FOCUS AREA 4

Pedestrian Safety

INTRODUCTION

This focus area provides the explicit teaching of content and skills related to pedestrian safety for Year 5 students. It focuses on:

- safe pedestrian practices such as identifying safe places to cross roads and walk
- identifying road rules, road signs, signals and markings relevant to pedestrians
- practising the stop, look, listen and think crossing procedure
- identifying the stopping distances of vehicles and the impact of this on pedestrian behaviour
- identifying and responding to unsafe situations for pedestrians in traffic in their local area
- planning safe pedestrian routes
- considering active transport and the advantages and disadvantages of these modes of transport
- factors that can affect a pedestrian to make decisions in the traffic environment such as the influence of peers, friends and family.

Key understandings

- Most WA children are driven to and from school each day, even though they live close to school. Active transport (walking, cycling and using public transport) has advantages and disadvantages as a travel option.
- There are a range of road rules, and road signs, signals and markings that are designed to keep pedestrians and other road users safe.
- Children are safer if they are supervised by an adult when crossing roads.
- The traffic environment is a changing environment therefore anticipating and reacting to hazards is a crucial aspect of pedestrian safety.
- Pedestrians should choose places where it is safer to cross the road such as on a straight stretch of road and at pedestrian crosswalks, school crossings, traffic signals, and overpasses and underpasses. Crossing between parked cars should only be carried out when there is no other option.
- It is important to identify potentially dangerous crossing situations and move to a safer place to cross if necessary, especially when unsure of the speed of the traffic, the time it takes to cross, visibility in all directions, and weather and road conditions.
- Where footpaths are not provided, pedestrians should walk facing oncoming traffic and well away from the edge of the road.
- The stop, look, listen and think crossing procedure should always be used.
- Wait until the bus has moved away before crossing the road using the stop, look, listen and think procedure.
- Use pedestrian gates at railway level crossings and with adult supervision. To cross railway tracks where pedestrian gates are not available, children should use the stop, look, listen and think procedure and check in both directions for trains.
- Negotiating a journey safely in the traffic environment requires planning and decision-making.
- There are safer routes to walk to and from school and within the local area.
- Peers, friends and family can influence decisions and attitudes about road safety.
- Pedestrians have a responsibility to act safely and make decisions that reduce their own and other road users' likelihood of involvement in traffic crashes.

Key skills

- Identify and plan a safe route to walk to and from school or to destinations in the local area, to avoid potential hazards for pedestrians.
- Generate decisions for a range of pedestrian-related situations and assess the positive and negative consequences of these decisions.
- Practise using the stop, look, listen, think procedure for crossing roads.
- Practise identifying road signs and signals relevant to pedestrians.
- Practise estimating stopping distances for cars and crossing times for pedestrians.
- Identify attitudes to road safety and share these with others.
- Listen when others share their ideas and opinions.
- Cooperate and communicate effectively with others
- Work effectively in a team to make decisions and complete tasks.

General capabilities in the Australian Curriculum

The general capabilities of the Australian Curriculum comprise an integrated and interconnected set of knowledge, skills, behaviours and dispositions that, together with curriculum content in each learning area and the cross-curriculum priorities, will assist students to become successful learners, confident and creative individuals, and active and informed citizens.

The content and activities in this focus area provide teachers with the opportunity to explicitly teach some of the general capabilities. The table below outlines how this resource addresses these capabilities.

Addressing the Australian Curriculum General Capabilities through Challenges and Choices

Key

- Literacy
- Numeracy
- Information and communication technology (ICT) capability
- Critical and creative thinking
- Ethical understanding
- Personal and social capability
- Intercultural understanding

TEACHER NOTES

Being a pedestrian is a normal part of childhood in Australia. Active transport (walking, cycling and using public transport) are important for young people's transportation and physical activity. However road transport crashes are one of the major causes of injury death among young people in Australia.

Pedestrians are considered vulnerable road users largely due to their lack of protection and limited biomechanical tolerance to violent forces if hit by a vehicle. In a collision with a vehicle, pedestrians are unprotected and are at a greater risk of injury or death compared with most other road users.[1]

Why is the risk of injury in young people so high?

Youth is a period of transition when adolescents mature into self-dependent adults. Young people begin making their own decisions at this stage in life, which can affect both their long and short term health and wellbeing.

Research suggests that in spite of their confidence they know what to do around roads and traffic, there are a number of factors[2] which combine to put young people at greater risk of injury than other age groups. Risks associated with being young include:

- **Overestimate their road skills and have a sense of invulnerability**
- **Difficulty judging the speed and distance of oncoming vehicles**
- **Development of peripheral vision and directional hearing generally continues up to the age of 10 or 11**
- **New levels of independence**
  Young people generally start being more mobile during adolescence. They travel more on their own or with friends than they used to, and have lower levels of adult supervision. Young people must learn how to manage their own safety.
- **Inexperience with alcohol and experimentation with alcohol and other drugs**
  Adolescence is also a time of heightened risk of injury due to increasing exposure to adult activities such as alcohol use typically in situations of decreasing parental supervision.[2]
- **Still developing maturity, hazard perception and decision-making skills**
  Adolescents and young adults are particularly vulnerable to injury because development of executive brain function and appreciation of risk is continuing in this period.[3, 4] The area of the brain related to these functions is generally still developing in young people into their 20s.
- **Peer pressure**
  At no time is the influence of peers greater than it is in adolescence. Young people are often motivated by the short term gain of impressing their mates over the longer term concerns of health and safety.
- **Risk-taking tendencies**
  Whilst the risk-taking behaviour of adolescents can be considered a normative developmental process[5], it undoubtedly has serious injury consequences. Research with adolescents has revealed that risk-taking behaviour is more prevalent among males, early school leavers, as well as youths with less parental supervision, peers who also actively engage in risk-taking behaviours, negative attitudes to authority and high alcohol use.[6]
- **Catching public transport**
  Using public transport may be a new experience for many Year 5 students and they often do not have the skills needed to travel safely by bus or train. Students rushing to catch the bus to avoid being late for school or to catch a train home may make quick decisions without properly assessing the traffic environment.
- **Distracted easily**
  Young people often listen to music, or use their mobile to talk or text while walking. These distractions interfere with a young person's ability to concentrate and hear traffic sounds alerting them to potential hazards. Giving the road their full attention and taking time to check traffic carefully before stepping out onto the road while crossing, and especially when with friends, also contributes to their risk as a pedestrian.

1 Devlin, A., Oxley, J., Corben, B., Logan, D. (in press). *Toward Zero Pedestrian Trauma*. MUARC report series.

2 Youthsafe website **www.youthsafe.org/factsnfigures/facts-a-figures.html** viewed 10 December 2012.

3 Kelley, A.E., Schochet, T. & Landry, C.F. (2004). *Risk taking and novelty seeking in adolescence: Introduction to Part I. Annals of the New York Academy of Sciences*, 1021, 27-32.

4 Steinberg, L. (2005). *Cognitive and affective development in adolescence*. Trends in Cognitive Sciences, 9(2), 69-74

5 Lerner, R. & Galambos, N. (1998). *Adolescent development: Challenges and opportunities for research.* Annual Review of Psychology, 49, 413-46.

6 Jessor, R., Van Den Bos, J., Vanderryn, J. & Costa F.M. (1995). *Protective factors in adolescent problem behaviour moderator effects and developmental change*. Developmental Psychology, 31 (6), 923-33.

Crossing the road

Pedestrians should always use the systematic search strategy when crossing a road or railway tracks. The steps are:

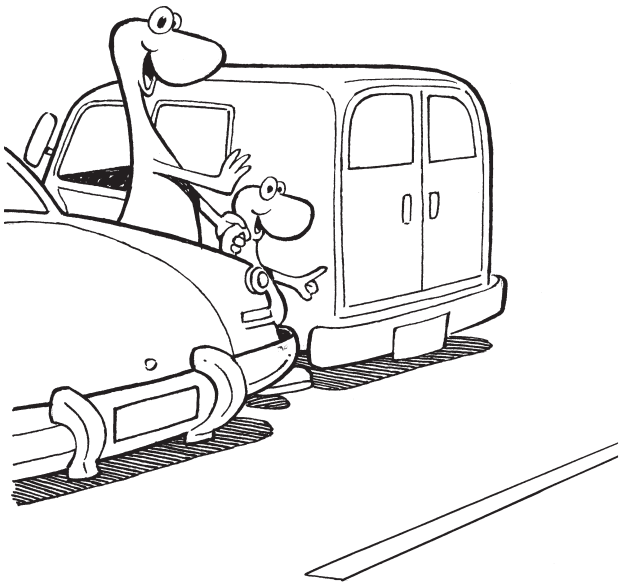
1. **Stop** well back from the kerb and road edge.
2. **Look** for traffic in all directions.
3. **Listen** for traffic coming in all directions.
4. **Think**, is it safe to cross.
5. **Cross** the road (or tracks) when there is no approaching traffic while still continuing to look and listen in case the situation changes.

Safer places to cross

Whenever possible, pedestrians should choose a place to cross the road that provides a clear view of traffic in every direction and where drivers can easily see the pedestrian.

There are designated places to cross in a traffic environment. These include:

- **School crossing** – these are usually located outside schools or on the busy roads close to the school. Traffic wardens are employed to assist pedestrians to cross.
- **Pedestrian crossings** – occur on busy roads and are signalled by signs placed before the crossing and large white stripes painted on the road surface. These are sometimes referred to as 'zebra crossings'.
- **Island crossing** – occur where the road is a dual carriageway with an island strip in the middle. Pedestrians should use the cross to the island and stop to assess if it is safe to continue before crossing to the other side.
- **Signal crossing (or traffic lights)** – are placed at busy intersections to help pedestrians cross the road. By pressing the button located on the traffic pole, a green 'walk' signal with the outline of a pedestrian, will appear. The signal provides adequate time for pedestrians to cross safely before the red 'don't walk' signal appears. Pedestrians should not commence to cross if the 'don't walk' phase is flashing or showing.
- **Railway level crossing** – are authorised locations where a road and railway line intersects at the same level allowing road users (including pedestrians and cyclists) to travel over the railway tracks. There are five types of railway level crossings including pedestrian.
- **Pedestrian footbridge, underpass or overpass** – located strategically to assist pedestrians to walk over or under busy roads and intersections



Crossing between parked cars

Crossing between parked cars is obviously not the safest option however when this cannot be avoided, pedestrians should:

- Select a gap between two cars (not a truck or a bus).
- Make sure the gap is not a driveway or a space big enough for a car to enter or park.
- Walk to the outside corner of the car and stop (ie in line with the outside edge of the cars) where traffic can be seen in all directions and drivers can see the pedestrian.
- Check that neither vehicle has a driver as the driver may be getting ready to reverse or move off into traffic and will not be able to see a small child.
- Use the stop, look, listen and think procedure to cross.

No footpath

Pedestrian are not permitted to walk on roads and should use footpaths, shared paths and nature strips. When walking on nature strips, pedestrians should walk facing oncoming traffic. When a vehicle such as truck, semi-trailer or road train is coming, and a pedestrian is close to the road edge, the pedestrian should walk as far away from the road as possible and wait until it has passed before continuing on their journey. Often these large vehicles produce a 'wind' that can unbalance a pedestrian.

Pedestrians waiting for public and community transport

While waiting at the bus stop pedestrians should:

- Wait as far away from the road side as possible.
- Not play games that involve running or using equipment that may roll onto the road.
- Keep sport equipment in a bag so items do not roll onto the road.

Pedestrians after disembarking a bus

Pedestrians are more likely to be injured after disembarking a bus when they choose to cross the road in front or behind the bus. It is safer for pedestrians to wait until the bus has moved on at least 20 metres allowing the pedestrian to see traffic in all directions and drivers to see the pedestrian.

In country areas where students use buses to travel to school, parents should wait or park their car on the same side of the road as the pick up and drop off area reducing the need for children to cross the road.

Pedestrian rules

Pedestrians must comply with road rules such as:

- cross by the shortest safe route and do not stay on the road longer than needed to cross safely which means no jaywalking
- use a designated pedestrian crossing or traffic light if it is within 20 metres of where you want to cross
- not crossing a railway line at a level crossing if there is a path, bridge or other structure within 20 metres designed for the use of pedestrians at the crossing

Road signs and signals

- Pedestrians and cyclists must comply with some road signs and signals (eg shared path, pedestrian phase signals and crosswalks).

- Children must understand that a green light on a normal traffic signal does not mean walk for a pedestrian. They should interpret the green light as a signal to use the systematic search strategy before crossing.

- Traffic signals with a pedestrian phase indicate when it is appropriate to cross after checking that cars have stopped or are not still in the process of turning the corner.

Promoting active transport

- One way to increase physical activity levels among WA primary students is for schools to encourage students to walk, cycle, scooter or take public transport to and from school. These modes of transport are known as active transport.

- In a recent survey, only 32% of WA primary school aged boys and 26% of primary school aged girls report to have actively commuted to school on the previous day. Children who actively travel to school are reported to be more alert on arrival than those transported by car.[7]

- More than two out of three WA children are driven to and from school each day, even though many live within two kilometres of school.[8]

- A supported active transport environment:
  - ⊙ Improves self confidence among young road users and helps develop important road safety skills.
  - ⊙ Improves road safety and congestion around schools by reducing traffic.
  - ⊙ Helps make a school and surrounding community feel safer by having more people out and about and more 'eyes' around the school.
  - ⊙ Encourages parent involvement in physical activity. Children with parents as active role models are more likely to be active.[2]
  - ⊙ Helps the community's impact on climate change by reducing pollution through car emissions.

Useful websites

- Office of Road Safety
  www.ors.wa.gov.au
- Department of Transport
  www.transport.wa.gov.au
- Heart Foundation
  www.heartfoundation.org.au
- WALGA RoadWise
  http://www.roadwise.asn.au/resources/resources/schools/index_html
- Main Roads WA
  http://www.mainroads.wa.gov.au/UsingRoads/PedestriansCyclists/Pages/PedestriansCyclists.aspx
- TravelSmart
  www.travelsmart.gov.au

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7 Martin, K., Rosenberg, M., Miller, M., French, S., McCormack, G., Bull, F., Giles-Corti, B., Pratt, S. *Move and Munch Final Report. Trends in physical activity, nutrition and body size in Western Australian children and adolescents: the Child and Adolescent Physical Activity and Nutrition Survey* (CAPANS) 2008. Western Australia: Western Australian Government; 2010.

8 Children's Physical Activity Coalition. *Charter for Active Kids: a Blueprint for active and healthy children in Western Australia* [Internet]. 2009 [cited 2010 Jun 18]. Available from: **http://www.heartfoundation.org.au/SiteCollectionDocuments/Charter%20for%20Active%20Kids_2007.pdf**

ACTIVITY 1

Considering active transport

Preparation

- **Strategy sheet** *PNI* – A3 photocopy per group
- **Strategy sheet** *Agree and disagree* – A3 photocopy
- **Activity sheet** *Considering active transport* – photocopy one per student

- Explain to students that most Western Australian students come to school by car even though they live less than 2 kilometres from their school. Discuss possible reasons why students travel to school this way.

- Conduct a survey of the class to determine how many students:
  - walked to school today
  - cycled to school today
  - came by public transport or school bus to school today
  - came by car to school today.

  Graph the results and explain that walking, cycling and using public transport are known as 'active' transport.

Ask

What are some advantages of travelling by car to get to school? (eg convenient, fast, not dependent on weather, not dependent on availability)
What are some disadvantages of travelling by car to take these trips? (eg reduction of physical activity and fitness; greenhouse gas emissions; traffic congestion around school; cost of fuel and maintenance; lack of community interaction; frustration and road rage.)
Which of the types of transport we surveyed would be better for the environment? Why?
Which of the types of transport we surveyed would help keep you fit and healthy? Why?
Which of the types of transport that we surveyed would provide opportunities for community interaction?
What are some factors that might stop you from choosing the active transport modes to get to and from school each day? (eg convenience, cost, time, weather, parental support, access to bikes and public transport)
What things would need to happen at our school to encourage more students to use active transport to get to and from school?

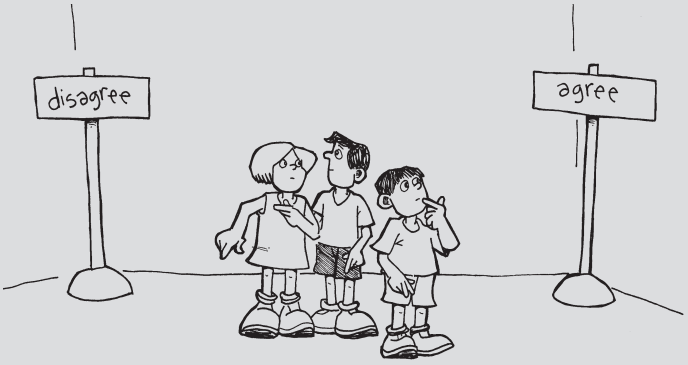
- Have students form groups of four and allocate one of the modes of transport below to each group. Using a **PNI** (refer to page 197), groups discuss their allocated transport mode:
  - walking
  - cycling
  - public transport

  For example: **Cycling**

Plus	Negative	Interesting
• improves fitness and health • fun/stress relieving • quick travel • parking easier • no pollution • cheaper than car	• can be dangerous • must own a bike • dependent on weather • roads not safe for cyclists • breathing in pollution	• can use car to take bike to safe cycle path • can take bikes on trains

  Have groups pass their completed PNI sheets to the next group on their right. Groups are then to consider any new factors that they can add to the PNI. Continue to pass on the sheets several times until no new ideas are elicited.

- Set up a **values continuum** (refer to page 201) using the 'agree' and 'disagree' signs. Use the following statements to explore the students' values about active transport. When students have moved to their chosen place on the continuum, they must explain to a partner why they chose to stand where they did. With their partner they need to think of one question to ask someone who chose a different end of the continuum to clarify why they took the position they did.



Statements

- I think that using active transport eg walking, cycling and using public transport, is too much effort for short trips.
- Choosing to walk or cycle to school every day would be an easy option for me.
- The main reason I would choose to walk or cycle to school every day would be to improve my fitness and my health.
- The main reason I would choose to walk or cycle to school every day would be to improve the traffic congestion around the school and improve the air quality.
- My family would use public transport if there were more services near our home.
- Roads need to be more pedestrian and cyclist friendly to encourage more people to walk and cycle.

After discussing all statements, use the following questions.

Ask

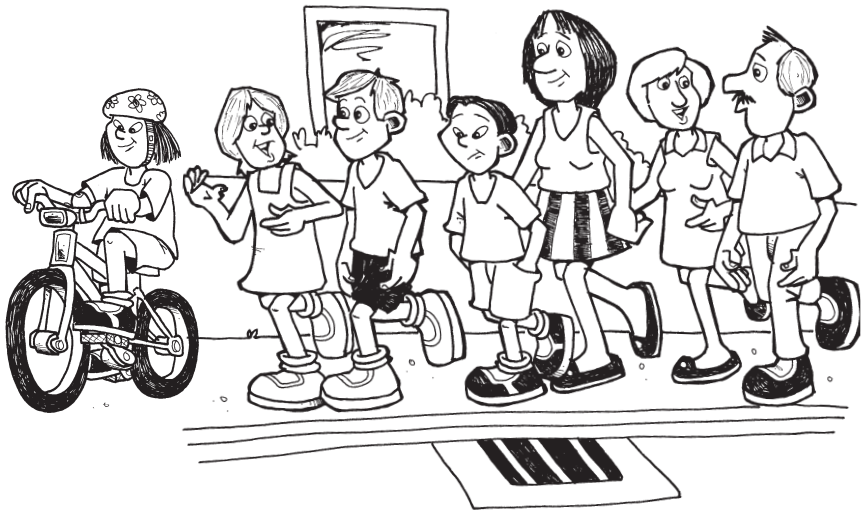
How does it feel to share your opinions with others?
Do you think hearing others' opinions and thoughts will change your behaviour as a pedestrian? Why or why not?

- Have students complete the *Considering active transport* sheet individually then share their responses with a partner or small group.

Name

ACTIVITY SHEET

Considering active transport



List some good things about cycling.

- It keeps you fit.
- _____
- _____
- _____

List some bad things about cycling.

- Drivers may not see you.
- _____
- _____
- _____

List some good things about walking.

- It doesn't cost anything.
- _____
- _____
- _____

List some bad things about walking.

- It can be slow.
- _____
- _____
- _____

Name

ACTIVITY SHEET

Considering active transport

List some good things about public transport.

- It's usually quicker than driving.
- _____
- _____
- _____

List some bad things about public transport.

- Buses and trains are not always at convenient places.
- _____
- _____
- _____

In your opinion, what would be five key things our school could do to encourage more students to use active transport to get to and from school?

1. _____
2. _____
3. _____
4. _____
5. _____

How do you think people's travel choices impact on their health?

_____

_____

_____

_____

_____

How do you think people's travel choices impact on their environment?

_____

_____

_____

_____

_____

ACTIVITY 2

Identifying pedestrian safety signs, signals, rules and behaviour

Preparation

- A3 paper – one sheet per group of four students
- **Activity sheet** *Pedestrian safety signs, signals, rules and behaviour* – photocopy one set of cards per group
- **Family information sheet** *Pedestrian road rules* – photocopy one per student

- Introduce the concept of rules in the community.

  Ask
  Why do communities have rules?
  What are some rules that we have to follow in our community? (These rules can be for any situation and not only related to pedestrian safety. For example - children have to go to school, drivers aren't allowed to speed and dogs must be kept on a leash in public places. It may help to give students a few prompt words or heading such as – rules at school, rules at the beach.)
  Are there rules when you travel as a pedestrian to school?
  What rules do cyclists have to follow on the way to school?
  What might happen if no-one obeyed the rules for the road?

- Explain that if students were to choose to walk to and from school or walk to catch public transport to get to and from school, they would need to:
  - obey the road rules that apply to pedestrians
  - obey warning signs and signals designed to keep pedestrians safe
  - remember safe pedestrian behaviour.

  Place students in small groups. Give each group an A3 sheet of paper and demonstrate how to draw a **Y chart** (refer to page 200). Label the Y chart – *pedestrian rules; pedestrian signals and signs; and safe pedestrian behaviour*. Explain that students are to write the rules associated with pedestrians under the first heading (they can include rules that drivers must obey that relate to pedestrians); write the signs, signals or markings they would need to comply with as a pedestrian under the second heading; and write any other safe pedestrian practices (such as walking on the footpath) that they would need to remember if they were a pedestrian.

  Have groups swap their Y charts and review the responses recorded on the sheet and add any new ideas. Groups then return the Y charts to the original owners.

- Distribute a set of cards from *Pedestrian safety signs, signals, rules and behaviour activity* sheet to each group. Have students sort the cards into the categories on their Y chart.

  Hear feedback of their categorising and clarify any incorrect classifications with students.

  Ask
  Did you have similar or different pedestrian road rules to the ones on the cards?
  Did you have similar or different pedestrian signs and signals to the ones on the cards?
  Did you have similar or different pedestrian safe behaviours to the ones on the cards?
  Do you think young people your age need to know about pedestrian road rules?
  Why or why not?
  Do you think young people your age need to know about pedestrian signs and signals? Why or why not?
  Where might you be able to get more information about road rules and signs and signals?
  What might happen if kids your age don't comply with road rules or signs and signals?
  Who do you think is responsible for making sure pedestrians comply with these road rules, signs and signals?

- Encourage students to look at safe pedestrian behaviour from:
  - A cyclist's point of view.
  - A bus driver's point of view.
  - A parent's point of view.

  Stress that pedestrian crashes are not always caused by drivers and that all road users have a responsibility to behave safely.

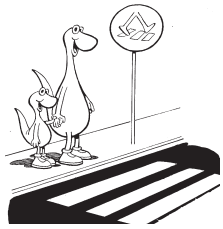
- Send a copy of *Pedestrian road rules* home with students to share with their family.

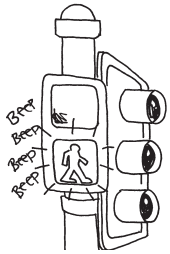
Teachers should be aware and sensitive to those children who come from families that do not always comply with pedestrian laws. However it is still important that these children understand that it is safer to follow the rules of the road such as crossing at crosswalks, pedestrian phased traffic signals and pedestrian gates at railway crossings.

Name **ACTIVITY SHEET**

Pedestrian safety signs, signals, rules and behaviour

Signs, signals and markings





Safe pedestrian behaviour

Always walk on the footpath or away from the edge of road, facing traffic if there is no footpath.	Make eye contact with the driver before crossing a driveway or pedestrian crossing.
Choose a safe place to cross such as a pedestrian crossing, signal crossing, roads with median strips, straight stretches of road or use over or underpasses.	The stop, look, listen, think procedure should be used every time you cross a road.
Choose a safe route to walk to and from school.	Walk with someone else, preferably an adult.
Stand well away from the roadside when you are waiting for a bus.	If there is no other safer option, when crossing between parked cars you should: • select a gap between two cars which have no drivers • make sure it is not a driveway or a space big enough for a car to park • walk to the outside corner of the car and stop where you can see and be seen • use stop, look, listen and think.
Wait until the bus has moved away before crossing using the stop, look, listen and think procedure.	

Name

ACTIVITY SHEET

Pedestrian safety signs, signals, rules and behaviour

Rules

Give way to pedestrians
Drivers are required by law to give way to pedestrians crossing the road that the vehicle is turning into.

Jaywalking
The law says you must cross by the shortest safe route and not stay on the road longer than needed to cross safely.

Railway crossings
A pedestrian cannot cross a railway line at a level crossing if there is a path, bridge or other structure designed for the use of pedestrians within 20 metres of the crossing.

Driveways and laneways
Drivers are required by law to give way to pedestrians on the footpath.

Drivers and crosswalks
Drivers are required by law to give way to pedestrians using a crosswalk or children's crossing. Remember, some vehicles do not always stop.

Pedestrians, crosswalks and traffic lights
The law says if you are within 20 metres of a crosswalk or traffic light you must use it to cross the road.

Pedestrian road rules

As your child becomes more independent and starts to walk to school and other locations, it is important they understand the road rules.

Intersections without signals
Drivers are required by law to give way to pedestrians crossing the road that the vehicle is turning into. Make sure your child knows to always check that vehicles have seen them before continuing with their crossing – not all vehicles follow this rule.

Driveways and laneways
Vehicles entering or exiting a driveway must give to any pedestrians on the footpath. Tell your child to always check driveways and laneways before crossing.

Pedestrian crossing signals
A pedestrian has the right of way until the red 'don't walk' signal has stopped flashing and is solid. Teach your child how to cross at pedestrian crossing signals.
Walk signal – cross with care
Clearance 'flashing signal' – finish crossing but do not start
Don't walk signal – do not cross

Pedestrians, crosswalks and traffic lights
The law says if you are within 20 metres of a crosswalk or traffic light you must use it to cross the road.

Crosswalks and children crossings
Vehicles must give way to pedestrians using a crosswalk. Teach your child to use the stop, look, listen and think procedure to cross. Remind your child to continue checking the traffic as some vehicles do not always stop at crosswalks.

Jaywalking
The law says you must cross by the shortest safe route and not stay on the road longer than needed to cross safely.

Railway crossings
A pedestrian cannot cross a railway line at a level crossing if there is a path, bridge or other structure designed for the use of pedestrians within 20 metres of the crossing.

Thank you for playing a vital role in your child's road safety education.

FINDING OUT

ACTIVITY 3

Identifying risks for pedestrians around our school

Preparation

- **Activity sheet** *Road safety issues around our school* – photocopy one per student

- Develop a class **mind map** (refer to page 196) showing technologies that have been developed to encourage safe road user behaviour and those aimed at keeping people safer in the traffic environment. For example, traffic lights, pedestrian actuated lights, tactile kerb edges, over and under passes, speed cameras, reflective road signs, cats eyes, overtaking lanes, rumble strips, guard rails, signs to warn road users of changed conditions.

  Explain these changes to the road user environment have been developed over time by researching best practice in road safety around the world, and often involve collaboration between many government agencies. Some of these technologies aim to give road users time to anticipate and react to hazardous conditions and therefore stay safer. Stress the traffic environment changes every day and students need to focus on local changes (eg road works, weather) if they are walking to and from school to encourage safe practices and a positive active transport experience.

- Draw a triangle on the board. Label the three corners of the triangle – person, environment and vehicle. Explain that the risks associated with road-related trauma and crashes are nearly always related to one or more of these three things: the behaviour of the person; the environment (or place and conditions at the time); the vehicle. Ask the class to listen to the following scenario and identify the factors that contributed to the crash.

  Scenario
  It was a rainy day and Mandy was keen to get home from school quickly. So instead of walking up to the school crossing with the warden, she ran straight across the road between two parked cars. The driver of one of the cars going into one of the pick-up bays didn't see Mandy. The car hit Mandy as she crossed the road. The car was travelling at 50km/h.

  Use the triangle to write the contributing factors to the crash eg person – Mandy was in a hurry, she didn't use stop, look, listen and think before she crossed, she made a poor decision about where it was safe to cross; environment – near a busy road, wet and busy roads, poor visibility for driver; vehicle – speeding.

- Explain that the class is going to survey their local school community for any traffic safety problems and hazards, and plan for some changes that may be required to address hazards they identify. Give each student a copy of *Road safety issues around our school* and ensure the class understand all aspects of the survey. Ask the class to suggest other risks that could be added to each section of the survey.

  Assign small groups of students to conduct the survey either before or after school, and over several days. All students may not be able to take part in the before and after school survey due to family reasons. These students could conduct the survey during school time. A note to parents informing them of the purpose of this activity may assure their support.

  After conducting the surveys, have students summarise their group data into *person*, *environment* or *vehicle* and use graphs or pie charts to summarise their findings.

- Have students choose two issues from the person, environment and vehicle categories they think are most affecting pedestrian safety around the school and develop a plan of action to change the behaviour or the environment. Encourage students to think laterally. For example:
  - move pedestrian crossing to more appropriate locations
  - use signalled crossing (where intelligent pedestrian detection is used to automatically extend the pedestrian's crossing time where required)
  - build a raised pedestrian crossing
  - improve approaches to safe crossing spots (kerb extensions, ramps, tactile paving).
  - build traffic calming to protect pedestrians
  - provide additional shared paths
  - educate parents on Kiss and Drive use or safer driving behaviour around schools
  - nominate for pedestrian and cycling infrastructure upgrades through the Black Spot program
  - promote the purchase of more pedestrian-friendly vehicles.

  Promote the students' ideas in the school newsletter, local paper or school website.

Access the *Road Safety around Schools Guidelines* at **http://www.roadwise.asn.au/resources/resources/schools/SchoolsguidelinesS** (WALGA RoadWise) to help identify and address road safety hazards around your school.

Name **ACTIVITY SHEET**

Road safety issues around our school

Survey the road safety risks in your school community. Add any other issues that you think are relevant to your school.

Road safety issue	Comments and observations
Pedestrian behaviour Do students: • Use school crossings? • Obey traffic wardens (if available)? • Stop, look, listen and think before crossing? • Avoid crossing between parked cars? • Walk straight across the road? • Avoid playing on the road? • Wait until buses have pulled away before crossing the road? • Avoid walking and cycling anywhere near the staff car park?	
Cyclist behaviour Do students: • Wear properly fitted bike helmets? • Obey road signs and signals around the school? • Ride with an adult if under 10 years old? • Ride safely – not too fast, use correct hand signals? • Ride dinking another person? • Ride on the footpath? • Ride through the staff car park? • Ride across the school crossing instead of walking their bike?	
Staff behaviour • Do teachers take care when entering and exiting car park? • Do teachers walk or ride to school?	
Parent behaviour • Do parents use the Kiss and Drive bays properly (if available)? • Ensure students get out on the kerb side of the car? • Take care when entering and exiting car parks? • Use only the car parks allocated to parents?	

Name **ACTIVITY SHEET**

Road safety issues around our school

Survey the road safety risks in your school community. Add any other issues that you think are relevant to your school.

Road safety issue	Comments and observations
The environment (place) • Are there footpaths to walk on? • Are there broken, uneven or blocked footpaths? • Is there are pedestrian crossing, warden controlled crossing or pedestrian controlled traffic lights near the school? • Are there buses entering and exiting around students? • Is there a separate staff car park? • Is the staff car park away from pedestrian access? • Are there Kiss and Drive bays? • Are these bays used correctly? • Is there 'one way' traffic only near drop off points? • Is there a safe, dry place to store bicycles and helmets? • Are there safe entry points to school grounds away from cars? • Is there a Walking School Bus™ at our school?	
Conditions • Is there traffic congestion? • Are some times of the day worse than others? • Do heavy vehicles use the roads around the school? • Are some times of the day worse than others? • Are the roads in a good condition around the school? • Are there any unusual hazards around the school at the moment? • Are there staggered home times for pre-primary and primary students? (if applicable)	

FINDING OUT

ACTIVITY 4

Stopping distances and crossing times

Preparation

- **Activity sheet** *Stopping distances* – photocopy and paste onto cardboard
- Trundle wheel or 100 metre measuring tape
- Stopwatch or watch (optional) – one per pair
- **Family information sheet** *Know your speed* – photocopy one per student

- Ask students to consider their knowledge of speed and distance in relation to cycling, skating or riding a scooter.

  Ask
  Do you leave it till the last second before you put on your brakes?
  What happens if you do? (eg consequences such as injury, damage to bike, nervousness about riding again)
  How do you know when to start braking?
  Does it take some time between thinking about braking and actually stopping?

  Explain to students the distance taken for a vehicle to stop in an emergency depends on the driver's thinking time and braking time, as well as the weather and road conditions. Write this equation on the board.

  Thinking time + Braking time = Stopping distance

  Stress that speeding is a common factor in many crashes. Have students guess and record the emergency stopping distance for a car travelling at 40km/h, 60km/h and 80km/h.

- Take the class outside to a large open area. Measure the distance using a trundle wheel and place the prepared signs at the correct stopping distances so students can compare their estimations.

Speed	Stopping distance
40km/h	17.4 metres
60km/h	32 metres
80km/h	53.6 metres

  Remind students these are distances for normal passenger vehicles and the distance would increase for semi-trailers and road trains.

- To develop students' ability to judge distances, have them practise estimating and measuring the same distances in common crossing places around the school and point out landmarks for students to note for the 40km/h vehicle and the 60km/h vehicle coming from both directions.

  Ask
  Presuming that cars using roads around our school are travelling at 40 km/h, how long will it take these cars to stop in an emergency?
  How far back from the crosswalk, warden crossing or other safe crossing places would that be? (Check the landmarks again for 40km/h and 60km/h.)
  What things might affect the stopping distance? (eg type of brakes; condition of road; type of road; experience and alertness of driver; weather conditions)
  What effect does speed have on these stopping distances? (The faster a vehicle travels, the longer it takes to stop.)
  Why is it important for pedestrians your age know this information? (They can make better decisions about when it's safe to cross the road when they know that it takes a long time for vehicles to stop.)
  What can pedestrians and cyclists do to help drivers stop more safely? (eg be more conspicuous, signal early, don't run out onto the road)

- Set up a simulated road which is the width of a road used by most students at the school. Ask the students to estimate how long it would take them to cross the road. Working with a partner, students count (or time) it takes for them to cross the road ie from after using the Stop, Look, Listen, Think procedure and walking straight across the road – not running.

  Have students check if their estimates were correct and compare times with other students.

  Now take students in small groups or with parent helpers to stand on the footpath near popular crossing points around the school. When cars approach, ask students to decide at what point it would still be safe for them to cross the road and to count the seconds it takes the car to travel from this point to where they are standing.

  Compare this time with the time it took them to cross the simulated road.

FINDING OUT

Ask

Are you allowing enough time to safely cross a road when traffic is approaching?
What do you have to do if you are not?
How can you use landmarks to help you estimate a safe crossing distance?
How can you use landmarks to help you estimate a vehicle's stopping distance?
What might you do differently next time you cross the road near the school?
Who else in your family might need to know the information you have just learnt?

Stress that it is okay for students to change their mind when preparing to cross the road if they are unsure of:

- The speed of the traffic and the time it will take them to cross.
- Visibility in all directions.
- Weather and road conditions.

- Have students write a thank you letter or email to their parent helper that also highlights what they learnt about vehicle stopping distances and road crossing times, and explain how this knowledge will impact on their future pedestrian behaviour.

- Send a copy of *Know your speed* home for students to share with their family.

To conduct this activity, teachers will need to ensure that the school administration has been notified and all risk management policies have been followed.

Name

ACTIVITY SHEET

Stopping distances

Name

ACTIVITY SHEET

Stopping distances

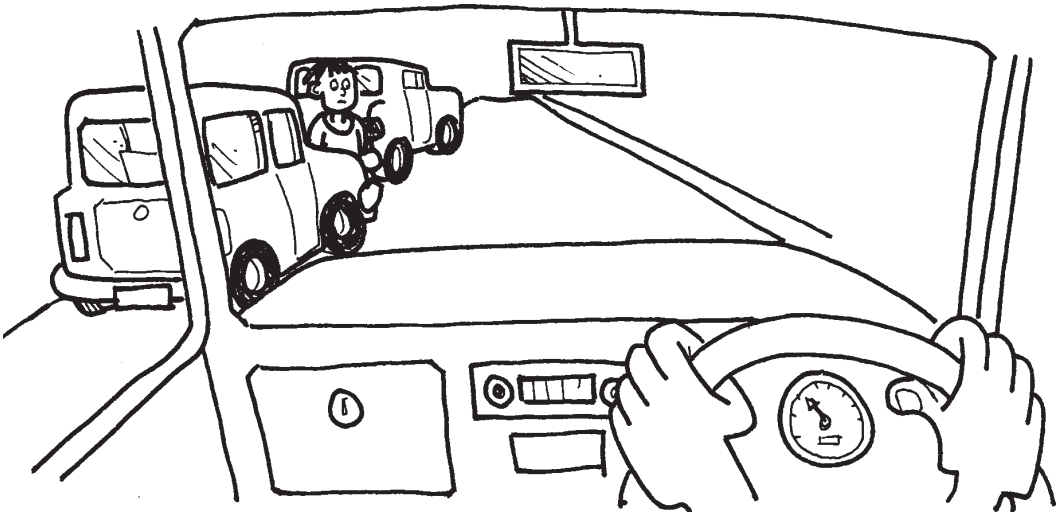
Name

ACTIVITY SHEET

Stopping distances

Know your speed

One key risk for pedestrians is the speed that vehicles around them are travelling. The slower the speed the quicker the driver can stop the car – especially when a child dashes out onto the road.



Your child has learnt that the distance taken for a vehicle to stop in an emergency depends on the driver's thinking time and braking time, as well as the weather and road conditions.

Thinking time
+ Braking time
= Stopping distance

This is how long it would take your car to stop in an emergency if you were alert, had not been drinking alcohol, had a roadworthy vehicle and the roads were dry.

Speed	Stopping distance
40km/h	17.4 metres
60km/h	32 metres
80km/h	53.6 metres

When you are driving in the car with your child, talk about:

- The decisions you need to make when pedestrians are on or near the road.
- The laws you are following to be a safer driver eg stopping for pedestrians who want to cross at a crosswalk.
- The errors made by other road users.

Help your child learn about vehicle speed. Ask your child to:

- guess the speed of the car they are travelling in (without looking at the speedometer)
- guess the speed of an approaching car and also how many seconds it will take before the car passes the car you are travelling in
- guess the speed of vehicles when you are out walking or cycling.

Teach your child to always use the stop, look, listen and think procedure before stepping onto the road and make safe decisions when they are out walking.

Thank you for playing a vital role in your child's road safety education.

ACTIVITY 5

Planning safe routes to walk in the local area

Preparation

- A street directory map of the suburb or local area, including the school and known Safety Houses – A3 photocopy per student and A2 photocopy
- Coloured markers – class set
- A4 paper – one sheet per group
- **Family information sheet** *Walking to school* – photocopy one per student

- **Brainstorm** (refer to page 193) with students the safest places to cross the roads around the school (eg on straight stretches of road, at the traffic warden crossing, at the crosswalk, after the bus has moved away, at the over/underpass, at the traffic lights, away from the roundabout, away from corners or crests). Explain the safest option may not always be the quickest option.

- Have students locate their home on their A3 map and highlight the route they think would be the safest to walk to and from school, marking in safe places to cross. Students then highlight any dangerous areas such as main roads or streets without footpaths.

  Ask students to share their map with a partner and have them justify their choice to their partner.

  Have students use a personalised marking code or colour to record their route on the A2 class map or interactive whiteboard.

- Place students in small groups. Explain that students are to imagine they are going on a class excursion. Assign one destination to each group and ask students to decide on the safest route from the school to:
  - The local library
  - The local shop
  - The closest bus stop
  - A local park
  - Other relevant landmark.

  Students discuss reasons for their choices and mark the route on their individual map with a distinctive colour or code to represent their group.

One person from each group takes their map and moves to the group on their right. This spokesperson must explain the reasons for their route choice. Other group members must check to see if a safer alternative can be found.

Ask

Which were the most common safer places to cross? Why?
Which were the safer roads to walk along? Why?
Which signs/signs/road markings are on these roads to keep pedestrians safer? Where are some unsafe places to cross? (eg near busy intersections, roundabouts, bends in roads, on crests of hills)
Where are some unsafe places to walk along the road? (eg where there is no footpath, road works, lots of heavy vehicles)
What safety features could be added to these environments to make them safer for pedestrians? (eg extra pedestrian crossings; signs to alert drivers of presence of children, reduction of speed limits; barriers to restrict pedestrian access; traffic calming facilities such as speed bumps)
What other measures could help change driver or pedestrian behaviour in these unsafe places? (eg an education program; increasing policing or infringement penalties)
Just because we have planned safer routes to these locations, does that mean those routes will always be safe? (Stress that a safe route is not always the safe route. Conditions can change and students may not be *as attentive because they think it's a safe route.)*
What other safe pedestrian behaviours do you need to consider when you take this safer route? (eg use Stop, Look, Listen, Think every time; make eye contact with the driver when crossing; leave a safe distance between them and the vehicle when they cross; think about what might obstruct the driver's view of them such as parked cars and shrubs; allow more time for wet conditions; be careful near driveways)
Are there any other unsafe places to look out for around our school? (eg teachers' car park, parent pick up area)
What could we do as a school to make these places safer?
Who walks or uses other active transport to or from school regularly?
How long do you think it would take for you to walk to or from school?
Look on the class map. Is there anyone who has chosen a similar route to you to get to school?
What would you need to plan and prepare so that you could walk to school regularly? (eg allow time to get ready for school and walk; prepare for bad weather)

- Have students use a 'Before, during and after' table to plan safer ways to walk to and from school, or to their class excursion destination.

Before	• Discuss the route with my family. • Get permission from my family to walk. • Practise walking the route with my family. • Know any Safety Houses along my route.
During	• Walk with an older sibling or parent if I am less than 10 years old. • Stay on the planned route. • Practise Stop, Look, Listen, Think. • Cross at the safe places I have identified. • Keep checking for hazards such as driveways and car parks, and don't talk to strangers.
After	• Let my teacher or parents know if I had any problems. • Review the route with my family to let them know if I felt safe at the crossing points we identified together. • Continue to use the safer route to school each time I walk. • Continue to practise Stop, Look, Listen, Think and cross at the safer places I identified or modified.

- Send home the plans and proposed safe route on their individual map, and a copy of *Walking to school* with each student to share with their family.

Local area maps can also be found using **www.whereis.com/ or http://earth.google.com** and shown an interactive whiteboard.

Walking to school

If your child walks to school, take a few moments to think about how you will prepare your child to stay safe along the way.

Plan a safe route
Choose a route that has footpaths (if you can) and crosses very few, if any, busy streets.

Walk the route with your child
Before school starts, walk the route together and talk about the things your child needs to remember along the way – staying on the footpath or if there isn't a footpath, walking along the edge of the road as far away from traffic as possible, and facing oncoming traffic.

Teach your child the basic rules about being a pedestrian while you're walking with them
You can practise the rules about the road and traffic with your child during your walks. Make it fun by playing 'I Spy with the road signs or street names. Praise your child when they get it right. In this way, by the time your child is old enough to walk to school without your help, none of the pedestrian road rules should come as a surprise to them.

Always stop, look, listen and think before stepping onto the road
Each time you cross the road make sure your child stops back from the kerb. Train your child to use their eyes and their hearing together when checking for traffic. Tell your child to look in all directions and listen for traffic they cannot see. Be sure to tell your child not to rely only on their hearing as some newer vehicles can be extremely quiet.

Ask your child questions about what they'd do in certain situations when you're walking
When you come to a crossing, ask your child what they should do. You should expect your child to answer something like: 'I stop, look in all ways to check the cars are actually stopping before I cross and only when I am sure they've stopped can I go across".

Find the safety houses along the way
Point out the homes that have 'safety house' plaques on their letter boxes or homes of family or friends where your child might stop for help in case of trouble.

Walking to school ... continued

Teach your child to cross only at safe places
Show your child places where they can cross safely such as pedestrian crossings, even if this means having to walk a bit further.

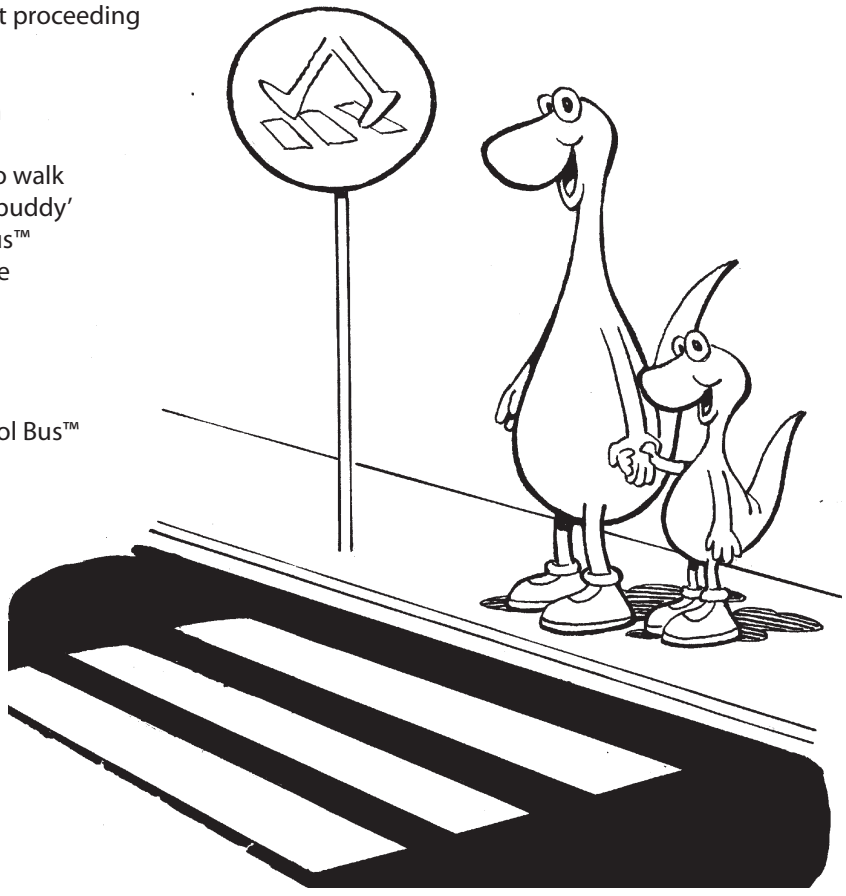
Explain why paying attention when walking is important
This doesn't just mean the obvious hazards like speeding cars but also less evident ones such as cars coming around corners suddenly or vehicles not stopping at pedestrian crossings. Explaining the reasons for staying alert while walking helps children to understand more clearly why something is expected of them, especially if they know the consequences of not paying adequate attention or of not practising basic safety precautions.

Driveways can be dangerous
Remind your child that drivers backing out of driveways cannot see very well and don't always think to look for children. The same goes for laneways and street corners. Always insist that your child stays alert and doesn't expect drivers to be doing the same. Teach your child what to do if a car suddenly comes out of a driveway such as jumping back and not proceeding any further into the car's path.

Arrange for your child to walk with another child if possible
It might not always be possible for you to walk your child to school so set up a 'walking buddy' or find out if there is a Walking School Bus™ near you. A Walking School Bus™ is where several parents take responsibility for walking a group of children to and from school.

For further information on Walking School Bus™ contact the Department of Transport.

Be a good road safety role model
Unfortunately, adults break a number of road rules every day and children see this and think that it's okay for them to do too. Be open with your child about it and explain that adults shouldn't be doing this either but they get lazy or think that they know better. Also make it clear that adults tend to rely on their height to help them see more than your child can. Explain to your child that adults sometimes get injured and killed not doing the right thing when crossing streets, and that it is never a good idea to follow adults who are breaking the rules.



Thank you for playing a vital role in your child's road safety education.

ACTIVITY 6

Influences from others on pedestrian decisions

Preparation

- **Activity sheet** *Pedestrian decisions* – photocopy one per group
- **Strategy sheet** *Decision making model* – photocopy one per student

- Discuss the difference between a 'split second' decision and a 'planned' decision. Ask students to give examples of each in a road safety situation. For example: Split second – deciding to run across the road to get a football or netball that has gone onto the road during training; Planned – choosing another place to cross the road after deciding that the visibility at a roundabout is not good.

  Explain that being a road user requires them to make decisions continually. Some will be easy for them to make eg waiting for the green 'walk' signal to appear before crossing at a set of lights; and some will be more difficult eg assessing how fast traffic is travelling as you attempt to cross a straight stretch of road. Discuss the consequences of some poor 'split second' decisions.

  Ask
  What does influence mean? (eg persuasion, power, ability to make someone do or think something)
  Who or what do you think influences the way you behave as a pedestrian? (eg friends; peers and family; time available; weather conditions; road safety campaigns; your road safety knowledge, skills and attitudes)
  Who or what influences you to behave safely as a pedestrian?
  Who or what influences you to behave not so safely as a pedestrian?
  Do you feel confident telling your friends that you don't want to do something?
  What might your friends say to you if you told them to stop behaving unsafely?
  How would you feel?
  How do you think you would feel if your friend asked you do to something that was not safe while you were being a pedestrian, like crossing the road where there was a lot of traffic instead of walking up to the traffic lights?
  What positive thoughts could you say to yourself to feel better?
  How would you feel if your friend 'dropped' you because you didn't want to do something?

- Place students in groups of three or four. Distribute a copy of a **decision-making model** (refer to page 195) to each group. Explain the model highlighting that decisions may have both positive and negative outcomes.

  Give each group a scenario card from the *Pedestrian decisions* sheet to read and work through using the decision-making model.

  Listen to each group's scenario and the decision that was made. Repeat the process for the remaining groups.

  Use the following questions to process the activity.

  Ask
  Would the decisions you made in each problem on the worksheet have reduced the risk of injury for the character?
  Why is it useful to think about and plan decisions for situations that might happen in real life?
  Is listening to how other students deal with unsafe situations helpful? Why or why not?
  How could you be a positive influence on your friends' pedestrian behaviour?
  Do you always have time to stop and think about how you could deal with a situation in real life? (Students need to understand that often decisions have to be made quickly and on the spot. In these situations the responses that students have rehearsed can be called upon to keep themselves safe.)

- Students form small groups and select a scenario that would most likely happen in real life and **role-play** (refer to page 197) using their chosen decision. Some revision of assertive communication may be required before students begin their role-play.

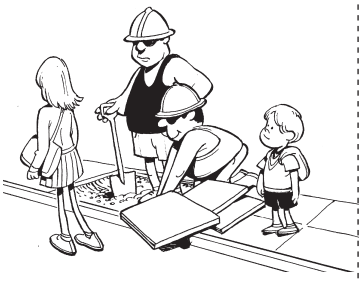
  Remind students that being prepared and rehearsed will help them to deal with situations confidently.

Name

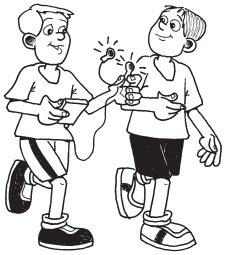
ACTIVITY SHEET

Making pedestrian decisions

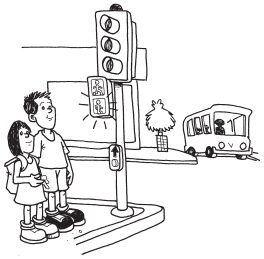
Caitlin is 11 years old. She is walking along the road she usually takes to get to school, when she notices there are some big men doing maintenance work on the footpath up ahead. The workmen are talking loudly to each other and look a bit scary. There is a detour for pedestrians clearly marked but Caitlin feels too embarrassed to keep walking that way. The other option is to cross a very busy road on a bend. What should she do?



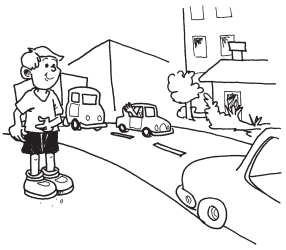
Max and Troy are 11 years old. They are walking home from school on the footpath next to a busy road. Max wants Troy to share his iPod but Troy knows that he should be listening out for traffic. What should Troy do?



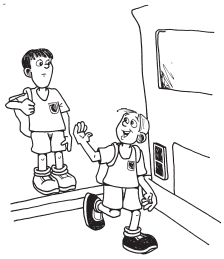
Max is 12 years old and his sister Anna is 10. They are waiting for the 'walk' signals at the traffic lights. Max tells Anna it is taking too long and they should just run across after the next car. What should Anna do?



John is going home with his friend Kate's mum. Kate's mum has parked on the other side of the road to the school and yells out for him to quickly run across the road because she is in a hurry and has the baby in the car. John knows that it is safer to use the crosswalk further up the road. What should John do?



Mitch has just got off the bus and is waiting for it to move away before he crosses the road. His friend Owen says, 'Don't be a chicken. Let's go.' What should Mitch do?



Paul is showing his friend Jamie how to play soccer on the edge of the road. Jamie misses the ball and it starts rolling out into the middle of the road. Paul shouts at Jamie to go and get the ball before it gets squashed. What should Jamie do?

ACTIVITY 7

Reflecting on own pedestrian behaviour and attitudes

Preparation

- **Activity sheet** *My pedestrian behaviour and attitudes* – photocopy one per student
- Die – one per group
- Access to computers

- Place students in groups of six. Using a **toss a die** strategy (refer to page 201), have students respond to the following questions. Wander around the groups listening to students' responses.

Toss a die questions

1. Do you think the pedestrian behaviour around our school is good?
2. What aspects of pedestrian safety do you think we could work on at our school?
3. What are some key rules that pedestrians in our area need to obey to stay safer?
4. What are some key signs in our area that pedestrians need to look out for to stay safer?
5. What are the safest places to cross roads on the way to our school?
6. What are the main hazards in our area for pedestrians?

1. What is the stopping distance for a car traveling at 40/60/80 km/h?
2. Why is it useful for you to know stopping distance information?
3. About how long does it take you to cross a normal two lane road and why is it useful to know this?
4. What could you think to yourself when someone is trying to influence you to do something unsafe around roads?
5. What could you say to someone who is trying to influence you to do something unsafe around roads?
6. How can you be a good role model as a pedestrian for your younger brothers and sisters or younger children at the school?

- Have students complete *My pedestrian behaviour and attitudes* activity sheet individually. If students do not currently walk to school, ask them to fill out the survey by considering a time when they have been a pedestrian in other locations. Encourage students to walk to school in the future.

  In small groups, students share their results and two things they would like to improve in order to become a safer pedestrian.

- Have students choose one of the following options to reflect on their learning:
  - Write a letter to your family telling them what you have learnt about being a safer pedestrian and how you rate your pedestrian behaviour. In your letter, include questions to your family about their pedestrian behaviour.
  - Write an article for the school newsletter explaining what you have learnt about pedestrian safety and how you think it could be improved around our school.
  - Write a speech or a rap about the key signs, signals and rules pedestrians need to follow to stay safer on our roads, and perform at a school assembly or in front of another class.

The statements on *My pedestrian behaviour and attitudes* may not all be appropriate to students living in rural and remote areas. Suggest students indicate their intention to behave in a road environment.

Name

ACTIVITY SHEET

My pedestrian behaviour and attitudes

Read each sentence and tick the box that indicates what you do as a pedestrian.

	ALWAYS	SOMETIMES	NEVER
I take the longer way if it is the safer way.			
I plan the way I walk to and from school.			
I make sure drivers and other road users can see me before I cross the road.			
I stop, look, listen and think before crossing the road.			
I wait for the 'walk' signal before crossing at the lights.			
I check that all traffic has stopped before crossing at the crosswalk.			
I wait for the traffic warden to blow the whistle before stepping onto the school crossing.			
I check for cars entering and exiting driveways or laneways.			
I try to not cross the road between parked cars.			
I use the crosswalk even if I have to walk out of my way to use it.			
I walk on the footpath or away from the edge of the road and facing traffic if there is no footpath.			
I wait on the same side of the road as the bus stop when I am waiting to be picked up.			
I take responsibility for my own safety if I am walking by myself.			
I cross roads at safer places eg crosswalks, traffic lights, straight roads, underpasses and overpasses.			
I look out for potential hazards when I am walking.			
I wear light clothing that can be seen by other road users in wet weather and when it is dark.			
I wait for the bus to leave before I cross the road.			
When walking in a car park, I use pathways and watch out for cars entering and exiting car bays.			