

Levels 4, 5 and 6

MODULE 3: Cycling

Activities

- Get into cycling!



Links to AusVELS

<p>Level 4</p> <p>Cross curriculum priority: Sustainability</p>	<p>Health and Physical Education <i>Health knowledge and promotion</i></p> <p>Civics and Citizenship <i>Civic knowledge and understanding</i> <i>Community engagement</i></p>
<p>Level 5</p> <p>Cross curriculum priority: Sustainability</p>	<p>Health and Physical Education <i>Health knowledge and promotion</i></p> <p>Civics and Citizenship <i>Community engagement</i></p>
<p>Level 6</p> <p>Cross curriculum priority: Sustainability</p>	<p>Health and Physical Education <i>Health knowledge and promotion</i></p> <p>Civics and Citizenship <i>Community engagement</i></p>

Key ideas

- ▶ Cycling is a healthy way to commute and get around.
- ▶ Cycling is a great recreational and competitive activity/sport.
- ▶ Cyclists need to adhere to the road rules.
- ▶ Cyclists need to plan well.
- ▶ Cycling can be more risky than walking.

Students will be able to:

- ▶ Identify the personal and societal benefits of cycling.
- ▶ Understand the need to learn how to cycle in a range of contexts.
- ▶ Develop plans and strategies to optimise their safety.

Vocabulary

- | | |
|----------------|---------------------|
| ▶ Barriers | ▶ Demerit points |
| ▶ Enablers | ▶ Greenhouse gases |
| ▶ Commuting | ▶ Greenhouse effect |
| ▶ Licence | ▶ Fatality |
| ▶ Registration | ▶ Topography |

ACTIVITY: Get into cycling!



IN THE CLASSROOM

Preparation

- Make an enlargement of a map of the local area from Google Maps or from a street directory, or you may be able to obtain a large local area map for your local government council.
- Students will need to have access to computers and the Internet.

Explore the advantages and disadvantages of cycling.

Ask and discuss some of the reasons people ride (commute, leisure, competition, convenience, environmental reasons) or don't ride (storage of bikes, helmet requirements, perceptions of safety, climate, lack of cycling facilities).

On the board, generate a class list of good and not so good things about cycling. Ask:

- Are there more benefits to cycling than not cycling? (Benefits could include increased fitness levels, reduction in greenhouse gas emissions, reduced traffic congestion and saving money.)

Allocate the good things to half of the class and ask them to design, develop and distribute materials promoting the benefits of cycling, especially to young people. Remember, there is plenty of evidence about the links between exercise and physical and mental health.

Allocate the not so good things to the remaining half of the class and for every item listed, ask them to come up with a strategy to turn this negative into a positive.

It may be necessary to start with countering perceptions around safety. There are more than 1.08 million people now riding a bike each week in Victoria (source: www.roadsafety.vic.gov.au). In the five years to 2011, the average number of cycling fatalities each year was 7.4 (2% of all road deaths) and an average of 454 bike riders were seriously injured each year (7% of all serious injuries on the roads reported to police) (source: *Cycling into the Future: Victoria's Cycling Strategy 2013-2023*). It is important that cyclists learn how to cycle safely in traffic, maintain their equipment in good condition, wear protective equipment and be visible to others.

Bring the two halves of the class together and share promotional and strategic ideas.

Explore the issues, barriers and enablers for cycling.

Provide an enlarged map of the local area and mark on it various landmarks that the class will immediately recognise. You may be able to get a large map for your local government council. The class could also view their local area using Google Maps (www.google.com.au/maps) or Google Earth (<http://earth.google.com>).

- What are some of the barriers (things and situations that make it unsafe or undesirable) to riding in this local area? (e.g. topography, tricky intersections, bike paths that suddenly end, no lock-up bike parks at the bus stop, station or school.)
- Where is it safe to cycle for fun in this local area? (e.g. what clubs and organisations are there to join or seek support/information from? Are there parklands or creek paths?)

In groups, have students undertake a research task to clarify any understandings about what are the issues, barriers and enablers when cycling for commuting OR leisure OR competition.

- If commuting – what are the issues, barriers and enablers? (e.g. where to store bike or helmet, time, weather.)
- If for leisure or recreation – where is it safe to ride? What fun events are happening? How may I best participate in endurance events like *Round the Bay in a Day* or the *Great Victorian Bike Ride*?
- What events are available to students who want to start competitive cycling? (e.g. those wishing to do triathlons, track work or road cycling.)

General research could also be on:

- Where do I learn the specific riding skills that I need for the type of riding I intend to do?
- Which bike is suitable for my needs?
- Which helmet and clothing keeps me best protected?
- What can I do to increase my safety when riding?
- How do I improve my fitness to be able to ride?
- What are the reasons why helmets are compulsory? (Link this discussion back to *Physics of road crashes*.)

Discuss how road laws apply to cyclists.

Tell the class that cyclists have the same rights and responsibilities as other road users.

Discuss with students which road laws apply to cyclists. Decide what laws could or should apply to cyclists.

- Should there be more or fewer road laws in relation to cyclists?
- What would be a suitable penalty for cyclists who break the law?
- Should cyclists be required to hold a licence or register their bikes before riding on the road?
- Should they lose demerit points when they disobey the laws while cycling?

Have students generate a number of as yet unanswered questions that relate to cyclists, road use and the law. Questions could be generated around the bike itself and what is required of it to be legal, the cyclist, where on the road they can ride, what helmets are legal and what is required, signals required by the cyclist, who cyclists have to give way to, etc.

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Once the question has been generated, each student needs to research the Victorian legal requirement and record it alongside the question. Information can be found on the websites of both VicRoads (www.vicroads.vic.gov.au) and Bicycle Network Victoria (www.bicyclenetwork.com.au).

Pool the questions and answers. Team up groups of students and have a representative compete in a quiz, with the 'quizmaster' asking questions and allowing the quickest person to provide the answer. The team with the most correct answers is the winner.

Clarify any questions that students appear to be unsure about.

EXPLORING THE LOCAL AREA

Preparation

- To run a group ride, it may be necessary for students to complete some preliminary *Bike Ed* program components or for staff or helpers to undertake *Bicycle Education Instructor Training*. See *Enrichment Activities* at the end of this module for details.
- Check the Department of Education and Early Childhood Development (DEECD) guidelines for cycling excursions; www.education.vic.gov.au/school/principals/spag/curriculum/pages/traffic.aspx.

Plan and take a group ride.

As a class, plan and take a group ride in the local area. Start by developing an action plan.

Investigate and plan:

- Distance and time required
- Safest route
- Equipment required
- Skills required.

Take the group ride making sure that Department of Education and Early Childhood Development (DEECD) guidelines for cycling excursions are followed.

AT HOME

Plan a ride from home.

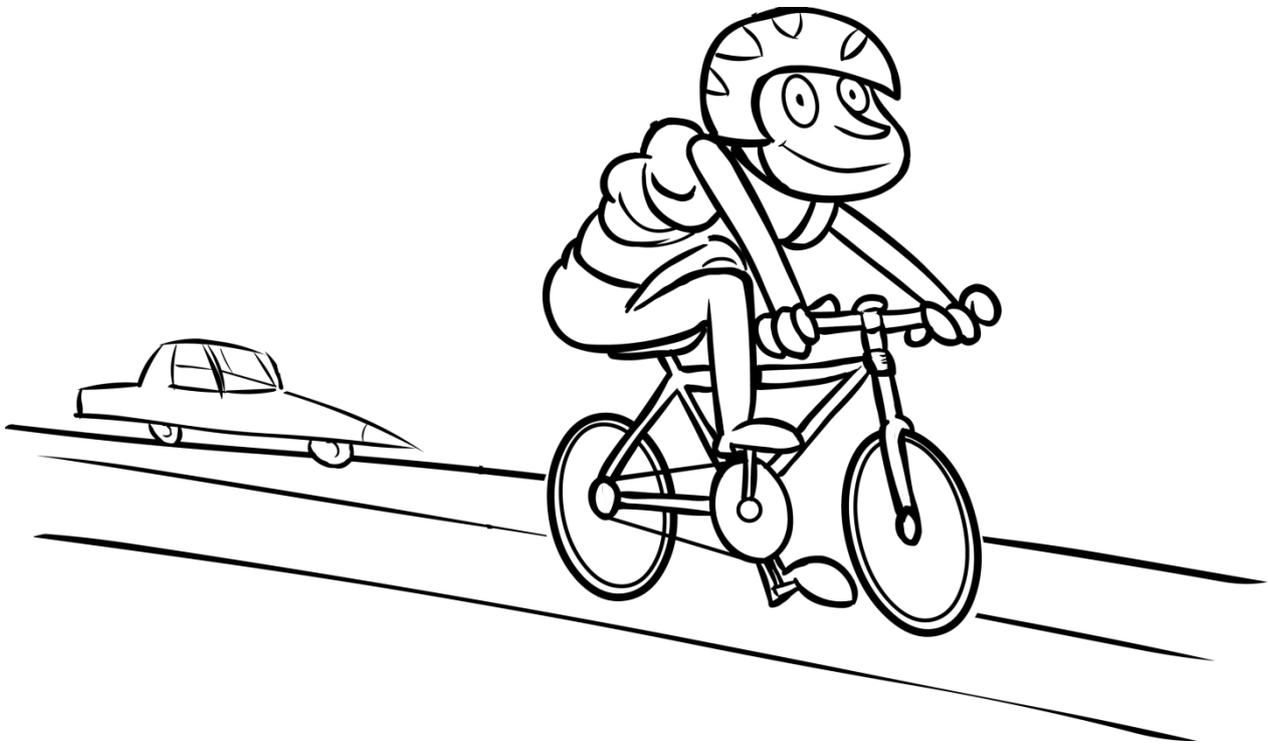
Direct students to identify one place that they would like to safely undertake a return journey to from their home.

They are to fully plan the ride and then, working with a parent/carer, discuss the barriers or enablers to undertaking the ride. It would be a good idea to either drive or ride the planned route with their parent/carer.

BACK IN THE CLASSROOM

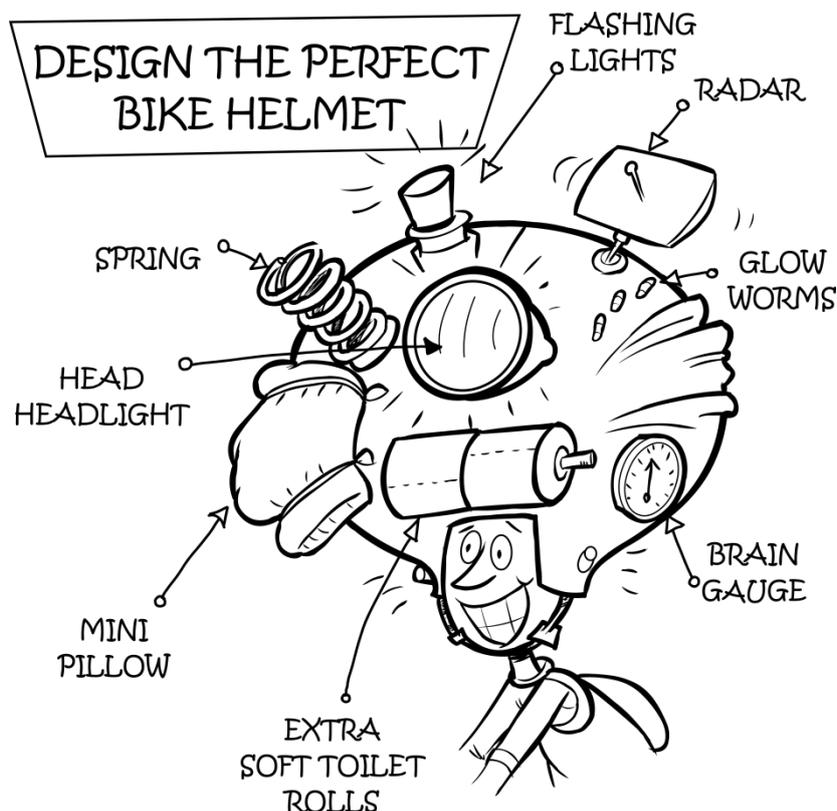
Present the plan to the rest of the class.

Students should detail the route, required preparation, time required, and the skills that may need to be learned. They should also consider potential hazards and how these will be managed.



ENRICHMENT ACTIVITIES

- Undertake the VicRoads *Bike Ed* program with the class. Information about the program and about *Bicycle Education Instructor Training* available from the Department of Education and Early Childhood Development (DEECD) can be found at: www.roadsafetieducation.vic.gov.au/resources/primary-school.html
- Consider organising a ‘Bike Camp’ where students have the opportunity to practise the skills they have learnt in *Bike Ed*.
- Contact Bicycle Network Victoria for information about their *Ride2School Program*: www.bicyclenetwork.com.au
- Make contact with your local Victoria Police station and organise for a visiting Youth Resource Officer to talk about bike safety and, in particular, the importance of wearing a helmet properly.
- Have the class identify and lobby for better facilities for cyclists – to local government (e.g. paths to go somewhere) or State Government (e.g. parking at stations, school, shopping centres, etc.).
- Students could design and make a prototype of a trendy/acceptable cycle helmet. They will need to establish what needs to be considered by doing some research online into bicycle helmet design.



LIST OF KEY ROAD SAFETY TERMS

Casualty – fatality or serious injury resulting from a road crash

Children's crossing – a crossing near a school that is active only when the flags are displayed

Crash – a violent collision causing harm or damage

Distraction – something that reduces concentration and attention

Fatality – a death as a result of a crash

Footpath – a narrow path for a person on foot

Force – the acceleration of a body in the direction of its application

Friction – the force generated between two surfaces when they rub or move over each other

Greenhouse gases - any of the atmospheric gases that contribute to the greenhouse effect

Hazard – something in the traffic or road environment that could cause risk or harm

Intersection – a place where two or more roads meet

Kerb – raised concrete lip at the edge of the roadway

Mid-block – the section of road between two intersections

Pedestrian – a person travelling on foot

Pedestrian crossing – a designated point in the road where there is a means to assist walkers to cross, such as traffic signals or warning signs

Public transport – trains, trams or buses, including school buses

Restraints – seatbelts and similar devices designed to keep people from being thrown around in a vehicle during a crash or when braking suddenly

Road – a public way for road users

Road markings – lines and markings on the road to guide traffic and road users

Road trauma – the serious injury or shock to the body as a result of a collision or crash

Safety door – the left side (kerbside) rear door of a car

Serious injury – an injury that requires a person to be taken to hospital

Shared pathway – a path where people travelling by different modes can travel together, such as pedestrians and cyclists

Speed – the distance travelled divided by the time it takes

Stop, Look, Listen, Think – a systematic procedure designed for pedestrians to use when crossing roads and railway lines

Stopping distance – the total distance that a vehicle travels to come to a stop once the driver realises that the vehicle has to stop

Travel mode – different ways of travelling, e.g. walking, riding, driving, public transport

Traffic signals/signs – a light, sign or other signal used to control or manage traffic or to provide information to road users

Verge – the extreme edge of the road

Vehicle – a device for transporting persons or things, such as a car, train, tram, bus, motorcycle or bicycle.

Zebra crossing – a pedestrian crossing with painted thick white lines on the road, usually with 'walking legs' signs and sometimes amber flashing lights.

USEFUL WEBSITES

Road Safety Education Victoria - www.roadsafetyeducation.vic.gov.au

Road Safety Victoria - www.roadsafety.vic.gov.au

Transport Accident Commission (TAC) - www.tac.vic.gov.au

VicRoads - www.vicroads.vic.gov.au

Victoria Police - www.police.vic.gov.au

DEECD - www.education.vic.gov.au/school/teachers/health/Pages/trafficsafety.aspx

RACV - www.racv.com.au

Public Transport Victoria - www.ptv.vic.gov.au/about-ptv/education

Kidsafe - www.kidsafe.com.au

Australian Department of Infrastructure and Regional Development - www.infrastructure.gov.au

