or disc when on. Always use **both brakes** when stopping.



C – Chain

Check the chain has clean oil on it and can move freely. The chain should look black or silver, not rusty. A little oil should come off if you touch it. If dirty oil has built up, clean that off first before adding more oil.

D – Direction

With the front wheel "parked" between your legs, try to turn the handlebars firmly. The wheel should turn with the handlebars, and the handlebars shouldn't feel loose or wobbly.

E – Everything else

Drop the bike gently from about 10cm and listen and feel for any unusual rattles. Tighten any bolts that have come loose.

Check all **quick release levers** are all done up correctly and tight. Quick release levers may be found on the wheels and seat post. They should curve in around the post or towards the centre of the wheel and may read "closed".

F – Fit

Make sure the bike fits you. When seated, the ball of at least one foot should touch the ground. When riding, legs should be almost straight when pedal is at the bottom of the stroke.

Check that the seat post is not raised above the 'Min Insert' marking (the least amount it must be inserted). Exceeding this can cause damage to the bike frame and injury to you.



Bike checklist

Use this bike checklist before a ride

Air – keep tyres pumped to the right pressure – usually written on the side of the tyre. Use a bike pump, not a service station/car pump. Check the tread isn't worn out. Check the wheel spins freely without wobbling, and there are no broken spokes.

Brakes – wheel the bike forwards and check each brake by pulling on the levers one at a time. The brake pads should fully touch the rims or disc when on.

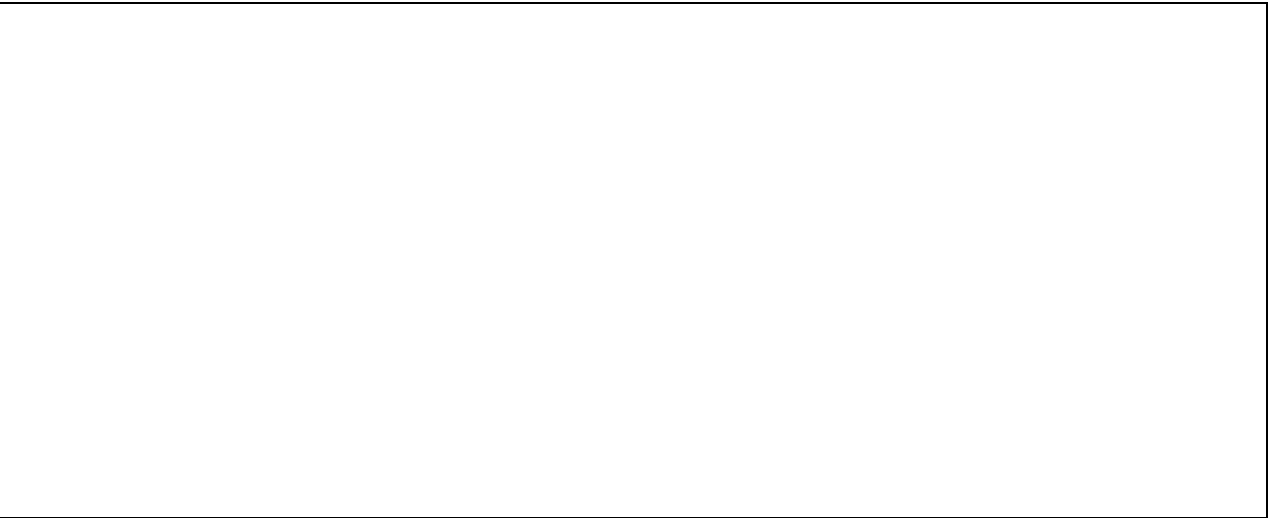


Fit – check that the seat post is not raised above the Min Insert marking as this can cause injuries and damage to the bike.

Chain – check the chain has clean oil on it and can move freely. The chain should look black or silver, not rusty. A little oil should come off if you touch it. If dirty oil has built up, clean that off first before adding more oil.

Direction – with the front wheel “parked” between your legs, try to turn the handlebars firmly. The wheel should turn with the handlebars, and the handlebars shouldn't feel loose or wobbly.

Everything else – drop the bike gently from about 10cm and listen and feel for any unusual rattles. Tighten or remove any parts that have come loose. Check all quick release levers are closed correctly and tight.



Helmet and gear

Check your helmet, clothes and lights before a ride.

Check your helmet is fit for use with the 4 'S's'

- Check your SHELL, STYROFOAM, and STRAPS for signs of wear or damage. Straps should not be tangled. They should sit in a Y shape under your ears.
- If there is damage to the Styrofoam or shell, the helmet should be replaced.
- Check your helmet has a standards approved SAFETY STICKER.
- Helmets last about 5 years – or one crash – before they need to be replaced.



Helmet fit

A helmet only works if it is on properly. Tighten the dial at the back before adjusting the straps.

Use the 2-4-1 method to fit your helmet correctly:

- 2 fingers between your helmet and eyebrows.
- 4 fingers in V's along the straps either side of your ears.
- 1 (or maybe 2) fingers between the buckle and your chin.

It should be snug – but not tight or uncomfortable. You should be able to wiggle your head gently without your helmet moving.



Clothing, shoes and gear

You don't need special clothing to ride a bike, but we recommend wearing something that will keep you comfortable and safe for your ride.

- Check you have no loose clothing or shoelaces.
- BRIGHT COLOURS make you stand out during the day.
- LIGHTS AND REFLECTIVE GEAR is best at night.
- WEAR SHOES that cover your toes. No open-toed shoes.

Carry any gear in a backpack or bike bag. Keep this away from moving parts, i.e. wheels, chain, brakes and pedals.

Pedal Ready Helmet/bicycle check form

Name of owner: _____ Frame ID number: _____

Type of bike (circle): BMX / Road / Mountain / Child / Other Colour: _____

The purpose of this helmet and bicycle check is to examine the condition of the equipment prior to participating in training. It is advised that major faults are repaired by a reputable bike mechanic.

<i>Checklist (legal requirements underlined)</i>	<i>OK</i>	<i>Repair/adjustment needed</i>
<u>Helmet</u> <ul style="list-style-type: none"> check for damage, safety sticker 	<input type="checkbox"/>	<input type="checkbox"/>
Frame <ul style="list-style-type: none"> no rust or cracks (good order) 	<input type="checkbox"/>	<input type="checkbox"/>
Frame correct size for trainee	<input type="checkbox"/>	<input type="checkbox"/>
Seat <ul style="list-style-type: none"> Secure, correct height 	<input type="checkbox"/>	<input type="checkbox"/>
Handlebars and headset <ul style="list-style-type: none"> tight and secure grips cover ends of handle bars 	<input type="checkbox"/>	<input type="checkbox"/>
<u>Front and rear brakes</u> <ul style="list-style-type: none"> respond quickly with firm contact 	<input type="checkbox"/>	<input type="checkbox"/>
Wheels <ul style="list-style-type: none"> wheel fasteners tight, wheels spin freely 	<input type="checkbox"/>	<input type="checkbox"/>
Tyres <ul style="list-style-type: none"> correct pressure, no cracks or slits 	<input type="checkbox"/>	<input type="checkbox"/>
Pedals <ul style="list-style-type: none"> spin freely, not loose 	<input type="checkbox"/>	<input type="checkbox"/>
Chain <ul style="list-style-type: none"> lightly oiled and in good condition 	<input type="checkbox"/>	<input type="checkbox"/>
<u>Red rear facing reflector</u>	<input type="checkbox"/>	<input type="checkbox"/>

Resources (2018)

Promoting and encouraging cycling - ideas

Auckland Cycle Ambassadors

Where it all started: read more about Kowhai Intermediates cycle ambassador programme:

<https://www.bikeready.govt.nz/schools/case-studies/student-led-bike-campaigns-extend-skills-training/>

Go by Bike Day/Wheels Day

Raise awareness of cycling as a mode of transport by encouraging students and their whanau/caregivers to bike to school. This could be one big event a year, or as frequent as weekly. For more info see:

<https://at.govt.nz/cycling-walking/travelwise-school-programme/travelwise-resources/plan-a-travelwise-wheels-day/>

Cycle Train

A Cycle Train is a similar concept to a Walking School bus, except on bikes. Parent volunteers supervise children as they bike to school. These parents, or 'conductors', set a route and pick up children at 'stops' along the way. Cycle trains are popular in Europe and have also been trialled in Nelson. Read the links below for more information about the Nelson study and a guideline for setting up your own school Cycle Train. The NZTA document includes a step by step guide on how to set up school Cycle Trains, surveys and consent forms to send out to parents and information about training, promotion and route selection.

Parent volunteers can also do cycle skills training with a focus on riding with children.

<http://www.pinnacleresearch.co.nz/school/cycle.html>

<http://www.nzta.govt.nz/resources/research/reports/338/docs/338.pdf> (Cycle Train Guidelines start on page 45 of the PDF)

Big Bike Fix Up

Once news of the track hits the school community, bikes may be dusted off which are in need of some attention. Making sure kids have a safe bike to ride should be a priority. A great way of getting the community excited about the bike track and back on their bikes is to organise a Big Bike Fix Up where families can bring bikes in to get checked out and fixed up. Collaborate with a local bike shop or mechanically minded parents to get the needed spare parts and helpers.

Alternatively, the school could host a lunchtime bike cafe, where bike mentors can do low key repairs/maintenance on bikes, and eat lunch too.

Or the school/ bike mentors could arrange to host some 'fix a flat' workshops for the students.

General info:

<https://www.nzta.govt.nz/walking-cycling-and-public-transport/cycling/cycling-education/>

School and Teacher Resources - Using cycling in the classroom

The following is a collection of resources that may be helpful to the school and teachers as they adapt to teaching with and using the bike track.

Visit Kura Kete for the latest educational resources and school activities:

<https://kurakete.gw.govt.nz/themes/safety-resources/cycle-skills/>

Curriculum Resources (2018)

- NZTA's [Bike Ready](#) curriculum resources. Curriculum-based learning helps young people place their bike riding in a wider context of participation in a safe transport system. Lesson plans support students taking part in BikeReady Grade 1 skills training, or any class interested in exploring the context of bike riding.
- EnviroSchools - Te Upoko o te Ika a Māui and Greater Wellington's [Active Travel Action](#) curriculum resource provides a process for schools to implement sustainable active travel practices in their school through student inquiry - and an opportunity for students to take action in response to climate change.
- NZTA also provide a curriculum resource – 'Road Safety: Everyone is a road user'
 - <https://education.nzta.govt.nz/resources/school-ethos-and-organisation/road-safety-education-policy>
 - http://education.nzta.govt.nz/data/assets/pdf_file/0007/49363/Everyone-is-a-road-user-Internet-links.-NZTA.pdf

Cycling education resources

- Pedal Ready has put together a list of resources for schools, which is a good place to start. It includes a bike and helmet checklist, a skill circuit and curriculum resources.
 - <http://pedalready.org.nz/schools/resources-for-schools/>
- The Road Code for Cyclists is available free online, or as a short factsheet.
 - <https://www.nzta.govt.nz/resources/roadcode/cyclist-code/>
 - <http://www.nzta.govt.nz/resources/factsheets/01/docs/01-cycles.pdf>

Special projects around bikes

- Some ideas:
 - Victoria University has information about a bike-powered generator in their Te Reo Physics Resources.
<http://ecs.victoria.ac.nz/technical/TeReoPhysics/CircuitsAndElectromagnetism/BicycleGenerator/>
 - Some councils have speed radars available that measure traffic speeds around the school. These results can be used for inquiry learning. Contact your local School Travel Planner to see if they can access one.
<https://www.movinmarch.com/contacts>
 - Take surveys of children's travel modes to use in inquiry learning activities.
 - Tips for riding in a social group:
<https://www.cyclingnewzealand.nz/everyday-cycling/group-riding-tips>

Appendices (1-6 removed and replaced by Pedal Ready page below)

Visit Pedal Ready for the latest cycling resources, including a guide for new/returning riders, biking to school and locking tips.

<https://www.pedalready.org.nz/cycling-resources>

Remember, a practical cycle skills course is the best way to build your confidence and skills!

Let's Ride!

Tips for staying safe on the road and making the most of your bike for people who are new or returning to cycling. This guide includes information on setting up before you ride, planning, skills to practice, riding in traffic and riding with others. It also has illustrations showing the best place to be around heavy vehicles and also locking your bike securely.

Biking to School

Our biking to school guide is designed to support tamariki who have completed the Grade 2 Pedal Ready training and are getting ready to ride to school (or part of the way) independently. It has refresher information on helmet, clothes and bike checks and a few suggestions on navigating intersections safely.

Cycle safety posters

We've created poster and leaflet versions of some key information in the Let's Ride guide. You can share these in your workplace or school.

NZ Code for Cyclists

The official New Zealand code for cyclists is a user-friendly guide to New Zealand's traffic law and safe driving practices.

The cycling code is also available in [Te Reo Māori](#).

For more information, please [contact](#) the Pedal Ready team.

Appendix 7: Notice to Parents and Sample Newsletter 'biking policy'

Notice to Parents - After Completion of Grade 2 Cycle Skills

Your child has taken part in cycle skills training at school, and has been awarded a Grade 2 certificate of participation.

This does NOT mean that your child is competent to ride safely on the road.

Basic skills covered in the course included:

- Keep to the left
- Use hand signals before turning or stopping
- Make a left or right turn safely – always check first for vehicles approaching from behind
- Ride in a straight line, no drifting into the traffic lane, or sudden changes in direction
- Check behind at regular intervals, while maintaining a straight line.
- Emergency braking
- Road rules – what to do at give way and stop signs, obey traffic signals, who has right of way
- Anticipating hazards and responding safely (parked cars, narrow road, car doors, broken glass, potholes, sumps)
- When turning right, check behind. Wait for a safe gap then signal before moving out into the lane. Wait on centre-line if necessary. Catch the eye of approaching drivers - make sure they've seen you. (A complex set of skills)

We recommend that you now spend some time riding on the road with your child, reinforcing the skills needed to interact safely with traffic.

Your child should only be given permission to ride unsupervised when you are confident that they are consistently using these skills, can maintain concentration, and have developed the necessary judgment (distance, time, speed of approaching vehicles) to judge a safe gap in traffic.

Template School 'biking policy':

The school policy for riding to school is that we encourage children to cycle to school once they have completed grade 2 cycle skills training (or similar). It is at the parents' discretion to decide on a student's ability to ride safely to school.

The school's Health and Safety Policy states:

- Children biking to school must wear helmets.
- Children under 10-years-old should not bike to school alone.
- All children [are given a yellow safety vest to be worn at all times/are asked to wear bright clothing over their uniform] and must use lights in low light/dim days while travelling to and from school.

With thanks to:

Greater Wellington Regional Council

Pedal Ready Cycle Skills

NZTA – Cycling in New Zealand

BikeReady – cycle skills resources

Enviroschools – Te Upoko o te Ika a Māui and Greater Wellington's Active Travel Action resource

Eco2School

Biketec

Workshops for Accessible Cycle Care (W.A.C.C)

● Today's To Do List

1. ~~Save some money.~~

2. ~~Exercise.~~

3. ~~Have some fun.~~

4. ~~Get better attitude.~~

5. ~~Go to work.~~

6. ~~Take time for myself.~~

7. ~~Save the planet.~~

8. ~~look ahead for my future.~~

Ride Bicycle