

Lesson 1: Setting out Bike Ed and riding stations (part 1)

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Bikes are for everyone!

Anyone can ride a bike. However, some students may require additional assistance in the form of modified equipment and differentiated teaching. Suggestions for activity differentiation are provided throughout the lesson plans. Some students may also benefit from learning support aids such as social stories and other resources. If you would like further information on options for equipment modifications, adaptive bicycles and assistive technology, and learning support aids to assist with the delivery of Bike Ed, please email bikeed@transport.vic.gov.au.



SUGGESTED STAGE

While this Unit is designed for Years 7 and 8 (age range 12-15 years), you may choose to use these lessons for a different age range, depending on the development, maturity and existing bike riding experience level of your students.



SUGGESTED DURATION

This is the first of nine lessons for Unit 4 – Riding independently.
Suggested lesson duration: 45 minutes.



LEARNING INTENTIONS

- For students to revisit and revise the skills needed for safe participation in Bike Ed.



SUCCESS CRITERIA

- Demonstrate how to change gears.
- Apply brakes smoothly with balance and control.
- Keep a safe distance (at least 2 bike lengths) when riding.



EQUIPMENT

- Please refer to Unit 4 Appendix 1 for riding station setup details and diagrams, which is for both lessons 1 and 2.
- Bicycles (at least one per two students), helmets (one per student), pens, self-assessment sheets, cones, measuring tapes, stop watches, tennis balls/small beanbags, ground marking (existing surface marks, tape, or removable markings).
- Permission forms for outside group rides (in later lessons).



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CURRICULUM LINKS

The Bike Ed program is designed to support all students by emphasizing the importance of safety and promoting independent travel skills. The Bike Ed program caters for all students and recognizes the need to teach safety and independent travel for all. Acknowledging the diverse needs of learners, we are committed to providing tailored assessment materials for students working at levels below the Foundation stage (A-D curriculum). For more information please email bikeed@transport.vic.gov.au.

CONTENT DESCRIPTORS (Geography)

VC2HG8S02 collect, organise and process information and data from primary and secondary sources, including fieldwork, and using geospatial technologies and digital tools as appropriate.

VC2HG8S03 represent and describe information and data using a range of formats, including maps constructed with geospatial technologies.

(HPE)

VC2HP8M01 refine and transfer movement skills in a variety of movement situations, including indoor, outdoor and aquatic settings.

VC2HP8M02 design and demonstrate how movement strategies can be manipulated to improve movement outcomes.

VC2HP8M03 demonstrate and explain how movement concepts related to effort, space, time, objects and people can be manipulated to improve movement outcomes.

VC2HP8M04 adapt and perform movement sequences in a variety of contexts, demonstrating how the movement elements of time, effort, space, people and objects can enhance performance.

ACHIEVEMENT STANDARD (EXTRACT) (Geography)

By the end of Level 8, students:

- collect, organise, process and represent information and data from primary and secondary sources using geospatial technologies.

(HPE)

By the end of Level 8, students:

- apply and transfer movement skills and movement concepts across a range of situations. They implement and evaluate the effectiveness of movement strategies on movement outcomes. They propose and evaluate strategies designed to promote personal health and wellbeing outcomes.



LEVEL 7 – 8 RUBRIC: BIKE ED

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
Students can identify safety issues in their own and others' bikes, clothing, and equipment, and suggest practical solutions to improve safety.	Students can undertake some of the basics of bike maintenance: · change a flat tyre · check tyre pressure · adjust seat height to fit individual · clean and oil the chain · fix a punctured tube	Students can undertake all of the basics of bike maintenance: · change a flat tyre · check tyre pressure · adjust seat height to fit individual · clean and oil the chain · fix a punctured tube
Students demonstrate successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands).	Students demonstrate successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands) and are beginning to take the lead or serve as role models for others.	Students demonstrate and can lead successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands).

Continued overleaf.



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Unit 4 Lesson 1: Setting out Bike Ed and riding stations (part 1)



LEVEL 7 – 8 RUBRIC: BIKE ED (Continued)

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
Students obey all road safety rules whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs).	Students obey all road safety rules whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs) and are beginning to take the lead or serve as role models for others.	Students lead others in adherence to all road safety rules, instructions and norms whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs).
Students obey all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths).	Students obey all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths) and serve as role models for others.	Students lead others in obeying all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths).
Students can identify and mitigate hazards in a community setting with assistance. Students can plan a safe travel route using a range of technologies and information (with teacher oversight)	Students can plan a safe travel route using various geospatial technologies and information (with teacher oversight) based on current conditions, hazards and the environment.	Students can plan several safe travel routes alternatives using various geospatial technologies and information (with teacher oversight), choosing the best and safest route based on current conditions, hazards and the environment.

Tuning in activity. Brainstorming bikes and benefits.

Approx. 5 minutes

Activities & Differentiation

Why do we ride bikes?

Brainstorm of reasons to ride a bike:

- Fun
- Good for the environment
- Healthy
- Easy to travel around
- Social activity
- As a competitive sport

Bike Ed unit summary

Brainstorming previous Bike Ed sessions or general cycling knowledge. Outline that there will be lessons on

Teaching Points

The program will build bike skills first, with work on road rules and road skills/awareness being interspersed.

The focus of the program is to have students able to complete the ride outside of school at the end.

Students should have already completed some form of Bike Ed in the past, however the first four lessons will provide time to work with novice riders.

Basic road rules:

- When to stop (Stop/Give way/traffic lights)
- Where to go (on the left)



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bike skills and skills needed to ride on the road. At the end of the unit, we'll do a short ride and a longer ride outside the school. A thumbs up/down/sideways about whether they can ride a bicycle.

Road rules

- Stop signs mean stop.
- Give Way signs mean to slow down and give way to anyone already in the intersection.
- Traffic lights: Red, yellow and green.
- Ride on the left side of the road or path.
- Minimum passing distance for cars passing bikes:
 - At least 1m up to 60km/h, and 1.5m over 60km/h.
 - Why is this needed?

Special road rules for bikes:

- You must wear an approved helmet.
- On paths, all bike riders must give way to pedestrians.
- Your bike must have at least one working brake.
- If you're riding at night, your bike needs lights.
 - White in front, red at back.

- Who has priority (pedestrians)
- What to have (helmet, brakes, lights at night)

Key Questions

Why do we have road rules?

- It helps everyone know what to do so that people don't run into each other.
- Helps us stay safe.

What rules do you think are most important? Why?

Knowledge questions:

Provide as many different situations as possible where you must stop your bike?

- Stop, give way signs. Red light.
- Obstructions, pedestrians.
- Intersections where someone else has right of way.

What are the things you need to do before you start riding?

- Proper clothing, bike helmet, shoes, bright clothes, front and rear lights.
- Check that your bike is safe.
- Check that you are safe to ride a bike, with a good attitude.

Safety Checks.

Approx. 5 minutes

Resource Requirements

Bicycles (at least one per two students), helmets (one per student), helmet fit guide, and ABCD check guide.

Safety

- If using a class set of helmets, ensure that the helmets have been cleaned for hygiene.
- Dropping the bike should only be from a very small height (approx. 5-10cm).
- Ensure bike seats are at the appropriate height for the student. Use the Bike fit guide.

Activities & Differentiation

Helmet & clothing check

Reminder from the teacher how to correctly put on helmet and check that they are wearing correct clothes.

- Two finger check (above eyebrow, under chin strap and forming a 'V' at the ear) and tighten the dial.
- Clothing is brightly coloured, for good visibility.
- Long pants are close fitting at the base, so stop it catching in the chain.
- Shoes are sturdy, close toed and non-slip, for stopping and protection.
- Students will put on their own helmets.

Teaching Points

We must always wear a helmet when on a bike because it protects our very important brain.

Just as important, is for the helmet to be fitted correctly, otherwise it won't work properly.

If we aren't dressed properly then we can't be seen easily, so someone might run into us.

We must check the bike before we ride. If the bike has a problem, then it might be unsafe to ride on.

Key Questions

- Why do we wear a helmet?



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** For suggestions regarding safety considerations and how to adapt the helmet and clothing safety check to accommodate students with specific religious or cultural clothing, please email bikeed@transport.vic.gov.au.*

ABCD bicycle check

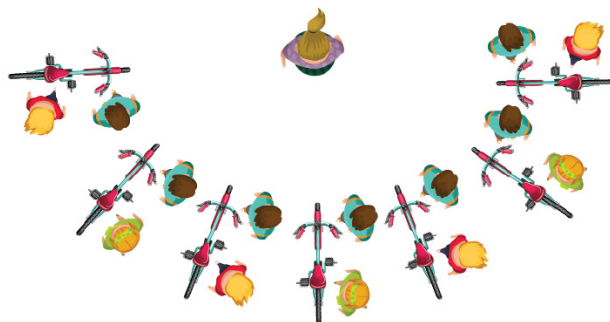
Each student completes a check of their bicycle, as led by the teacher. Use ABCD check guide. The ABCD check is as follows:

- A. Is there air in the tyres? Squeeze the tyre walls.
- B. Do the brakes work? Squeeze each brake whilst lightly pushing the bike.
- C. Does the chain move smoothly? Inspect the chain and move the pedals.
- D. Is anything loose on the bike? Check with a very small drop (whilst still holding on to the bike).
- E. You may also choose to add "E" for handlebar Ends: check that the end caps at the ends of the handlebars are not missing or damaged, as the hollow pipe of the handlebar can cause injury in a fall.

Attitude check

Try your best, have fun, respect others.

- What are the best ways to make sure that cars and other riders can see you?
- Why do we do a bike check before we ride?



Activity 1. Riding stations.

Approx. 30 minutes

Resource Requirements

Bicycles (at least one between two students), helmets (one per student), cones, measuring tapes, stop watches, tennis balls/small beanbags, ground marking (existing surface marks, tape, or removable markings).

Safety

- Bike riders to keep a safe distance from each other.
- Non-riders to keep out of the riding area unless measuring.
- Helmets to be worn at all times.
- Unused bikes to be stored away from the riding area.
- Students to stay in their activity area and not roam between groups.
- Riders to dismount and walk their bikes between stations.

Activities & Differentiation

Walkthrough of riding stations

For the rest of this class and the start of next class the students will be running their own bike skills stations and assessment.

- Students will work in pairs or small groups.
- Students will spend five minutes at each station

Activity Setup - Riding stations

*please refer to Unit 4 Appendix 1 for setup details and diagrams, which is used for both lessons 1 and 2.



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Unit 4 Lesson 1: Setting out Bike Ed and riding stations (part 1)



before moving on to the next station. There will be seven stations in total, of which two will be completed this class.

- At each station one student will complete the station whilst their partner assists by measuring, timing or counting.
- Discuss the requirements of riders and partners at each of the two stations.

Riding stations

1. Slow ride – Record maximum time to complete 10m ride. This promotes balance.
2. Single push – Record maximum distance completed with a single push. This promotes good starting and balance.
3. Slalom – Record minimum distance between cones without touching. This helps bike control.
4. Bean Bag Drop – Count number of times you can take a bean bag from the start line (passed to the rider by scoring partner or picked up from the top of a cone) and drop it in a bucket/hoop at the other end. This helps develop one-handed riding and bike control.
5. Hit the spot – Record number of spots hit within the area without going out of bounds. This helps bike control.
6. Straight line riding – Record maximum distance covered without leaving the line on the ground. This helps bike control.
7. Stop and go – Rider will ride into a 2m x 2m box, come to a complete stop and ride off without touching the ground. This helps bike control and balance.

Modifications

- For students that are still learning to balance and pedal, the teacher will be able to work more directly with them whilst the others do their self-assessments.
- Students who are not yet able to balance and pedal can still participate in these activities using a balance bike (refer to additional resources).
- Novice students may wish to repeat easier stations more often with supervision.

Progressions

- Each station will be effective for bike riders of all levels, although some will be more challenging than others.

Teaching Points

Working together.

- Students will need to work together at each station.
- Make sure that each student has equal time riding at the station.

Activities

- Explanation of each activity is on the self-assessment sheets.

Accurate measurement

- It's important that students make accurate measurements.
- This will involve timing, measuring and counting.

Honesty

- Riders and their partners need to be honest in their assessments.

Students working independently

- Ensure students are working safely and productively in their groups.

Work with novice riders to help them reach a level where they can practice and join in the riding stations.

Tips for Turning

- Turning only requires a gentle turning of the handlebars and very slight lean in the direction of the turn.
- The best way to turn the bike is to look towards where you wish to turn. The bike generally follows in this direction as this action usually results in the handlebar turn and lean that is required.
- Emphasise that the movements must be small and gentle, rather than sharp and sudden.

Key Questions

- How do we use the stopwatch/measuring tape?
- What is important to make this activity work well for everybody?
- How do we work productively as a group?
- How do we make sure that everyone is getting a fair turn?
- What tips do you have for others to make riding easier?
- Which is the best way to turn the bike?
 - Smooth and slow.
 - Look in the direction you want to turn.



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Reflection & closure.

Approx. 5 minutes

Activities & Differentiation

What worked well and what were the challenges in doing the riding stations?

Questioning to recap learning intentions.

Thumbs up/down/sideways: Are you excited about doing Bike Ed?

Key Questions

- What are some of the road rules we need to know for bike riding?
- How do we fit our helmets? Why do we do it?
- How do we do an ABCD check? Why do an ABCD check?
- What worked well or not well when you did the riding stations? What did you do well at and what do you need to work on?



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Lesson 2: Riding stations (part 2) and pre-intersections

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Bikes are for everyone!

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SUGGESTED STAGE

While this Unit is designed for Years 7 and 8 (age range 12-15 years), you may choose to use these lessons for a different age range, depending on the development, maturity and existing bike riding experience level of your students.



SUGGESTED DURATION

This is the second of nine lessons for Unit 4 – Riding independently.
Suggested lesson duration: 45 minutes.



LEARNING INTENTIONS

- For students to identify and explain basic road rules that relate to cycling.
- For students to analyse and demonstrate ways to safely navigate simple intersections (in a simulated school setting).



SUCCESS CRITERIA

- Identify behaviour at Stop, give way, no entry, traffic lights.
- Recall road rule in relation to riding on a footpath and helmet use.
- Use safe distance and use safe speed at intersections.



EQUIPMENT

- Please refer to Unit 4 Appendix 1 for riding station setup details and diagrams, which is used for both lessons 1 and 2.
- Bicycles (at least one per two students), helmets (one per student), pens, self-assessment sheets, cones, measuring tapes, stop watches, tennis balls/small beanbags, ground marking (existing surface marks, tape, or removable markings).



LESSON PLAN

Unit 4 Lesson 2: Riding stations (part 2) and pre-intersections



CURRICULUM LINKS

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CONTENT DESCRIPTORS (Geography)

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(HPE)

VC2HP8M01 refine and transfer movement skills in a variety of movement situations, including indoor, outdoor and aquatic settings.

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VC2HP8M04 adapt and perform movement sequences in a variety of contexts, demonstrating how the movement elements of time, effort, space, people and objects can enhance performance.

ACHIEVEMENT STANDARD (EXTRACT) (Geography)

By the end of Level 8, students:

- collect, organise, process and represent information and data from primary and secondary sources using geospatial technologies.

(HPE)

By the end of Level 8, students:

- apply and transfer movement skills and movement concepts across a range of situations. They implement and evaluate the effectiveness of movement strategies on movement outcomes. They propose and evaluate strategies designed to promote personal health and wellbeing outcomes.



LEVEL 7 – 8 RUBRIC: BIKE ED

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
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Continued overleaf.



LESSON PLAN

Unit 4 Lesson 2: Riding stations (part 2) and pre-intersections



LEVEL 7 – 8 RUBRIC: BIKE ED (Continued)

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
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Tuning in activity. Brainstorming key bike skills.

Approx. 5 minutes

Activities & Differentiation

In groups of 2 or 3, students think back to the riding stations in the last lesson, and brainstorm responses to the following questions:

- What worked well/not well when you did the riding stations?
- What key skills did you do well?
- What key skills did you find that you need to work on? Why?

Each student shares one response with the class.

Teaching Points

If needed, prompt students to consider key skills such as:

- Balance and control
- Turning
- Tight turns
- Braking / stopping
- Riding one-handed
- Slow riding

Responses will depend on which stations each student completed last lesson, and which still remain for this lesson.



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Unit 4 Lesson 2: Riding stations (part 2) and pre-intersections



Safety Checks.

Approx. 5 minutes

Resource Requirements

Bicycles (at least one per two students), helmets (one per student), helmet fit guide, and ABCD check guide.

Safety

- If using a class set of helmets, ensure that the helmets have been cleaned for hygiene.
- Dropping the bike should only be from a very small height (approx. 5-10cm).
- Ensure bike seats are at the appropriate height for the student.

Activities & Differentiation

Helmet & clothing check

Reminder from the teacher how to correctly put on helmet and check that they are wearing correct clothes.

- Two finger check (above eyebrow, under chin strap and forming a 'V' at the ear) and tighten the dial.
- Clothing is brightly coloured, for good visibility.
- Long pants are close fitting at the base, so stop it catching in the chain.
- Shoes are sturdy, close toed and non-slip, for stopping and protection.
- Students will put on their own helmets.

** For suggestions regarding safety considerations and how to adapt the helmet and clothing safety check to accommodate students with specific religious or cultural clothing, please email bikeed@transport.vic.gov.au.*

ABCD bicycle check

Each student completes a check of their bicycle, as led by the teacher. Use ABCD check guide. The ABCD check is as follows:

- A. Is there air in the tyres? Squeeze the tyre walls.
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- C. Does the chain move smoothly? Inspect the chain and move the pedals.
- D. Is anything loose on the bike? Check with a very small drop (whilst still holding on to the bike).
- E. You may also choose to add "E" for handlebar Ends: check that the end caps at the ends of the handlebars are not missing or damaged, as the hollow pipe of the handlebar can cause injury in a fall.

Attitude check

Try your best, have fun, respect others.

Teaching Points

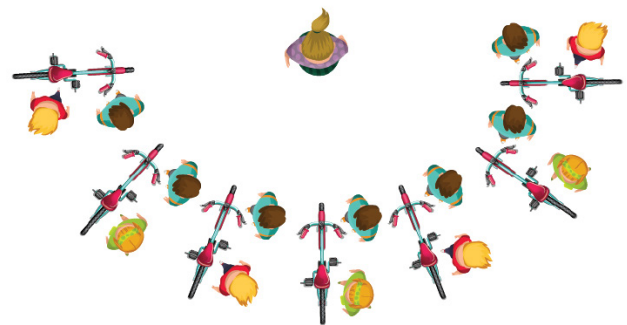
We must always wear a helmet when on a bike because it protects our head and our very important brain. Just as important, is for the helmet to be fitted correctly, otherwise it won't work properly.

If we aren't dressed properly then we can't be seen easily, so someone might run into us.

We must check the bike before we ride. If the bike has a problem, then it might be unsafe to ride on.

Key Questions

- Why do we wear a helmet?
- What are the best ways to make sure that cars and other riders can see you?
- Why do we do a bike check before we ride?



LESSON PLAN

Unit 4 Lesson 2: Riding stations (part 2) and pre-intersections



Activity 1. Hot spot game.

Approx. 5 minutes

Resource Requirements

Bicycles (at least one per two students), helmets (one per student) and cones or other obstacles.

Safety

- Ensure that students do not go too quickly and maintain space to other bike riders.
- Make sure that obstacles will not cause bike to fall if hit.

Activities & Differentiation

Set up an area between two lines approximately 5-10 metres apart, with a series of obstacles for students to avoid. These obstacles can be cones, bean bags, balls or anything safe that is available.

Students should ride, slowly and in control, from one side to the other whilst avoiding the obstacles, then returning to the start by riding around the outside of the course (as per the diagram).

Modifications

- Set up multiple lanes to cater for different levels and allow students to choose their level.
- The number of the obstacles in each lane can be adjusted for different groups, with novice riders having fewer obstacles, and more advanced riders having more obstacles placed closer together.
- Non-slip rubber floor markers/spots, or chalk markings, make the game less intimidating for novice riders.
- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources).

Progressions

- The difficulty can be increased as the students successfully negotiate each pass by adding more obstacles to the course.
- The size of the obstacle can change the difficulty.
- You can include the "Traffic Light" game as part of this activity (See Unit 1, Lesson 4). The teacher will call 'Red' (all riders stop), 'Yellow' (all riders ride slowly), and 'Green' (all riders resume normal speed).

Activity Setup



Teaching Points

The focus of the game should be to apply the movements in a controlled manner. Students should focus on control, rather than speed.

Key Questions

How did you steer the bike to make it as easy to avoid the obstacles as possible?

- Slow, smooth steering.



Activity 2. Riding stations. (continued from lesson 1)

Approx. 15 minutes

Resource Requirements

Bicycles (at least one between two students), helmets (one per student), cones, measuring tapes, stop watches, tennis balls/small beanbags, ground marking (existing surface marks, tape, or removable markings).

Safety

- Bike riders to keep a safe distance from each other.
- Non-riders to keep out of the riding area unless measuring.
- Helmets to be worn at all times.
- Unused bikes to be stored away from the riding area.
- Students to stay in their activity area and not roam between groups.
- Riders to dismount and walk their bikes between stations.

Activities & Differentiation

Walkthrough of riding stations

For the rest of this class and the start of next class the students will be running their own bike skills stations and assessment.

- Students will work in pairs or small groups.
- Students will spend five minutes at each station before moving on to the next station. There are seven stations in total, five will be completed in this class (following on from the two completed last class).
- At each station one student will complete the station whilst their partner assists by measuring, timing or counting.
- Discuss the requirements of riders and partners at each of the two stations.

Riding stations

1. Slow ride – Record maximum time to complete 10m ride. This promotes balance.
2. Single push – Record maximum distance completed with a single push. This promotes good starting and balance.
3. Slalom – Record minimum distance between cones without touching. This helps bike control.
4. Bean Bag Drop – Count number of times you can take a bean bag from the start line (passed to the rider by scoring partner or picked up from the top of a cone) and drop it in a bucket/hoop at the other end. This helps develop one-handed riding and bike control.
5. Hit the spot – Record number of spots hit within the area without going out of bounds. This helps bike control.

Activity Setup - Riding stations

*please refer to Unit 4 Appendix 1 for setup details and diagrams, which is used for both lessons 1 and 2.

Teaching Points

Working together.

- Students will need to work together at each station.
- Make sure that each student has equal time riding at the station.

Activities

- Explanation of each activity is on the self-assessment sheets.

Accurate measurement

- It's important that students make accurate measurements.
- This will involve timing, measuring and counting.

Honesty

- Riders and their partners need to be honest in their assessments.

Students working independently

- Ensure students are working safely and productively in their groups.

Work with novice riders to help them reach a level where they can practice and join in the riding stations.

Tips for Turning

- Turning only requires a gentle turning of the handlebars and very slight lean in the direction of the turn.
- The best way to turn the bike is to look towards where you wish to turn. The bike generally follows in this direction as this action usually results in the handlebar turn and lean that is required.



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Unit 4 Lesson 2: Riding stations (part 2) and pre-intersections



6. Straight line riding – Record maximum distance covered without leaving the line on the ground. This helps bike control.
7. Stop and go – Rider will ride into a 2m x 2m box, come to a complete stop and ride off without touching the ground. This helps bike control and balance.

Modifications

- For students that are still learning to balance and pedal, the teacher will be able to work more directly with them whilst the others do their self-assessments.
- Students who are not yet able to balance and pedal can still participate in these activities using a balance bike (refer to additional resources).
- Novice students may wish to repeat easier stations more often with supervision.

Progressions

- Each station will be effective for bike riders of all levels, although some will be more challenging than others.

Emphasise that the movements must be small and gentle, rather than sharp and sudden.

Key Questions

- How do we use the stopwatch/measuring tape?
- What is important to make this activity work well for everybody?
- How do we work productively as a group?
- How do we make sure that everyone is getting a fair turn?
- What tips do you have for others to make riding easier?
- Which is the best way to turn the bike?
 - Smooth and slow.
 - Look in the direction you want to turn.

Activity 3. Sharing the road.

Approx. 2 minutes

Activities & Differentiation

Sharing the road

Bring students together to talk about basic road rules. What road rules affect them as bike riders?

Teaching Points

Make sure the following points are covered:

- Signs: Stop, give way, no entry, traffic lights.
- Riding on footpaths: Only allowed if you are 12 or under or riding with someone 12 or under.
- Helmets are mandatory.

Giving way

You must give if you face a stop, or give way sign, or a line (solid or dotted) at an intersection. If there is nothing to tell you what to do (signs, lines etc.) then you must give way to those on your right.

Key Questions

- What do we mean by 'giving way'?
- Why do we give way?



LESSON PLAN

Unit 4 Lesson 2: Riding stations (part 2) and pre-intersections



Activity 4. Venn Ride-agram.

Approx. 10 minutes

Resource Requirements

Cones and stop and give-way signs.
Chalk can be used to create line markings, draw stop and give way signs, and draw directional arrows on the ground. Signs may be printed and laminated, with beanbags used to stop them blowing away.

Activities & Differentiation

This activity will involve students riding their bicycles on two overlapping square circuits. Where the circuits overlap, students must give way to the right.

- You may wish to first have the students walk their bikes through the course slowly. Explain that the stop sign or give way sign means that they must stop at the line and then wait for the intersection to be clear before they can continue. At the centre intersections, riders must give way to the right.
- Riders will ride around the course in the directions indicated.
- If the class is large then you may wish to set up two or more courses.

Modifications

- Limit the number of bike riders using the rectangles at first to allow easier gaps to be picked.
- Set up a separate, larger course for slower riders (and balance bikes) so they are not intimidated by more confident riders.
- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources), or maybe choose to be pedestrian traffic until they gain the confidence to participate on a balance bike.

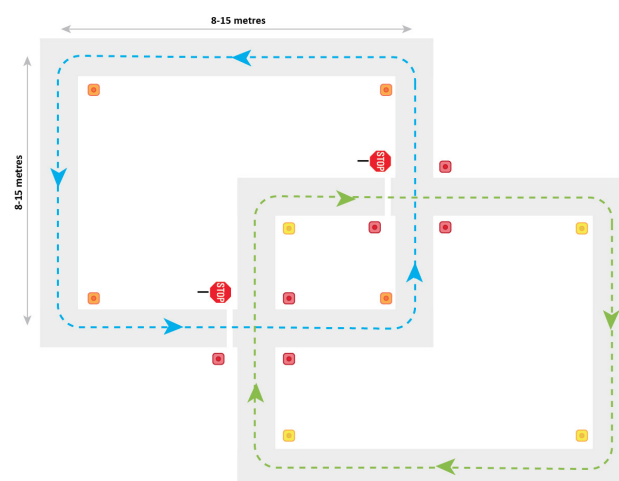
Progressions

- The course can be set up with stop signs at the intersections, or give way signs, a mix, or no signs at all (unsigned intersection), to challenge riders to think about the different rules at each.
- Encourage students to practice signalling and voice calls of “slowing” and “stopping” while riding around the course.
- More confident students can choose to turn left (ensure they are signalling their intentions) at the intersections to swap to the other rectangle.

Safety

- Ensure that other students are clear of the bikes as they are being ridden around.
- Provide ample space between riders.
- Ensure that the speed of the riders is low.
- Teachers should focus on the conflict points of the course. Provide students with guidance as to appropriate gaps.

Activity Setup



Teaching Points

This activity, as well as helping to practice turning, also introduces giving way on the bike.

In the Venn Ride-agram, there is a point where riders must give way. Mark this with a different coloured cone or, if available, a ‘Give Way’ or ‘Stop’ sign.

Riders will only have to give way to the right, unless presented with a sign telling them otherwise.

Negotiating your movements with other bike riders and road users on paths is very important.

Most important for students is to have a safe attitude, where each bike rider will act in the safest, most predictable way possible to avoid collisions.

Good braking technique requires:

- Keep bike straight.
- Good posture. Pressure on feet, slightly standing off the seat, bracing for the stopping force.
- Smooth pulling of the brake lever, not pulling as hard as possible.



LESSON PLAN

Unit 4 Lesson 2: Riding stations (part 2) and pre-intersections



- Using both brakes. The front brake will provide most stopping power but must be used with rear brake assistance to provide a smooth, safe stop.

Key Questions

How do you avoid collisions in the overlapping courses?

- Safe attitude.
- Low speed.
- Understanding Give Way to the right road rules.
- Controlled stopping.
- Communication.
- Safe distance between riders.

Why do we stop at the stop line?

- It's the law.
- So that others can safely predict our behaviour. Safe, predictable behaviour means that people can avoid us on the road.
- To give us time to make a safe decision at the intersection, such as picking a safe gap to ride into.

Reflection & closure.

Approx. 3 minutes

Activities & Differentiation

Reinforce the idea of priority on roads. Who has priority? In the Venn Ride-agram, it was the person on the right, but this can change if there are signs saying something else.

Write reflection at on self-assessment sheet:

1. What parts of bike riding do you do well?
2. What parts of bike riding do you need to work on?

Thumbs up/down/sideways: how confident do you feel about your understanding of the road rules and priority discussed today?

Key Questions

- What parts of bike riding do you need to work on?
- What parts of bike riding do you do well?
- Why do we have priority rules on roads, rather than just letting people work it out themselves? What would traffic look like?



Lesson 3: Intersections

Bikes are for everyone!

Anyone can ride a bike. However, some students may require additional assistance in the form of modified equipment and differentiated teaching. Suggestions for activity differentiation are provided throughout the lesson plans. Some students may also benefit from learning support aids such as social stories and other resources. If you would like further information on options for equipment modifications, adaptive bicycles and assistive technology, and learning support aids to assist with the delivery of Bike Ed, please email bikeed@transport.vic.gov.au.



SUGGESTED STAGE

While this Unit is designed for **Years 7 and 8 (age range 12-15 years)**, you may choose to use these lessons for a different age range, depending on the development, maturity and existing bike riding experience level of your students.



SUGGESTED DURATION

This is the third of nine lessons for Unit 4 – Riding independently.
Suggested lesson duration: 45 minutes.



LEARNING INTENTIONS

- For students to analyse and demonstrate ways to safely navigate more complex intersections (in a simulated school setting).



SUCCESS CRITERIA

- Use safe distance and use safe speed at intersections.
- Ride on left side of the road, giving way to the right and obeying road signs.



EQUIPMENT

Bicycles (at least one per two students), helmets (one per student), cones, measuring tape, and stop and give way signs.





CURRICULUM LINKS

The Bike Ed program is designed to support all students by emphasizing the importance of safety and promoting independent travel skills. The Bike Ed program caters for all students and recognizes the need to teach safety and independent travel for all. Acknowledging the diverse needs of learners, we are committed to providing tailored assessment materials for students working at levels below the Foundation stage (A-D curriculum). For more information please email bikeed@transport.vic.gov.au.

CONTENT DESCRIPTORS (Geography)

VC2HG8S02 collect, organise and process information and data from primary and secondary sources, including fieldwork, and using geospatial technologies and digital tools as appropriate.

VC2HG8S03 represent and describe information and data using a range of formats, including maps constructed with geospatial technologies.

(HPE)

VC2HP8M01 refine and transfer movement skills in a variety of movement situations, including indoor, outdoor and aquatic settings.

VC2HP8M02 design and demonstrate how movement strategies can be manipulated to improve movement outcomes.

VC2HP8M03 demonstrate and explain how movement concepts related to effort, space, time, objects and people can be manipulated to improve movement outcomes.

VC2HP8M04 adapt and perform movement sequences in a variety of contexts, demonstrating how the movement elements of time, effort, space, people and objects can enhance performance.

ACHIEVEMENT STANDARD (EXTRACT) (Geography)

By the end of Level 8, students:

- collect, organise, process and represent information and data from primary and secondary sources using geospatial technologies.

(HPE)

By the end of Level 8, students:

- apply and transfer movement skills and movement concepts across a range of situations. They implement and evaluate the effectiveness of movement strategies on movement outcomes. They propose and evaluate strategies designed to promote personal health and wellbeing outcomes.



LEVEL 7 – 8 RUBRIC: BIKE ED

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
Students can identify safety issues in their own and others' bikes, clothing, and equipment, and suggest practical solutions to improve safety.	Students can undertake some of the basics of bike maintenance: · change a flat tyre · check tyre pressure · adjust seat height to fit individual · clean and oil the chain · fix a punctured tube	Students can undertake all of the basics of bike maintenance: · change a flat tyre · check tyre pressure · adjust seat height to fit individual · clean and oil the chain · fix a punctured tube
Students demonstrate successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands).	Students demonstrate successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands) and are beginning to take the lead or serve as role models for others.	Students demonstrate and can lead successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands).

Continued overleaf.



LEVEL 7 – 8 RUBRIC: BIKE ED (Continued)

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
Students obey all road safety rules whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs).	Students obey all road safety rules whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs) and are beginning to take the lead or serve as role models for others.	Students lead others in adherence to all road safety rules, instructions and norms whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs).
Students obey all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths).	Students obey all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths) and serve as role models for others.	Students lead others in obeying all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths).
Students can identify and mitigate hazards in a community setting with assistance. Students can plan a safe travel route using a range of technologies and information (with teacher oversight)	Students can plan a safe travel route using various geospatial technologies and information (with teacher oversight) based on current conditions, hazards and the environment.	Students can plan several safe travel routes alternatives using various geospatial technologies and information (with teacher oversight), choosing the best and safest route based on current conditions, hazards and the environment.

Tuning in activity. Sharing the road.

Approx. 5 minutes

Activities & Differentiation

In groups of 2 or 3, revise basic road rules. Think/pair/share what they remember from last lesson.

- What road rules affect them as bike riders? Consider things like traffic signs/signals and road markings, footpaths, pedestrian crossings, stopped trams, etc.
- Who gives way at different types of intersections?

Share with the group, ensuring key road rules are covered.

Teaching Points

Make sure the following points are covered:

- Signs: Stop, give way, no entry, traffic lights.
- Riding on footpaths: Only allowed if you are 12 or under or riding with someone 12 or under.
- Helmets are mandatory.
- Giving way: You must give if you face a stop, or give way sign, or a line (solid or dotted) at an intersection. If there is nothing to tell you what to do (signs, lines etc.) then you must give way to those on your right.



LESSON PLAN

Unit 4 Lesson 3: Intersections



Safety Checks.

Approx. 5 minutes

Resource Requirements

Bicycles (at least one per two students), helmets (one per student), helmet fit guide, and ABCD check guide.

Safety

- If using a class set of helmets, ensure that the helmets have been cleaned for hygiene.
- Dropping the bike should only be from a very small height (approx. 5-10cm).
- Ensure bike seats are at the appropriate height for the student.

Activities & Differentiation

Helmet & clothing check

Reminder from the teacher how to correctly put on helmet and check that they are wearing correct clothes.

- Two finger check (above eyebrow, under chin strap and forming a 'V' at the ear) and tighten the dial.
- Clothing is brightly coloured, for good visibility.
- Long pants are close fitting at the base, so stop it catching in the chain.
- Shoes are sturdy, close toed and non-slip, for stopping and protection.
- Students will put on their own helmets.

** For suggestions regarding safety considerations and how to adapt the helmet and clothing safety check to accommodate students with specific religious or cultural clothing, please email bikeed@transport.vic.gov.au.*

ABCD bicycle check

Each student completes a check of their bicycle, as led by the teacher. Use ABCD check guide. The ABCD check is as follows:

- A. Is there air in the tyres? Squeeze the tyre walls.
- B. Do the brakes work? Squeeze each brake whilst lightly pushing the bike.
- C. Does the chain move smoothly? Inspect the chain and move the pedals.
- D. Is anything loose on the bike? Check with a very small drop (whilst still holding on to the bike).
- E. You may also choose to add "E" for handlebar Ends: check that the end caps at the ends of the handlebars are not missing or damaged, as the hollow pipe of the handlebar can cause injury in a fall.

Attitude check

Try your best, have fun, respect others.

Teaching Points

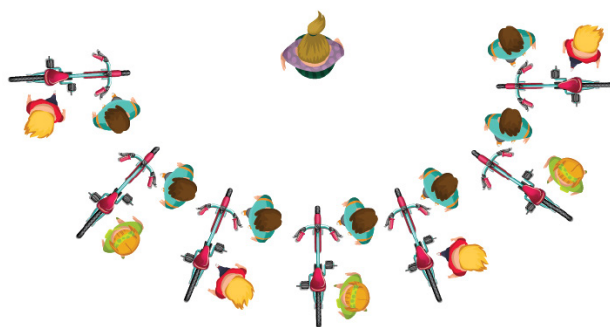
We must always wear a helmet when on a bike because it protects our head and our very important brain. Just as important, is for the helmet to be fitted correctly, otherwise it won't work properly.

If we aren't dressed properly then we can't be seen easily, so someone might run into us.

We must check the bike before we ride. If the bike has a problem, then it might be unsafe to ride on.

Key Questions

- Why do we wear a helmet?
- What are the best ways to make sure that cars and other riders can see you?
- Why do we do a bike check before we ride?



Activity 2. Figure 8 riding.

Approx. 10 minutes

Resource Requirements

Bicycles (at least one between two students), helmets (one per student), cones, stop/give way sign.

Safety

- Ensure that other students are clear of the bikes as they are being ridden around.
- Provide ample space between riders.
- Ensure that the speed of the riders is low.
- Teachers should focus on the conflict point of the figure 8. Provide students with guidance as to appropriate gaps.

Activities & Differentiation

This demonstrates what is required when you give way.

- Set up a figure 8 course as per the diagram. It should be at least 10-15 m long. If the class is large, then you may wish to set up two or more courses.
- Riders will ride around the course in a single direction.
- At the centre intersection, riders must give way to the right. Walk through this with students.
- Switch riding directions at various stages.

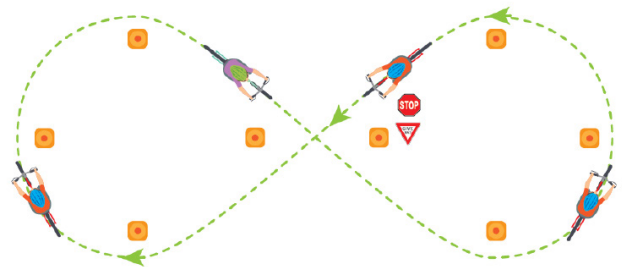
Modifications

- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources).
- Set up a separate, larger course for slower riders (and balance bikes) so they are not intimidated by more confident riders.
- Students struggling or nervous may wish to begin by riding around the outside of the figure 8 instead, and observing other students completing the task, before entering the figure 8.

Progressions

- You may wish to include a 'stop' or 'give way' sign at the intersection, and occasionally switch the side that will be required to give way.

Activity Setup



Teaching Points

This activity, as well as helping to practice turning, also provides a revision of giving way on the bike.

In the figure 8, there is a point where riders must give way. Mark this with a different coloured cone or, if available, a 'give way' or 'stop' sign.

Riders will only have to give way to the right, unless presented with a sign telling them otherwise.

Key Questions

- What do we mean by 'giving way'?
- Why do we give way?



Activity 3. T-intersections.

Approx. 10 minutes

Resource Requirements

Cones and stop and give-way signs.
Chalk can be used to create line markings, draw stop and give way signs, and draw directional arrows on the ground. Signs may be printed and laminated, with beanbags used to stop them blowing away.

Activities & Differentiation

This activity will involve students riding their bicycles through a T-intersection, stopping at the stop/give way signs, and making a right or left turn that the intersection, then continuing around the outside of the course back to the intersection.

- Firstly, have the students walk their bikes through the course slowly. Explain that the stop sign or give way sign means that they must stop at the line and then wait for the intersection to be clear before they can proceed and turn right or left.
- Students should start by riding around the outside of the course (anti-clockwise only), and more confident riders can be invited to enter the intersection when they feel ready. Once they have negotiated the intersection, they must give way before re-entering the outer circuit.
- When approaching the intersection, the student may be instructed to turn left only, or as they progress, may be allowed to choose to turn either left or right.
- Students should practice indicating before turning.
- The teacher should be at the intersection, observing and providing feedback to students as they negotiate the intersection.

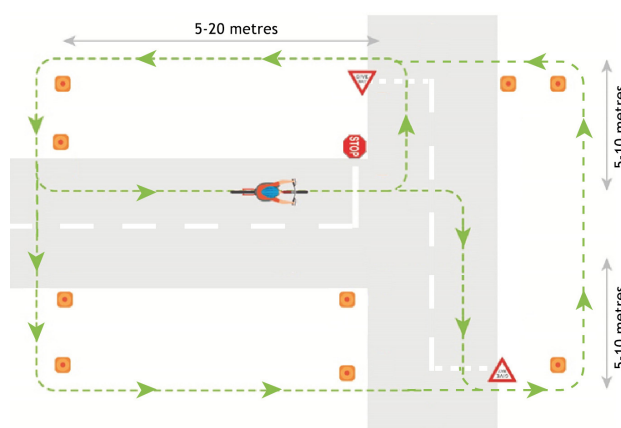
Modifications

- The teacher may wish to limit the number of bike riders using the intersection at first to allow easier gaps to be picked.
- Less confident or nervous riders can choose to continue riding around the outside of the course (anti-clockwise only), until they feel ready to enter the intersection. They will still learn by observing how other students navigate through the intersection.
- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources), or maybe choose to be pedestrian traffic until they gain the confidence to participate on a balance bike.

Safety

- Must be completed at low speed.
- Students must maintain at least two bike lengths distance to other bike riders.

Activity Setup



Teaching Points

When students approach the intersection on a bike, they should do the same thing that they do as a pedestrian.

- Stop
- Look (for road users, left and right)
- Listen (for road users)
- Think (who has priority, what are the other road users doing, is it safe to move)

Students making decisions at the intersection.

- Provide opportunities for students to make decisions and pick safe gaps in traffic when they are ready.

Key Questions

Why do we stop at the stop line?

- It's the law.
- So that others can safely predict our behaviour. Safe, predictable behaviour means that people can avoid us on the road.
- To give us time to make a safe decision at the intersection, such as picking a safe gap to ride into.



LESSON PLAN

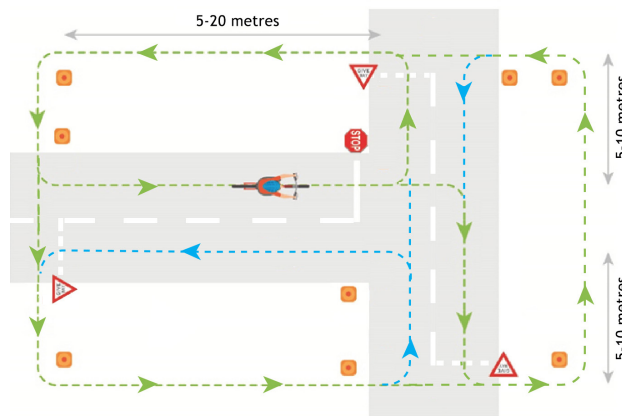
Unit 4 Lesson 3: Intersections



Progressions

- The teacher may call 'left' or 'right' when students approach the stop line, to indicate the direction they should turn.
- The course may be set up to allow students to enter other areas to the T-intersection (blue lines) to create 'traffic', so that riders must pick safe gaps in the traffic.
- The traffic may be bike riders, or students without bikes may be pedestrian traffic.

Progression Activity Setup



Activity 4. Cross intersections.

Approx. 10 minutes

Resource Requirements

Cones and stop and give-way signs.
Chalk can be used to create line markings, draw stop and give way signs, and draw directional arrows on the ground. Signs may be printed and laminated, with beanbags used to stop them blowing away.

Safety

- Must be completed at low speed.
- Students must maintain at least two bike lengths distance to other bike riders.
- Pedestrians must walk at a consistent speed to provide predictability for bike riders.
- Pedestrians should be wearing brightly coloured clothing.

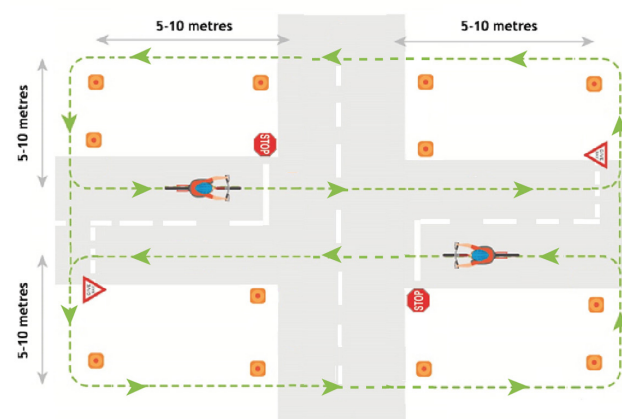
Activities & Differentiation

This course setup is a minor alteration to the T-intersection, so you can use the same setup for both activities.

This activity will involve students riding their bicycles through a cross-intersection, stopping at the stop/give way signs, and proceeding through the intersection, then continuing around the outside of the course back to the intersection.

- Firstly, have the students walk their bikes through the course slowly. Explain that the stop sign or give way sign means that they must stop at the line and then wait for the intersection to be clear before they can proceed though to turn right or turn left.
- Students should start by riding around the outside of the course (anti-clockwise only), and more confident riders can be invited to enter the intersection when they feel ready. Once they have negotiated the

Activity Setup



LESSON PLAN

Unit 4 Lesson 3: Intersections



intersection, they must give way before re-entering the outer circuit.

- When approaching the intersection, the student may be instructed to go straight over only (not turning left or right).
- Students should practice indicating before turning (when re-entering the outer circuit).
- The teacher should be at the intersection, observing and providing feedback to students as they negotiate the intersection.

Modifications

- Less confident or nervous riders can choose to continue riding around the outside of the course (anti-clockwise only), until they feel ready to enter the intersection. They will still learn by observing how other students navigate through the intersection.
- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources), or maybe choose to be pedestrian traffic until they gain the confidence to participate on a balance bike.
- The teacher may wish to limit the number of bike riders using the intersection at first to allow easier gaps to be picked.

Progressions

- Once students are comfortable making the movements, allow students to enter the through-road (blue lines), so that riders must pick safe gaps in the traffic. The traffic may be bike riders, or students without bikes may be pedestrian traffic.
- As an extension activity as students become more confident, they may be allowed to choose to turn left at the intersection to begin with, and then add in the option of turning right, or may still go straight ahead. Students will need to indicate their intentions in this instance. (see "Intersection Course" in lesson 4 for more details).

Teaching Points

Students should be approaching this intersection in the same way they as the T-intersection, except that there is an extra intersection exit.

- Stop,
- Look (for road users, left and right),
- Listen (for road users),
- Think (who has priority, what are the other road users doing, is it safe to move).

Students making decisions at the intersection.

- Provide opportunities for students to make decisions and pick safe gaps in traffic when they are ready.

Key Questions

Who goes first?

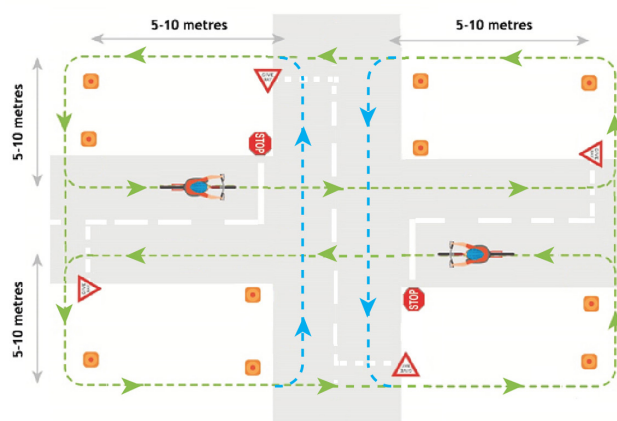
- At the intersection, those at the stop sign must wait.
- If there are two people opposite each other at the stop sign, the person turning right must wait until the other people have gone.

If both riders are turning right, who goes first?

If one is turning left and one is turning right, who goes first?

If one is turning right and one is going straight, who goes first?

Progression Activity Setup



LESSON PLAN

Unit 4 Lesson 3: Intersections



Optional. Intersection course.

Approx. 10 minutes

Resource Requirements

Cones and stop and give-way signs.
Chalk can be used to create line markings, draw stop and give way signs, and draw directional arrows on the ground. Signs may be printed and laminated, with beanbags used to stop them blowing away.

Activities & Differentiation

Set up course as per the diagram (and is the same setup as the previous “Cross intersection” activity).

- Students should start by riding around the outside of the course (anti-clockwise only), and more confident riders can be invited to enter the intersection (from the 2 arms shown only) when they feel ready. Once they have negotiated the intersection, they must give way before re-entering the outer circuit.
- Students may turn left or right at the intersection only (not straight over), as shown in the diagram. Students should practice indicating before turning (and when re-entering the outer circuit).

Modifications

- Less confident or nervous riders can choose to continue riding around the outside of the course (anti-clockwise only), until they feel ready to enter the intersection. They will still learn by observing how other students navigate through the intersection.
- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources), or maybe choose to be pedestrian traffic until they gain the confidence to participate on a balance bike.

Progressions

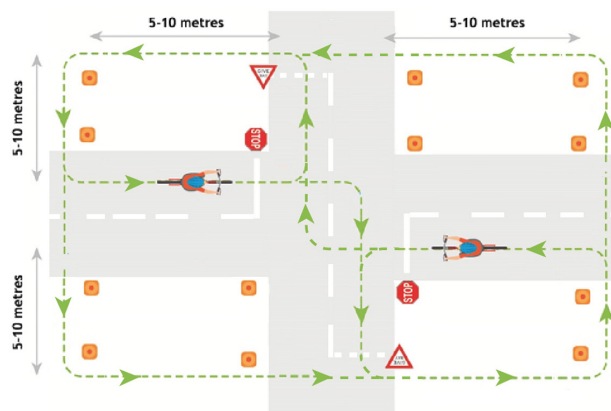
- Once students are comfortable making the movements, allow students to enter the intersection from the other 2 arms (blue lines) as through-traffic, so that riders must pick safe gaps in the traffic. The traffic may be bike riders, or students without bikes may be pedestrian traffic. Initially, those on the through-road are not allowed to turn at the intersection and may continue straight only (as shown by the blue lines).
- As students become more confident, as an extension activity they may be allowed to choose to turn left or right from the through-road at the intersection

Safety

- Students must maintain at least two bike lengths distance to other bike riders.
- Non-riders/helpers are to stay off the riding areas.
- Limit riding to a safe speed.

Activity Setup

Lanes should be at least 3m wide and up to 30 metres in length (depending on space constraints).



Teaching Points

This is a good activity to repeat when time is available. It provides opportunities for riders to make decisions and perform variety of skills in different situations, as they would on roads and paths.

Using the intersection:

- Students will give way to the right at the intersection.
- Signal prior to making a turn so that others know your intentions.

Key Questions

- Who has right of way at the middle intersection/side intersections?
- What will we need to do as we approach each intersection to ride safely?
- How do we negotiate the intersections safely?



as well. This will get quite complicated, so ensure all students are ready for this progression.

- The internal intersection can be modified to other types.
- Other hazards and skill stations may be placed on the external circuit, such as performing head checks/one handed riding etc.

Reflection & closure.

Approx. 5 minutes

Activities & Differentiation

What worked well and what were the challenges in doing the intersections?

Thumbs up/down/sideways: How confident are you in understanding the requirements at each type of intersection?

Key Questions

Provide scenarios that were practiced and ask how to respond.

- What do we do at a T-intersection? How has priority/right of way?
- What do we do at a cross-intersection? How has priority/right of way?
 - The person facing the stop/give way sign/red light must give way.
- What do we do at an unsigned intersection?
 - Give way to the bike rider/car on your right.



Lesson 4: Intersections and road skills

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Bikes are for everyone!

Anyone can ride a bike. However, some students may require additional assistance in the form of modified equipment and differentiated teaching. Suggestions for activity differentiation are provided throughout the lesson plans. Some students may also benefit from learning support aids such as social stories and other resources. If you would like further information on options for equipment modifications, adaptive bicycles and assistive technology, and learning support aids to assist with the delivery of Bike Ed, please email bikeed@transport.vic.gov.au.



SUGGESTED STAGE

While this Unit is designed for Years 7 and 8 (age range 12-15 years), you may choose to use these lessons for a different age range, depending on the development, maturity and existing bike riding experience level of your students.



SUGGESTED DURATION

This is the fourth of nine lessons for Unit 4 – Riding independently.
Suggested lesson duration: 45 minutes.



LEARNING INTENTIONS

- For students to analyse and apply ways to safely navigate complex intersections (in a simulated school setting).



SUCCESS CRITERIA

- Use safe distance and use safe speed at intersections.
- Ride on left side of the road, giving way to the right and obeying road signs.
- Demonstrate safe waiting times in complex situations.



EQUIPMENT

Bicycles (at least one per two students), helmets (one per student), intersection diagram sheets, cones and/or ground markings, and stop and give way signs.





CURRICULUM LINKS

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VC2HG8S03 represent and describe information and data using a range of formats, including maps constructed with geospatial technologies.

(HPE)

VC2HP8M01 refine and transfer movement skills in a variety of movement situations, including indoor, outdoor and aquatic settings.

VC2HP8M02 design and demonstrate how movement strategies can be manipulated to improve movement outcomes.

VC2HP8M03 demonstrate and explain how movement concepts related to effort, space, time, objects and people can be manipulated to improve movement outcomes.

VC2HP8M04 adapt and perform movement sequences in a variety of contexts, demonstrating how the movement elements of time, effort, space, people and objects can enhance performance.

ACHIEVEMENT STANDARD (EXTRACT) (Geography)

By the end of Level 8, students:

- collect, organise, process and represent information and data from primary and secondary sources using geospatial technologies.

(HPE)

By the end of Level 8, students:

- apply and transfer movement skills and movement concepts across a range of situations. They implement and evaluate the effectiveness of movement strategies on movement outcomes. They propose and evaluate strategies designed to promote personal health and wellbeing outcomes.



LEVEL 7 – 8 RUBRIC: BIKE ED

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
Students can identify safety issues in their own and others' bikes, clothing, and equipment, and suggest practical solutions to improve safety.	Students can undertake some of the basics of bike maintenance: · change a flat tyre · check tyre pressure · adjust seat height to fit individual · clean and oil the chain · fix a punctured tube	Students can undertake all of the basics of bike maintenance: · change a flat tyre · check tyre pressure · adjust seat height to fit individual · clean and oil the chain · fix a punctured tube
Students demonstrate successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands).	Students demonstrate successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands) and are beginning to take the lead or serve as role models for others.	Students demonstrate and can lead successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands).

Continued overleaf.



LEVEL 7 – 8 RUBRIC: BIKE ED (Continued)

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
Students obey all road safety rules whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs).	Students obey all road safety rules whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs) and are beginning to take the lead or serve as role models for others.	Students lead others in adherence to all road safety rules, instructions and norms whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs).
Students obey all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths).	Students obey all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths) and serve as role models for others.	Students lead others in obeying all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths).
Students can identify and mitigate hazards in a community setting with assistance. Students can plan a safe travel route using a range of technologies and information (with teacher oversight)	Students can plan a safe travel route using various geospatial technologies and information (with teacher oversight) based on current conditions, hazards and the environment.	Students can plan several safe travel routes alternatives using various geospatial technologies and information (with teacher oversight), choosing the best and safest route based on current conditions, hazards and the environment.

Tuning in activity. Local intersections and roads.

Approx. 5 minutes

Resource Requirements

Laptops/tablets, at least one per group.

Safety

N/A

Activities & Differentiation

Students think of a local intersection that they are familiar with, which they feel would be challenging on a bike, and locate it on Google Maps.

Each group shares their chosen intersection with the class and explains why they think it would be challenging to ride on a bike, and any strategies they might use to ride through the area safely.

Teaching Points

If students can't think of an intersection, or if there aren't many available in the area, consider other challenging areas to ride such as narrow roads, rail crossings, where a bike lane ends or commonly has cars parked in it, roads with pot-holes at the edges, shopping strips, etc.

Encourage students to also think about how car drivers navigate intersections and how it might be different on a bike.



LESSON PLAN

Unit 4 Lesson 4: Intersections and road skills



Safety Checks.

Approx. 5 minutes

Resource Requirements

Bicycles (at least one per two students), helmets (one per student), helmet fit guide, and ABCD check guide.

Safety

- If using a class set of helmets, ensure that the helmets have been cleaned for hygiene.
- Dropping the bike should only be from a very small height (approx. 5-10cm).
- Ensure bike seats are at the appropriate height for the student.

Activities & Differentiation

Helmet & clothing check

Reminder from the teacher how to correctly put on helmet and check that they are wearing correct clothes.

- Two finger check (above eyebrow, under chin strap and forming a 'V' at the ear) and tighten the dial.
- Clothing is brightly coloured, for good visibility.
- Long pants are close fitting at the base, so stop it catching in the chain.
- Shoes are sturdy, close toed and non-slip, for stopping and protection.
- Students will put on their own helmets.

** For suggestions regarding safety considerations and how to adapt the helmet and clothing safety check to accommodate students with specific religious or cultural clothing, please email bikeed@transport.vic.gov.au.*

ABCD bicycle check

Each student completes a check of their bicycle, as led by the teacher. Use ABCD check guide. The ABCD check is as follows:

- A. Is there air in the tyres? Squeeze the tyre walls.
- B. Do the brakes work? Squeeze each brake whilst lightly pushing the bike.
- C. Does the chain move smoothly? Inspect the chain and move the pedals.
- D. Is anything loose on the bike? Check with a very small drop (whilst still holding on to the bike).
- E. You may also choose to add "E" for handlebar Ends: check that the end caps at the ends of the handlebars are not missing or damaged, as the hollow pipe of the handlebar can cause injury in a fall.

Attitude check

Try your best, have fun, respect others.

Teaching Points

We must always wear a helmet when on a bike because it protects our head and our very important brain.

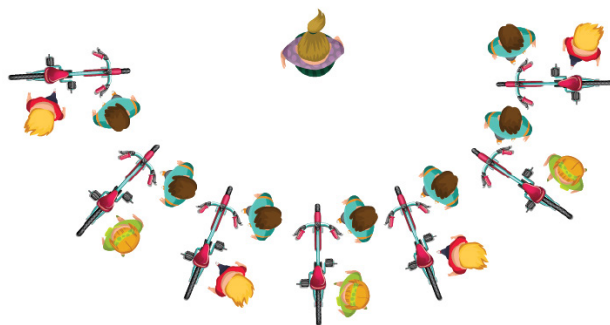
Just as important, is for the helmet to be fitted correctly, otherwise it won't work properly.

If we aren't dressed properly then we can't be seen easily, so someone might run into us.

We must check the bike before we ride. If the bike has a problem, then it might be unsafe to ride on.

Key Questions

- Why do we wear a helmet?
- What are the best ways to make sure that cars and other riders can see you?
- Why do we do a bike check before we ride?



Activity 1. Intersection Theory.

Approx. 10 minutes

Resource Requirements

Intersection guide diagrams.

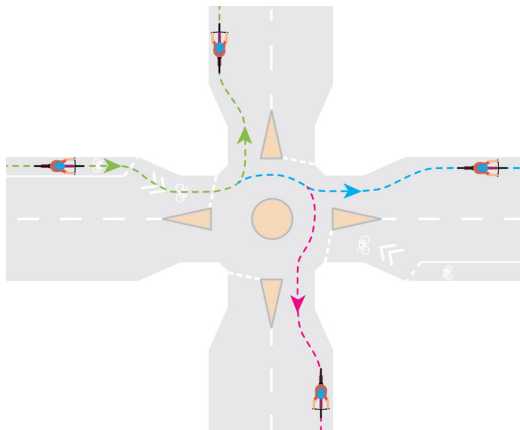
1. Roundabout
2. Cross intersection

Activities & Differentiation

Hand out sheets with diagrams, or project screen with diagrams, or draw on whiteboard, or print on a large sheet and use toy cars/bikes/figurines to demonstrate. Explain to students that these are pre-learning for on-the-bike activities in the next session.

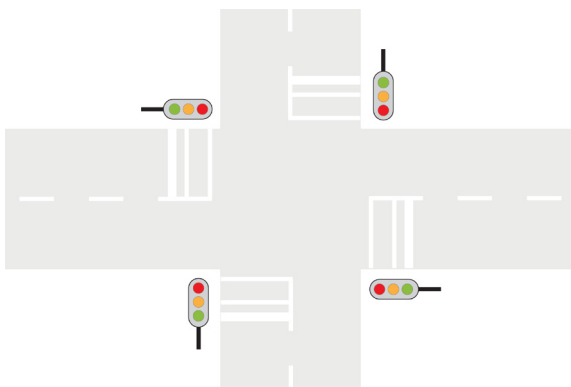
1. Roundabouts

Start with blank roundabout, and draw path of each rider (turning left, going straight, turning right), discussing process of each.



2. Right Turns at Intersections

Use Cross Intersection diagram and explain process for hook turns.



Teaching Points

** In all intersection cases, also encourage students to consider dismounting their bike and crossing as a pedestrian (stop, look, listen, think). This is the safest way to navigate intersections and can be done in almost all situations.*

1. Roundabouts

Discuss the best way for a bike rider to navigate a roundabout.

- Discuss the key dangers of a roundabout: the narrow concrete areas where it is not safe to be overtaken by a vehicle.
- Scan, signal, scan to merge into the traffic lane (called “taking the lane”) on approach.
- Signal first before entering the roundabout, then keep two hands on the handlebar. Repeat the signal only if it is necessary to convey intentions to another road user.
- Who gives way? Give way to anyone coming from your right, or anyone already on the roundabout circle.
- Stay in the centre of the lane all the way through the roundabout, until you have passed the narrow “squeeze points”.
- Signal if turning left or right, but not if going straight ahead.

2. Right Turns at Intersections:

There are three different ways that bike riders can make a right turn on the road.

1. Turn right from the road.

Here the bike rider signals for a right turn, does a head-check, and slowly moves to the right side of the road when it is safe to do so. Stopping at the right of the road at the intersection, the bike rider makes the right turn when there is a safe gap. This should be done when there is only one lane of traffic, there is low traffic volume, and the rider is confident they can make the move safely.

2. Make a hook turn.

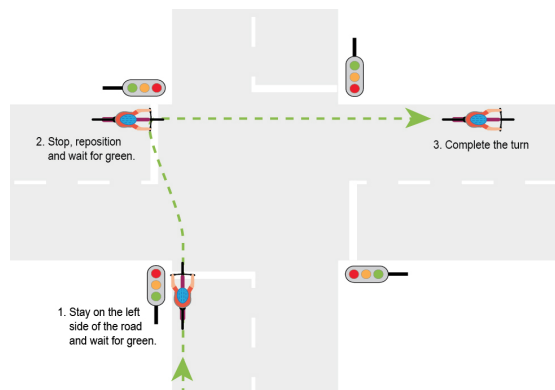
Here the bike rider can pull over to the left of the road and stop. They will then turn the bike right to face the direction they will be turning and wait until there is no traffic, so that they can cycle directly across the road. This is safer, as there is no merging

LESSON PLAN

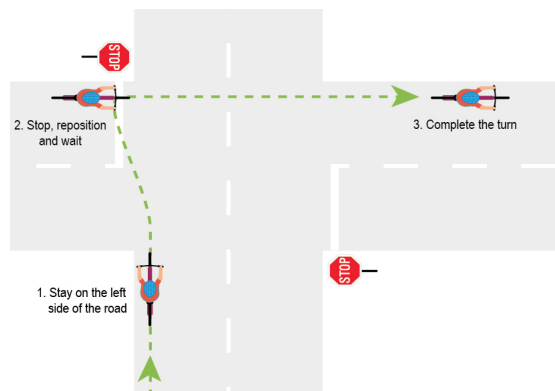
Unit 4 Lesson 4: Intersections and road skills



Hook Turn with Traffic Lights:



Hook Turn without Traffic Lights:



Progressions:

- Split into 4 groups, with two groups assigned to each intersection type.
- Each group draws their chosen pathway(s) through the intersection and then presents it to the class, with reasoning.

required and the bike rider is in a position to see the whole intersection whilst stationary. This is a safer option if traffic volumes are high, especially at larger, cross-intersections.

3. Dismount and cross as a pedestrian (see above).

Key Questions

- When would you make each different type of right turn?
 - It depends on the road, how much traffic there is, how difficult the turn is, road conditions (is visibility high/low, bad weather?) and how confident the rider is.
- What is the order of the right turn methods, from safest to least safe?
 - Dismount and walk, hook turn, right turn from the road.

Activity 2: On road safety.

Approx. 10 minutes

Resource Requirements

N/A

Safety

- Students are to always maintain a safe distance from the road.



Activities & Differentiation

Depending what road scenarios are available within the environment surrounding the school, and staffing levels, you may choose to do the practical activity or use group discussions and worksheets or use a combination of both.

Option 1: Practical activity

In small groups, take students to the road adjacent and visible from the school.

- The road should ideally be relatively lightly trafficked with some parked cars

If an intersection is available, this is a great additional talking point, to revise the Intersection Theory activity. Use teaching points listed to lead discussions.

Option 2: Discussion & worksheets

Provide printed screenshots (or display on screen) of a local Google maps street view with cars parked, a driveway entering onto a roadway, and a road with a bike lane that ends or has a car parked in it.

In groups of 2-3, students are to discuss the points below and draw on the image where they would ride and note the hazards they need to avoid.

Teaching Points

Car door hazards

‘Dooring’ is a major hazard for bike riders on the road. This is where occupants open the door of a parked car into the path of bike riders. This is extremely dangerous and good cycling behaviour is needed to manage it.

- Explain the road safety context for managing ‘dooring’.
- Car dooring can be managed by ensuring that you ride at least 1 metre away from the side of any parked car.

Safely entering the road

A large proportion of crashes involving children are from bike riders carelessly entering the road from the footpath or a driveway. This is because bike riders can be difficult to see for cars (especially if there are parked cars in the vicinity) and bike riders may enter the road without sufficiently checking for road traffic.

Explain the road safety context for learning how to enter the road correctly on a bike.

The correct way to ride out is:

1. Walk your bike to the edge of the roadway.
2. Scan right, and when clear, place your bike onto the roadway pointing in the direction of travel.
3. Mount the bike and move starting pedal into power position.
4. Scan behind (over the right shoulder) before riding off in a straight line.

Merging into a traffic lane

Sometimes a bike lane ends, or has an obstruction such as a sign or a parked car, and riders need to merge into the traffic lane.

Explain the road safety context for learning how to merge safely from a bike lane into a traffic lane.

The correct way is:

1. Observe the hazard ahead
2. Scan behind to check for traffic coming
3. If it is clear, signal right to show intention to merge
4. Scan behind again before merging
5. Move to the right to position 1 metre out from the parked car or obstacle
6. Once past the obstruction, if the bike lane is clear, signal left and return to the bike lane

Key Questions:

What are the dangers when riding past parked cars?
What do we need to be aware of, and how can we



avoid them?

- Danger of being 'doored'
- Observe parked cars to look for a driver inside
- Ride 1 metre out from parked cars

How do we safely enter the roadway? What hazards do we need to be aware of?

- Stop before entering the roadway and scan both ways to ensure it is safe to enter
- Ride on the left side of the road, being careful not to ride out too far

When might we need to merge from the bike lane into the traffic lane? What is the process?

- When there is an obstruction or parked car blocking the lane
- Scan, signal, scan again, then merge to pass the obstruction. Return to the bike lane if and when it is clear.

Activity 3. Move on over.

Approx. 10 minutes

Resource Requirements

Cones. Chalk can be used to create line markings, and draw directional arrows on the ground. This setup works extremely well using the side-lines of a tennis court as the "bike lanes".

Activities & Differentiation

This activity will involve students riding in a simulated bike lane that ends (due to a parked car) and must then merge into the "traffic lane" and ride 1 metre out from the edge of the lane.

- Remind students about the skill of scanning behind (head-checks), and signalling. Introduce the concept of indicating to show that you are changing lanes. Explain when you would have to do this.
- You may wish to first have the students walk (with or without) their bikes through the course slowly. Explain the scan, signal, scan process and when each step should occur.

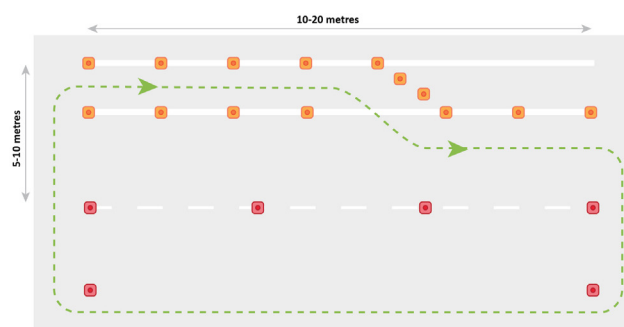
Modifications

- You may wish to have this activity occurring on only one side of a rectangle (not both as in the second progression diagram), and a different (less complex) activity such as slalom, along the opposite edge of

Safety

- Must be completed at low speed.
- Students must maintain at least two bike lengths distance to other bike riders.

Activity Setup



Teaching Points

Negotiating your movements with other bike riders and road users on paths is very important. Most important for students is to have a safe attitude, where each bike rider will act in the safest, most predictable way possible to avoid collisions.



LESSON PLAN

Unit 4 Lesson 4: Intersections and road skills



the rectangle; so that the teacher can closely observe for safe merging and provide feedback.

- If students are not confident taking a hand off to signal, they can use their voice to say “merging” instead.
- If students are not confident to scan behind without swerving out of the lane, they can practice just looking sideways to start with, and build up to checking behind.
- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources).

Progressions

- As students become competent at the task, some students will be instructed to take the traffic lane from the start (diagram overleaf; following the blue line and arrows), and they then become traffic that the bike lane traffic must give way to / merge into.
- Initially, the traffic lane riders should ride slowly enough to allow a gap for the merging rider to merge in front of them. As skills progress, traffic lane riders can choose to speed up so that the bike lane cannot merge in front of them and must slow or stop to give way; or may choose to slow down to make merging possible; simulating real-life situations in traffic.
- For this progression, the confident riders should begin the green path (bike lane) only when they are ready, with less confident riders taking the blue path (traffic lane) until they are confident to take the bike lane.
- As students get more familiar with this activity, they could choose which lane they take (bike lane or traffic lane) by signalling their intentions.
- A teacher or non-riding student can stand in the area where the “parked car” is in the bike lane and have their arm out as if it is an opened door, reminding students that they need to be one metre out to avoid getting “doored”. The student or teacher in the parked car could hold a pool noodle out as the “door” instead of holding their arm out. Note: this should be a distance indicator only, and should not be allowed to make contact with the student on the bike.

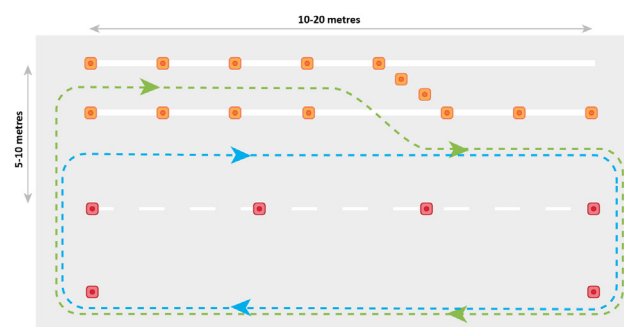
Key Questions

How do you avoid collisions when merging into a traffic lane?

- Safe attitude.
- Low speed.
- Understanding the road rules for merging.
- Scan, signal, scan.
- Communication (signalling).
- Being prepared to slow and stop if there is not space to merge.

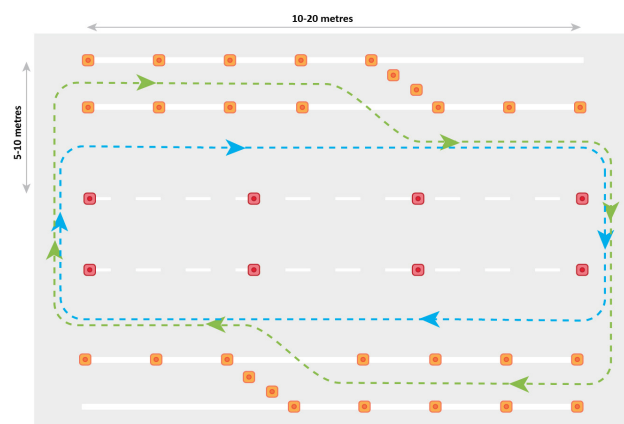
Progression Activity Setup

Adding a “traffic lane” of riders.



Alternate Setup

Using both sides of a circuit so students get two opportunities to practice.



LESSON PLAN

Unit 4 Lesson 4: Intersections and road skills



Activity 4. Unsigned Intersections.

Approx. 10 minutes

Resource Requirements

Cones, and stop and giveaway signs.
Chalk can be used to create line markings, draw way signs, and draw directional arrows on the ground.
Signs may be printed and laminated, with beanbags used to stop them blowing away.

Activities & Differentiation

This is the same course setup as the previous Cross Intersections activity, but without signs in the middle.

- This activity will involve students riding their bicycles through an unsigned intersection.
- Explain that, at roundabouts or intersections without signs, we give way to the rider (or vehicle) on our right. Demonstrate this with volunteers.
- Have the students walk their bikes through the course slowly, showing them how to give way as they do so.
- The riders will follow a similar route as the Cross Intersections course, where they can ride around the outside until comfortable coming into the intersection, and then may ride across the intersection after stopping to give way.
- Firstly, have students only follow the green path – with no cross traffic. Once they are comfortable, add in the blue path, which creates cross traffic.
- The teacher should be at the intersection, observing and providing feedback to students as they negotiate the intersection.

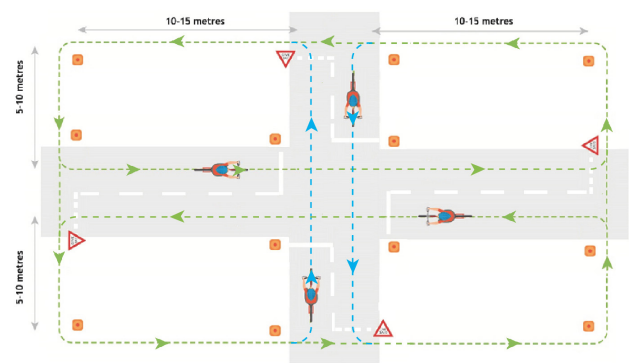
Modifications

- You may add non-riders with 'stop signs' (like a school crossing supervisor) at points around the outside of the circuit.
- May wish to limit the number of bike riders using the intersection at first to allow easier gaps to be picked.
- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources).
- Less confident or nervous riders can choose to continue riding around the outside of the course (anti-clockwise only), until they feel ready to enter the intersection. They will still learn by observing how other students navigate through the intersection.

Safety

- Must be completed at low speed.
- Students must maintain at least two bike lengths distance to other bike riders.

Activity Setup



Teaching Points

Students making decisions at the intersection.

- Provide opportunities for students to make decisions and pick safe gaps in traffic when they are ready.

Key Questions

Who goes first?

- If there are no signs, you must give way to the rider coming from your right.

Progressions

- As students become more confident, as an extension activity they may be allowed to choose to turn left at the intersection to begin with, and then add in the option of turning right, or may still go straight ahead. Students will need to indicate their intentions in this instance.



Reflection & closure.

Approx. 5 minutes

Activities & Differentiation

What did you learn from watching traffic?

What are some of the major road safety issues we learned how to manage today?

- Making a right turn at intersections,
- Roundabouts,
- Unsigned intersections,
- Car dooring,
- Entering a road,
- Merging from a bike lane into traffic lane.

How do we manage each of those?

Thumbs up/down/sideways: How confident do you feel about navigating roundabouts and turning right at intersections?

Key Questions

What do we do at an unsigned intersection?

- Give way to the bike rider or car on your right.

Are there any bike safety issues that you still unsure how to deal with?



Lesson 5: Riding stations (part 3)

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Bikes are for everyone!

Anyone can ride a bike. However, some students may require additional assistance in the form of modified equipment and differentiated teaching. Suggestions for activity differentiation are provided throughout the lesson plans. Some students may also benefit from learning support aids such as social stories and other resources. If you would like further information on options for equipment modifications, adaptive bicycles and assistive technology, and learning support aids to assist with the delivery of Bike Ed, please email bikeed@transport.vic.gov.au.



SUGGESTED STAGE

While this Unit is designed for Years 7 and 8 (age range 12-15 years), you may choose to use these lessons for a different age range, depending on the development, maturity and existing bike riding experience level of your students.



SUGGESTED DURATION

This is the fifth of nine lessons for Unit 4 – Riding independently.
Suggested lesson duration: 45 minutes.



LEARNING INTENTIONS

- For students to complete all activities with control.



SUCCESS CRITERIA

- Demonstrate how to change gears in a variety of situations.
- Apply brakes smoothly with balance and control under pressure situations.
- Keep a safe distance (at least 2 bike lengths) when riding.



EQUIPMENT

- Please refer to Unit 4 Appendix 2 for riding station setup details and diagrams.
- Bicycles (at least one per two students), helmets (one per student), pens, self-assessment sheets, cones, measuring tapes, stop watches, tennis balls/small beanbags, ground marking (existing surface marks, tape, or removable markings).



LESSON PLAN

Unit 4 Lesson 5: Riding stations (part 3)



CURRICULUM LINKS

The Bike Ed program is designed to support all students by emphasizing the importance of safety and promoting independent travel skills. The Bike Ed program caters for all students and recognizes the need to teach safety and independent travel for all. Acknowledging the diverse needs of learners, we are committed to providing tailored assessment materials for students working at levels below the Foundation stage (A-D curriculum). For more information please email bikeed@transport.vic.gov.au.

CONTENT DESCRIPTORS (Geography)

VC2HG8S02 collect, organise and process information and data from primary and secondary sources, including fieldwork, and using geospatial technologies and digital tools as appropriate.

VC2HG8S03 represent and describe information and data using a range of formats, including maps constructed with geospatial technologies.

(HPE)

VC2HP8M01 refine and transfer movement skills in a variety of movement situations, including indoor, outdoor and aquatic settings.

VC2HP8M02 design and demonstrate how movement strategies can be manipulated to improve movement outcomes.

VC2HP8M03 demonstrate and explain how movement concepts related to effort, space, time, objects and people can be manipulated to improve movement outcomes.

VC2HP8M04 adapt and perform movement sequences in a variety of contexts, demonstrating how the movement elements of time, effort, space, people and objects can enhance performance.

ACHIEVEMENT STANDARD (EXTRACT) (Geography)

By the end of Level 8, students:

- collect, organise, process and represent information and data from primary and secondary sources using geospatial technologies.

(HPE)

By the end of Level 8, students:

- apply and transfer movement skills and movement concepts across a range of situations. They implement and evaluate the effectiveness of movement strategies on movement outcomes. They propose and evaluate strategies designed to promote personal health and wellbeing outcomes.



LEVEL 7 – 8 RUBRIC: BIKE ED

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
Students can identify safety issues in their own and others' bikes, clothing, and equipment, and suggest practical solutions to improve safety.	Students can undertake some of the basics of bike maintenance: · change a flat tyre · check tyre pressure · adjust seat height to fit individual · clean and oil the chain · fix a punctured tube	Students can undertake all of the basics of bike maintenance: · change a flat tyre · check tyre pressure · adjust seat height to fit individual · clean and oil the chain · fix a punctured tube
Students demonstrate successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands).	Students demonstrate successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands) and are beginning to take the lead or serve as role models for others.	Students demonstrate and can lead successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands).

Continued overleaf.



LEVEL 7 – 8 RUBRIC: BIKE ED (Continued)

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
Students obey all road safety rules whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs).	Students obey all road safety rules whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs) and are beginning to take the lead or serve as role models for others.	Students lead others in adherence to all road safety rules, instructions and norms whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs).
Students obey all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths).	Students obey all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths) and serve as role models for others.	Students lead others in obeying all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths).
Students can identify and mitigate hazards in a community setting with assistance. Students can plan a safe travel route using a range of technologies and information (with teacher oversight)	Students can plan a safe travel route using various geospatial technologies and information (with teacher oversight) based on current conditions, hazards and the environment.	Students can plan several safe travel routes alternatives using various geospatial technologies and information (with teacher oversight), choosing the best and safest route based on current conditions, hazards and the environment.

Tuning in activity. Brainstorming key bike skills.

Approx. 5 minutes

Activities & Differentiation

In groups of 2 or 3, students think back to the riding stations in lessons 1 and 2, and brainstorm responses to the following questions:

- What worked well/not well when you did the riding stations?
- What key skills did you do well?
- What key skills did you find that you need to work on? Why?

Each student shares one response with the class.

Teaching Points

If needed, prompt students to consider key skills such as:

- Balance and control
- Turning
- Tight turns
- Braking / stopping
- Riding one-handed
- Slow riding



LESSON PLAN

Unit 4 Lesson 5: Riding stations (part 3)



Safety Checks.

Approx. 5 minutes

Resource Requirements

Bicycles (at least one per two students), helmets (one per student), helmet fit guide, and ABCD check guide.

Safety

- If using a class set of helmets, ensure that the helmets have been cleaned for hygiene.
- Dropping the bike should only be from a very small height (approx. 5-10cm).
- Ensure bike seats are at the appropriate height for the student.

Activities & Differentiation

Helmet & clothing check

Reminder from the teacher how to correctly put on helmet and check that they are wearing correct clothes.

- Two finger check (above eyebrow, under chin strap and forming a 'V' at the ear) and tighten the dial.
- Clothing is brightly coloured, for good visibility.
- Long pants are close fitting at the base, so stop it catching in the chain.
- Shoes are sturdy, close toed and non-slip, for stopping and protection.
- Students will put on their own helmets.

** For suggestions regarding safety considerations and how to adapt the helmet and clothing safety check to accommodate students with specific religious or cultural clothing, please email bikeed@transport.vic.gov.au.*

ABCD bicycle check

Each student completes a check of their bicycle, as led by the teacher. Use ABCD check guide. The ABCD check is as follows:

- A. Is there air in the tyres? Squeeze the tyre walls.
- B. Do the brakes work? Squeeze each brake whilst lightly pushing the bike.
- C. Does the chain move smoothly? Inspect the chain and move the pedals.
- D. Is anything loose on the bike? Check with a very small drop (whilst still holding on to the bike).
- E. You may also choose to add "E" for handlebar Ends: check that the end caps at the ends of the handlebars are not missing or damaged, as the hollow pipe of the handlebar can cause injury in a fall.

Attitude check

Try your best, have fun, respect others.

Teaching Points

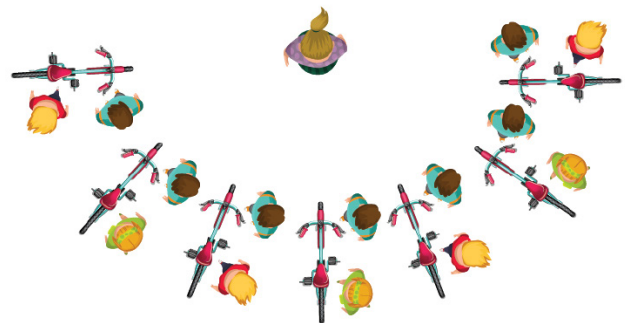
We must always wear a helmet when on a bike because it protects our head and our very important brain. Just as important, is for the helmet to be fitted correctly, otherwise it won't work properly.

If we aren't dressed properly then we can't be seen easily, so someone might run into us.

We must check the bike before we ride. If the bike has a problem, then it might be unsafe to ride on.

Key Questions

- Why do we wear a helmet?
- What are the best ways to make sure that cars and other riders can see you?
- Why do we do a bike check before we ride?



Activity 1. Hot spot game.

Approx. 5 minutes

Resource Requirements

Bicycles (at least one per two students), helmets (one per student) and cones or other obstacles.

Activities & Differentiation

Set up an area between two lines approximately 5-10 metres apart, with a series of obstacles for students to avoid. These obstacles can be cones, bean bags, balls or anything safe that is available.

Students should ride, slowly and in control, from one side to the other whilst avoiding the obstacles, then returning to the start by riding around the outside of the course (as per the diagram).

Modifications

- Set up multiple lanes to cater for different levels and allow students to choose their level.
- The number of the obstacles in each lane can be adjusted for different groups, with novice riders having fewer obstacles, and more advanced riders having more obstacles placed closer together.
- Non-slip rubber floor markers/spots, or chalk markings, make the game less intimidating for novice riders.
- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources).

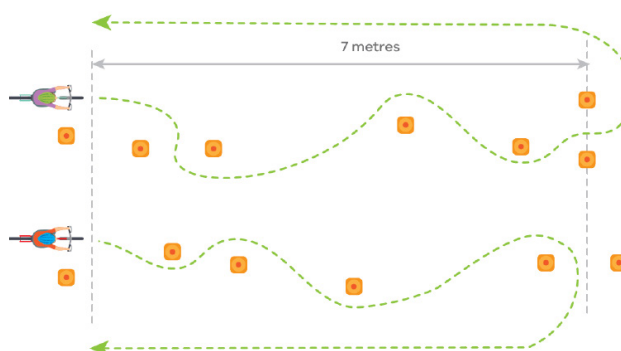
Progressions

- The difficulty can be increased as the students successfully negotiate each pass by adding more obstacles to the course.
- The size of the obstacle can change the difficulty.
- You can include the "Traffic Light" game as part of this activity (See Unit 1, Lesson 4). The teacher will call 'Red' (all riders stop), 'Yellow' (all riders ride slowly), and 'Green' (all riders resume normal speed).

Safety

- Ensure that students do not go too quickly and maintain space to other bike riders.
- Make sure that obstacles will not cause bike to fall if hit.

Activity Setup



Teaching Points

The focus of the game should be to apply the movements in a controlled manner. Students should focus on control, rather than speed.

Key Questions

- How did you steer the bike to make it as easy to avoid the obstacles as possible?
- Slow, smooth steering.



Activity 2. Riding stations.

Approx. 27 minutes

Resource Requirements

Bicycles (at least one between two students), cones, measuring tapes, stop watches, small beanbags, ground marking (existing surface marks, tape, or removable markings).

Safety

- Bike riders to keep a safe distance from each other.
- Non-riders to keep out of the riding area unless measuring.
- Helmets to be worn at all times.
- Unused bikes to be stored away from the riding area.
- Students to stay in their activity area and not roam between groups.
- Riders to dismount and walk their bikes between stations.

Activities & Differentiation

Walkthrough of riding stations

- For this class the students will be running their own bike skills stations and assessment.
- Students will work in pairs or small groups.
- Students will spend five minutes at each station before moving on to the next station. There are five stations in total.
- At each station one student will complete the station whilst their partner assists by measuring, timing or counting.
- Discuss the requirements of riders and partners at each of the five stations.

* Note: if some students' skills are not yet up to the level required to complete these riding stations, you may wish to interchange some or all with stations from lessons 1 & 2 (Appendix 1), to ensure all students can participate, be challenged and experience success.

Riding stations

1. Waterdrop – Record the amount of water carried in a cup for 10 metres. This promotes bike control and develops one-handed riding skills.
2. Chicane – Record the minimum diameter of a full 180-degree turn made. This promotes balance and bike control.
3. Track stand – Record the maximum time standing still on the bike without putting a foot on the ground. This promotes balance and bike control.
4. Braking – With a 5m ride to build speed, record the time taken after crossing the line until the stop line, 3m on. Must stop exactly on the line to count. This promotes braking and bike control.
5. Swapping Turns – Record the number of times the

Activity Setup - Riding stations

*please refer to Unit 4 Appendix 2 for setup details and diagrams.

Teaching Points

Working together.

- Students will need to work together at each station.
- Make sure that each student has equal time riding at the station.

Activities

- Explanation of each activity is on the self-assessment sheets.

Accurate measurement

- It's important that students make accurate measurements.
- This will involve timing, measuring and counting.

Honesty

- Riders and their partners need to be honest in their assessments.

Students working independently

- Ensure students are working safely and productively in their groups.

Work with novice riders to help them reach a level where they can practice and join in the riding stations.

Key Questions

- How do we use the stopwatch/measuring tape?
- What is important to make this activity work well for everybody?
- How do we work productively as a group?
- How do we make sure that everyone is getting a fair turn?



LESSON PLAN

Unit 4 Lesson 5: Riding stations (part 3)



pair swap turns with each other (must pass on the right) within 20m. This promotes communication, bike and speed control.

Modifications

- For students that are still learning to balance and pedal, the teacher will be able to work more directly with them whilst the others do their self-assessments.
- Students who are not yet able to balance and pedal can still participate in these activities using a balance bike (refer to additional resources).
- Novice students may wish to repeat easier stations more often with supervision.

Progressions

- Each station will be effective for bike riders of all levels, although some will be more challenging than others.

Reflection & closure.

Approx. 3 minutes

Activities & Differentiation

What worked well and what were the challenges in doing the riding stations?

Raise hands to indicate the easiest and most difficult stations.

Questioning to understand some typical scores for each activity.

Write answers on self-assessment sheet:

1. What parts of bike riding do you do well?
2. What parts of bike riding do you need to work on?

Thumbs up/down/sideways: how much do you think you have improved your bike control skills in the riding stations?

Key Questions

What worked well/not well when you did the riding stations?

What parts of bike riding do you need to work on? Why?

What parts of bike riding do you do well?



Lesson 6: Maintenance and group riding skills

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Bikes are for everyone!

Anyone can ride a bike. However, some students may require additional assistance in the form of modified equipment and differentiated teaching. Suggestions for activity differentiation are provided throughout the lesson plans. Some students may also benefit from learning support aids such as social stories and other resources. If you would like further information on options for equipment modifications, adaptive bicycles and assistive technology, and learning support aids to assist with the delivery of Bike Ed, please email bikeed@transport.vic.gov.au.



SUGGESTED STAGE

While this Unit is designed for Years 7 and 8 (age range 12-15 years), you may choose to use these lessons for a different age range, depending on the development, maturity and existing bike riding experience level of your students.



SUGGESTED DURATION

This is the sixth of nine lessons for Unit 4 – Riding independently.
Suggested lesson duration: 45 minutes.



LEARNING INTENTIONS

- For students to perform basic bike maintenance.
- For students to ride safely in a group of bike riders (in a school setting).



SUCCESS CRITERIA

- Students can safely:
 - Check tyre pressure
 - Adjust seat height to fit individual
 - Clean and oil the chain
 - Change a flat tyre
 - Fix a punctured tube
- Safely ride in single file or two abreast, maintaining safe distances and communicating effectively.



EQUIPMENT

Bicycles, helmets, bags, chain oil, hexagonal (allen) key, bike pump with pressure gauge, and printed maps of upcoming rides.



LESSON PLAN

Unit 4 Lesson 6: Maintenance and group riding skills



CURRICULUM LINKS

The Bike Ed program is designed to support all students by emphasizing the importance of safety and promoting independent travel skills. The Bike Ed program caters for all students and recognizes the need to teach safety and independent travel for all. Acknowledging the diverse needs of learners, we are committed to providing tailored assessment materials for students working at levels below the Foundation stage (A-D curriculum). For more information please email bikeed@transport.vic.gov.au.

CONTENT DESCRIPTORS (Geography)

VC2HG8S02 collect, organise and process information and data from primary and secondary sources, including fieldwork, and using geospatial technologies and digital tools as appropriate.

VC2HG8S03 represent and describe information and data using a range of formats, including maps constructed with geospatial technologies.

(HPE)

VC2HP8M01 refine and transfer movement skills in a variety of movement situations, including indoor, outdoor and aquatic settings.

VC2HP8M02 design and demonstrate how movement strategies can be manipulated to improve movement outcomes.

VC2HP8M03 demonstrate and explain how movement concepts related to effort, space, time, objects and people can be manipulated to improve movement outcomes.

VC2HP8M04 adapt and perform movement sequences in a variety of contexts, demonstrating how the movement elements of time, effort, space, people and objects can enhance performance.

ACHIEVEMENT STANDARD (EXTRACT) (Geography)

By the end of Level 8, students:

- collect, organise, process and represent information and data from primary and secondary sources using geospatial technologies.

(HPE)

By the end of Level 8, students:

- apply and transfer movement skills and movement concepts across a range of situations. They implement and evaluate the effectiveness of movement strategies on movement outcomes. They propose and evaluate strategies designed to promote personal health and wellbeing outcomes.



LEVEL 7 – 8 RUBRIC: BIKE ED

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
Students can identify safety issues in their own and others' bikes, clothing, and equipment, and suggest practical solutions to improve safety.	Students can undertake some of the basics of bike maintenance: · change a flat tyre · check tyre pressure · adjust seat height to fit individual · clean and oil the chain · fix a punctured tube	Students can undertake all of the basics of bike maintenance: · change a flat tyre · check tyre pressure · adjust seat height to fit individual · clean and oil the chain · fix a punctured tube
Students demonstrate successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands).	Students demonstrate successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands) and are beginning to take the lead or serve as role models for others.	Students demonstrate and can lead successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands).

Continued overleaf.



LESSON PLAN

Unit 4 Lesson 6: Maintenance and group riding skills



LEVEL 7 – 8 RUBRIC: BIKE ED (Continued)

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
Students obey all road safety rules whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs).	Students obey all road safety rules whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs) and are beginning to take the lead or serve as role models for others.	Students lead others in adherence to all road safety rules, instructions and norms whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs).
Students obey all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths).	Students obey all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths) and serve as role models for others.	Students lead others in obeying all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths).
Students can identify and mitigate hazards in a community setting with assistance. Students can plan a safe travel route using a range of technologies and information (with teacher oversight)	Students can plan a safe travel route using various geospatial technologies and information (with teacher oversight) based on current conditions, hazards and the environment.	Students can plan several safe travel routes alternatives using various geospatial technologies and information (with teacher oversight), choosing the best and safest route based on current conditions, hazards and the environment.

Tuning in activity. Bike maintenance videos.

Approx. 5 minutes

Resource Requirements

Laptops/tablets, at least one per group.

Safety

N/A.

Activities & Differentiation

In groups of 2 or 3, students search for a good bike maintenance video that shows one of:

- Checking tyre pressure.
- Adjusting seat height.
- Cleaning and oiling the chain.
- Changing a flat tyre.
- Fixing a punctured tube.

Teaching Points

Suggest Park Tools videos, or videos by other reputable brands.

Key Questions

- Why do we need to maintain our bike?
- So that it works better, and costs less as parts will last longer.
 - Having the correct air pressure in the tyres will make



LESSON PLAN

Unit 4 Lesson 6: Maintenance and group riding skills



Each group shares key learnings from their chosen video with the class.

- it easier to ride, and reduce the chance of a flat tyre.
 - Fixing a punctured tube is better for the environment.
- Why do we need to know how to change the seat height?
- Having the correct seat height can maximise efficiency and reduce likelihood of injury.

Activity 1. Bike maintenance.

Approx. 20 minutes

Resource Requirements

Bikes (approximately one between two-three students), rags, chain oil, hexagonal (allen) key, bike pump with pressure gauge.

Protective gear for students: Gloves, glasses, masks.

Safety

- Ensure that students are careful with their hands near chains and gears, which can be sharp.
- Fingers can get caught under bike tyres.
- Use ground sheets to prevent oil from getting on the ground and surfaces, making them slippery.

Activities & Differentiation

Set up the students so that there is one bike between 2 or 3 students. Find an open area that can get dirty, since there will be oil. If not, place towels under the bikes to protect the ground from oil.

Cleaning the bike

- Using the rag, wipe down the surfaces of the bike to remove dirt and grime.
- This is important to protect the bike from long term damage, since the bike has many moving parts that will be damaged by debris.

Cleaning and oiling the chain

- The chain is the link between the rider and the movement of the bike and has many moving parts. It needs to be free of debris and well lubricated to stay functional and make riding easier.
- Optional: Turn the bike upside down.
- Using a rag, lightly hold the chain halfway between the pedals and rear hub. Pull the pedals slowly to rotate the gears and move the chain whilst cleaning with the rag.
- Ensure that, if required, the ground is protected from the oil using a towel or tarp.
- Using bike chain oil, or a multipurpose bike chain lubricant, hold the nozzle directly (5mm) over the chain. Rotate the pedals to move the chain slowly, ensuring that the chain oil seeps into the joints of the chain.

Teaching Points

A maintenance guide is included as part of Unit 4. Have students follow along with the guide as a reference.

It is recommended that teachers leading this activity do a practice run of the maintenance activities to ensure that the session runs smoothly.

Key Questions

Why do we check and maintain our bikes?

- Because they may be unsafe, so we need to check and fix them.

What will happen if the tyres are the wrong pressure?

- Could puncture if too low (edges can pinch) or high (burst).
- Can make it very difficult to ride, or very slow.

Cleaning and oiling the chain



LESSON PLAN

Unit 4 Lesson 6: Maintenance and group riding skills



- Once the chain is oiled, change the gears such that the newly greased chain passes over each of the cogs. This will lubricate those cogs too.
- Hold the rag and pinch the sides of the chain with it to wipe off any excess chain oil. (ideally this should be done after letting the bike sit for a while).

Adjusting the seat

- The bike seat should be set to the correct height. The ideal seat height is such that the rider can sit on the seat whilst touching the ground with their tiptoes. Less confident or beginner riders may wish to have their seat lower until they build up confidence, however, should be aware that this will affect their pedaling efficiency and power, and may lead to a knee injury on longer, hilly rides.
- To adjust the seat, pull the quick release lever to loosen.
- If there is no quick release, use a hexagonal key or adjustable spanner to loosen the seat post.
- Then adjust the seat to the correct height and tighten the seat release whilst ensuring that the seat is straight.
- Make sure that the “minimum insertion point” of the seat post has not been reached or exceeded – this is marked on the seat post with small vertical notches, and/or may be labeled as such. Going beyond this point may damage the frame of the bike and/or cause injury.

Checking tyre pressure

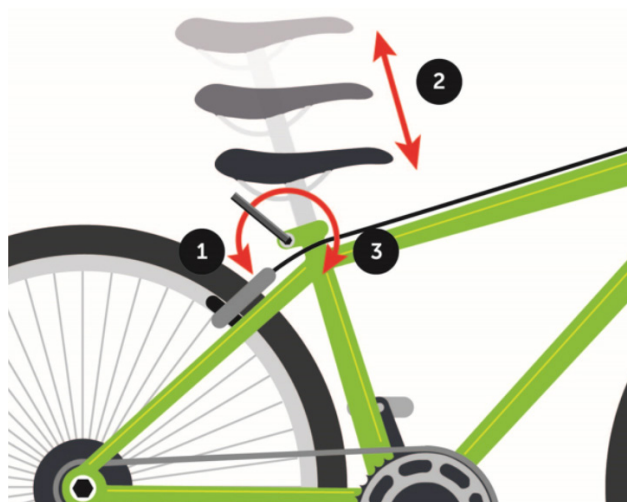
Tyres will slowly lose pressure over time, so will need more air pumped into them every few weeks.

- Check the side of the tyre to see what the recommended pressure is.
- Attach the pump to the tyre nozzle.
- Check the pressure using the gauge.
- Use the pump to add more air until the pressure is correct.

Modifications

- Consider using older students to help with this activity, especially if they show an interest in hands on activities.

Adjusting the seat



Checking tyre pressure



Progressions

- Students who complete this quickly may be used to help other students
- Encourage students who have an interest in bike mechanics to research and learn about other adjustments and repairs via YouTube - the Park Tools channel has very informative and industry-standard content.



LESSON PLAN

Unit 4 Lesson 6: Maintenance and group riding skills



Safety Checks.

Approx. 5 minutes

Resource Requirements

Bicycles (at least one per two students), helmets (one per student), helmet fit guide, and ABCD check guide.

Safety

- If using a class set of helmets, ensure that the helmets have been cleaned for hygiene.
- Dropping the bike should only be from a very small height (approx. 5-10cm).
- Ensure bike seats are at the appropriate height for the student.

Activities & Differentiation

Helmet & clothing check

Reminder from the teacher how to correctly put on helmet and check that they are wearing correct clothes.

- Two finger check (above eyebrow, under chin strap and forming a 'V' at the ear) and tighten the dial.
- Clothing is brightly coloured, for good visibility.
- Long pants are close fitting at the base, so stop it catching in the chain.
- Shoes are sturdy, close toed and non-slip, for stopping and protection.
- Students will put on their own helmets.

** For suggestions regarding safety considerations and how to adapt the helmet and clothing safety check to accommodate students with specific religious or cultural clothing, please email bikeed@transport.vic.gov.au.*

ABCD bicycle check

Each student completes a check of their bicycle, as led by the teacher. Use ABCD check guide. The ABCD check is as follows:

- Is there air in the tyres? Squeeze the tyre walls.
- Do the brakes work? Squeeze each brake whilst lightly pushing the bike.
- Does the chain move smoothly? Inspect the chain and move the pedals.
- Is anything loose on the bike? Check with a very small drop (whilst still holding on to the bike).
- You may also choose to add "E" for handlebar Ends: check that the end caps at the ends of the handlebars are not missing or damaged, as the hollow pipe of the handlebar can cause injury in a fall.

Attitude check

Try your best, have fun, respect others.

Teaching Points

We must always wear a helmet when on a bike because it protects our head and our very important brain.

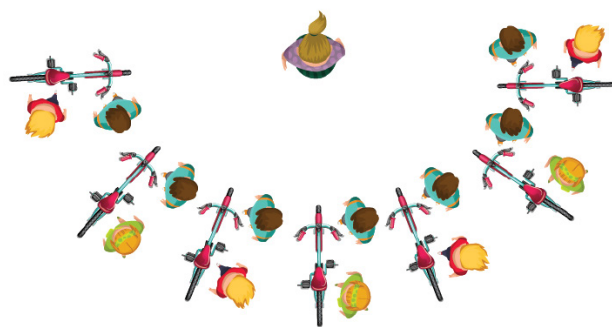
Just as important, is for the helmet to be fitted correctly, otherwise it won't work properly.

If we aren't dressed properly then we can't be seen easily, so someone might run into us.

We must check the bike before we ride. If the bike has a problem, then it might be unsafe to ride on.

Key Questions

- Why do we wear a helmet?
- What are the best ways to make sure that cars and other riders can see you?
- Why do we do a bike check before we ride?



Activity 2. Signaling and voice commands.

Approx. 5 minutes

Resource Requirements

Bicycles (at least one per two students) and helmets (one per student), cones.

Activities & Differentiation

Bring class together for instruction on key signals. See teaching points for details.

In an open area, riders will follow in single file. The movements will be dictated by the leader and signals/commands repeated by all group members.

- Begin with a predictable path, such as around the outside of a rectangular area (such as a basketball court).
- Then progress to move randomly around the area, with left and right turns, as well as stops.

Modifications

- If the space is confined, the group sizes can be limited, or the group split in multiple groups.
- If students are less confident, the activity can commence with smaller groups and then progress later into larger groups.
- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources).

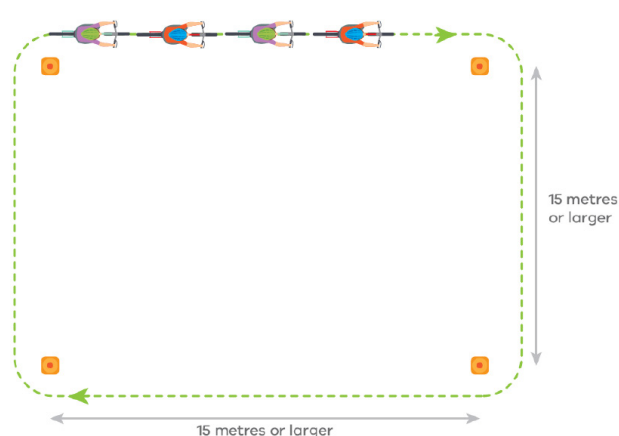
For students who are struggling or nervous about taking a hand off the handlebars to signal, suggest that they follow this process. Once they can ride for at least 10 metres completing the task, they can move to the next step.

1. Start by simply loosening the grip with the signaling hand, to feel how the balance needs to shift.
 2. Take the hand off the grip completely but hover it approx. 5-10cm above the grip.
 3. Take the hand off the grip and place it on the knee on the same side.
 4. Take the hand off and move it very slowly outwards away from the body.
 5. Progress to a full signal.
- *Note that the first 3 steps have the hand in line with the body, so that the balance point is not disrupted by moving the arm sideways. Explain this to students so they understand the importance of moving the arm out slowly, until they are very comfortable with the process.*

Safety

- Maintain at least a bicycle length between each other when in single file.
- Smooth braking to prevent collisions.

Activity Setup



Teaching Points

The signals are:

- Right: right arm extended horizontally.
- Left: left arm extended horizontally

Voice commands accompany these: 'Turning Right', 'Turning Left', "Slowing", and 'Stopping'. These are passed from the leader to the tail of the group, as the signal and command are repeated by each group member until everyone knows.

One of the most important parts of being a safe bike rider is being predictable to other road users.

When riding as a group, everyone needs to behave predictably to ensure that other road users can maintain a safe distance.

Signaling provides other road users and group members with information, allowing your future movements to be known and conducted safely.

Key Questions

Why is it so important to signal what we are doing on the road?

- Predictable for our group members and other road users.

Why should we leave a bike length gap between riders?



LESSON PLAN

Unit 4 Lesson 6: Maintenance and group riding skills



Progressions

- Include hand signals and voice calls that need to be passed back along the group – such as hand signals for turning, and calls for “slowing”, “stopping”, or pointing out obstacles (pot-holes, posts, speed humps, sticks, rocks, dogs, potential car doors, etc).
- Students may lead the activity once they have gained confidence, calling out the commands and signals.

- Because it takes time to react to signals, voice commands and braking, so we need a margin of safety.

What challenges did you find when doing the activity?

- Hard to hear? Need to be assertive with our commands.

Activity 3. Moving into pairs and single file.

Approx. 5 minutes

Resource Requirements

Bicycles (at least one per two students) and helmets (one per student), cones.

Safety

- Maintain at least a bicycle length between each other when in single file.
- Smooth braking to prevent collisions.

Activities & Differentiation

Provide instruction about riding in pairs as a group and riding in single file. We need to know how to do both and how to switch between them.

“Double up!”

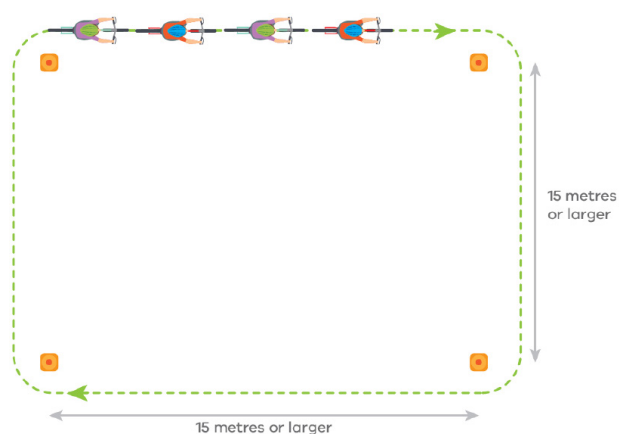
When you hear the command “Double up!”, bike riders will move from single file into pairs. The process:

- The first rider/leader should do a head-check first to make sure it is still safe to move to double file.
- Communicate this to riders behind them. They will call out the words “Double up!” so that people behind can hear them, and this message should be passed back through the group.
- The first, and then every second (alternating) rider will move to the right (into the traffic lane).
- The rider that was behind them will then move up to be on their left.
- Each pair should then move up to close the gap to the pair in front of them.
- Do the process standing in line (single file) first. Number each rider 1, 2, 1, 2, etc. On calling “double up”, each “1” should step to the right, and each “2” should step forward. The group is now in double file.
- Then walk slowly through this same process without bicycles.

“Single file!”

When you hear the command “Single file!”, bike riders will move from pairs into single file. They do this by:

Activity Setup



Teaching Points

Different road environments may require different ways of riding as a group. In quiet streets, riding in pairs as a group may be preferable to keep the group together however, where road/path space is tight, it may be better to be in single file.

Note: It can be safer to be in double file as a group where it would not be safe for a car driver to overtake a single line of riders, such as through roundabouts or queuing at intersections. This also then halves the length of the group and therefore time taken when a car driver does find a safe place to overtake the group.



LESSON PLAN

Unit 4 Lesson 6: Maintenance and group riding skills



- Communicating this to riders behind them. They will call out the words "Single file!" so that people behind can hear them, and this message should be passed back through the group.
- Riders on the left will slow down to create gaps.
- Riders on the right will continue straight and move ahead of the rider that was previously to their left, and then move left into the gap left by that rider.
- As per the previous process (riders numbered 1, 2, etc). On calling "single file", each "1" should step forwards, and then step to the left. The group is now in single file.
- Then walk slowly through this same process without bicycles.

Once students are familiar, do this process slowly on bicycles around a simple and familiar track. The calls should begin with the leader.

- Start with riders in the same order as when they were lined up, and then swap them around so they can experience the difference between the right and left lanes.

Modifications

- If the space is confined, the group sizes can be limited, or the group split in multiple groups.
- If students are less confident, the activity can commence with smaller groups and then progress later into larger groups.

Key Questions

Why is it so important to signal what we are doing on the road?

- Predictable for our group members and other road users.

When would we want to change from single to doubled up riding? And vice versa?

- When there is little road space, we should ride single file. This allows cars to comfortably pass whilst leaving a gap.
- When there is ample road space, doubling up is good because it allows the group to be closer together which makes communication easier.

What challenges did you find when doing the activity?

- Hard to hear? Need to be assertive with our commands.

Progressions

- Students may lead the activity once they have gained confidence, calling out the commands and signals.

Optional. Tortoise game: Slow ride.

Approx. 5 minutes

Resource Requirements

Bicycles (at least one per two students), helmets (one per student) and cones.

Activities & Differentiation

- Line students up along a line, as per diagram, with the finish line 10-15 metres away.
- Riders attempt to be the last rider to cross the finish line by riding as slowly as possible without putting a foot onto the ground.

Modifications

- To ensure everyone gets to participate, if a competition is made out of the activity ensure that

Safety

- Students must maintain at least two bike lengths distance to other bike riders.

Teaching Points

Tips for improving this skill include maintaining good posture, doing half pedals, looking ahead, and not coming to a complete stop.

Key Questions

- Is it easier to ride slowly or at normal speed?
- What tips do you have for other people to help them do the tortoise race?
- Why do we practice slow riding?



LESSON PLAN

Unit 4 Lesson 6: Maintenance and group riding skills



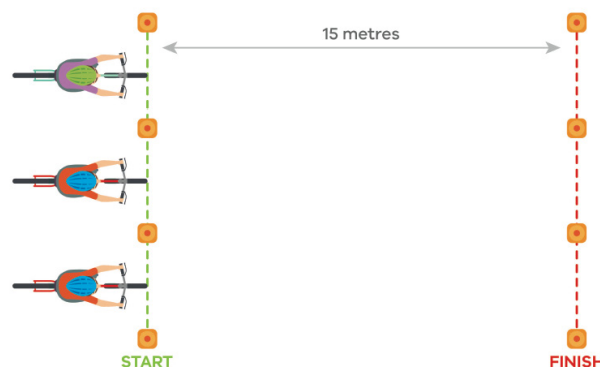
everyone gets to participate and compare their improvement rather than just the most skilled.

- Rather than making it a competition against other students, suggest students keep a tally of how many times they touch their foot down, and aim to improve their score on subsequent runs.
- Students who are not yet able to balance and pedal may still participate using a balance bike by pushing off to start and seeing how long they can balance and roll without touching a foot down, and aiming to reduce the number of foot touches per run.

Progressions

- Encourage advanced students to think about their gear selection (if they have gears and understand them), and experiment with what gear selection works best for riding slowly with control.
- Advanced riders may also wish to experiment with standing on the pedals vs sitting on the seat, and note how this affects balance.
- Advanced riders may also be given a 'head-start' by making them start forward of the others (so they don't have as far to ride).

Activity Setup



Optional. Changing the tyre.

Approx. 15 minutes

Resource Requirements

Bikes (approximately one between two to three students), bike pump with pressure gauge, tyre levers, and student reference sheet.

Safety

- Ensure that students are careful with their hands near chains and gears, which can be sharp.
- Fingers can get caught under bike tyres.
- Use ground sheets to prevent oil from getting on the ground and surfaces, making them slippery.

Activities & Differentiation

1. Turn bike upside down
2. Remove wheel
3. Deflate the tyre
4. Remove one side of the tyre from the wheel rim
5. Remove and replace (or fix) the inner tube
6. Fit the tyre back on the wheel rim
7. Inflate the tyre
8. Reattach the wheel to the bike

Modifications

Consider using older students to help with this activity, especially if they show an interest in hands on

Teaching Points

A maintenance guide is included as part of Unit 4. Have students follow along with the guide as a reference.

It is recommended that teachers leading this activity do a practice run of the maintenance activities to ensure that the session runs smoothly.

Encourage students to also learn how to use a puncture repair kit to fix punctured tubes to save money and the environment.

Key Questions

What will happen if we continue riding when we have a flat tyre?



LESSON PLAN

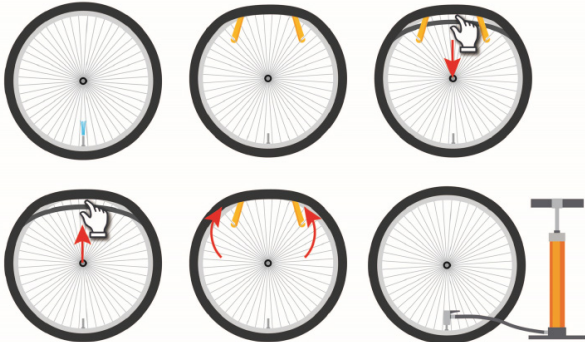
Unit 4 Lesson 6: Maintenance and group riding skills



activities.

Progressions

Students who complete this quickly may be used to help other students.



- It will damage the tyre and rim of the bike, which will be costly to replace.
 - Can make it very difficult and potentially dangerous to ride, or very slow.
- Why should we learn to repair a punctured tube, instead of throwing it away?
- It is better for the environment, and saves money!

Reflection & closure.

Approx. 5 minutes

Resource Requirements

Printed copies of the proposed route map for the next rides.

Safety

N/A.

Activities & Differentiation

Reflect on bike maintenance topics covered today, as well as group riding skills - communication, and moving from single to double file.

Thumbs up/down/sideways: How comfortable are you riding in a group?

Hand out route maps to students in preparation for the upcoming rides.

** Make sure that all permission forms have been returned prior to the rides and that a risk assessment has been undertaken and approved.*

Key Questions

What are the keys to riding in a group?

- Communication,
- Space,
- Predictability.

What are some key tasks required for maintaining your bike in good and safe riding condition?

What are the key steps to replacing a bike tyre? (if this was covered)



Lesson 7: Group ride 1.

Bikes are for everyone!

Anyone can ride a bike. However, some students may require additional assistance in the form of modified equipment and differentiated teaching. Suggestions for activity differentiation are provided throughout the lesson plans. Some students may also benefit from learning support aids such as social stories and other resources. If you would like further information on options for equipment modifications, adaptive bicycles and assistive technology, and learning support aids to assist with the delivery of Bike Ed, please email bikeed@transport.vic.gov.au.



SUGGESTED STAGE

While this Unit is designed for Years 7 and 8 (age range 12-15 years), you may choose to use these lessons for a different age range, depending on the development, maturity and existing bike riding experience level of your students.



SUGGESTED DURATION

This is the eighth of nine lessons for Unit 4 – Riding independently.
Suggested lesson duration: 45 minutes.



LEARNING INTENTIONS

- For students to safely participate in a group ride in the community (low traffic environment).



SUCCESS CRITERIA

- Follow instructions, road rules and work as a group during the community ride.
- Exhibit bike control skills (safe distancing, safe speed) during the community ride.
- Use hand signals, head checks, scanning and voice commands at all times during the ride.



EQUIPMENT

Bicycles (one per student), helmets, cones, completed permission slips, whistle, high visibility vests.





CURRICULUM LINKS

The Bike Ed program is designed to support all students by emphasizing the importance of safety and promoting independent travel skills. The Bike Ed program caters for all students and recognizes the need to teach safety and independent travel for all. Acknowledging the diverse needs of learners, we are committed to providing tailored assessment materials for students working at levels below the Foundation stage (A-D curriculum). For more information please email bikeed@transport.vic.gov.au.

CONTENT DESCRIPTORS (Geography)

VC2HG8S02 collect, organise and process information and data from primary and secondary sources, including fieldwork, and using geospatial technologies and digital tools as appropriate.

VC2HG8S03 represent and describe information and data using a range of formats, including maps constructed with geospatial technologies.

(HPE)

VC2HP8M01 refine and transfer movement skills in a variety of movement situations, including indoor, outdoor and aquatic settings.

VC2HP8M02 design and demonstrate how movement strategies can be manipulated to improve movement outcomes.

VC2HP8M03 demonstrate and explain how movement concepts related to effort, space, time, objects and people can be manipulated to improve movement outcomes.

VC2HP8M04 adapt and perform movement sequences in a variety of contexts, demonstrating how the movement elements of time, effort, space, people and objects can enhance performance.

ACHIEVEMENT STANDARD (EXTRACT) (Geography)

By the end of Level 8, students:

- collect, organise, process and represent information and data from primary and secondary sources using geospatial technologies.

(HPE)

By the end of Level 8, students:

- apply and transfer movement skills and movement concepts across a range of situations. They implement and evaluate the effectiveness of movement strategies on movement outcomes. They propose and evaluate strategies designed to promote personal health and wellbeing outcomes.



LEVEL 7 – 8 RUBRIC: BIKE ED

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
Students can identify safety issues in their own and others' bikes, clothing, and equipment, and suggest practical solutions to improve safety.	Students can undertake some of the basics of bike maintenance: · change a flat tyre · check tyre pressure · adjust seat height to fit individual · clean and oil the chain · fix a punctured tube	Students can undertake all of the basics of bike maintenance: · change a flat tyre · check tyre pressure · adjust seat height to fit individual · clean and oil the chain · fix a punctured tube
Students demonstrate successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands).	Students demonstrate successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands) and are beginning to take the lead or serve as role models for others.	Students demonstrate and can lead successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands).

Continued overleaf.



LEVEL 7 – 8 RUBRIC: BIKE ED (Continued)

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
Students obey all road safety rules whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs).	Students obey all road safety rules whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs) and are beginning to take the lead or serve as role models for others.	Students lead others in adherence to all road safety rules, instructions and norms whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs).
Students obey all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths).	Students obey all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths) and serve as role models for others.	Students lead others in obeying all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths).
Students can identify and mitigate hazards in a community setting with assistance. Students can plan a safe travel route using a range of technologies and information (with teacher oversight)	Students can plan a safe travel route using various geospatial technologies and information (with teacher oversight) based on current conditions, hazards and the environment.	Students can plan several safe travel routes alternatives using various geospatial technologies and information (with teacher oversight), choosing the best and safest route based on current conditions, hazards and the environment.



THIS LESSON INCLUDES A SHORT RIDE OUTSIDE OF THE SCHOOL GROUNDS

You will need to have at least two teachers for the first 20 students and one teacher per 10 students thereafter. At least one teacher must be an accredited Bike Ed instructor. <https://www2.education.vic.gov.au/pal/excursions/guidance/adventure-activities>. Permission forms to allow students to participate in outside bike rides must be returned prior to the ride and a risk assessment must be undertaken and approved.

The importance of inclusion in group ride activities outside of school grounds for all students regardless of ability cannot be underestimated.

Statistics show that road incidents involving children on bikes often occur while the rider is entering the roadway, or at intersections. As such, real-world education and guided experience with these scenarios are crucial to ensuring safety of children riding a bicycle and interacting with other road and path users.

The out-of-school group ride helps students develop confident, independent bike riders, ultimately encouraging the use of a bicycles for active transport, promoting physical activity and reducing car use. As the end-point of a program, the group ride provides a realistic and relevant goal and reward for students,



LESSON PLAN

Unit 4 Lesson 7: Group ride 1



allowing for application and consolidation of riding skills developed throughout the Bike Ed program. Many students find this activity the most empowering and exciting component of the program.

If you would like additional resources and support for including all students in a group ride regardless of ability, please email bikeed@transport.vic.gov.au.

Tuning in activity. Brainstorming group riding.

Approx. 5 minutes

Activities & Differentiation

Think/pair/share in groups of 2 or 3, brainstorming responses to the following questions:

- What skills are you most looking forward to applying on the group ride?
- Which intersections do you think will be most challenging, and how will you navigate them?
- How confident do you feel about riding safely in a group? What things can you do to be safe when riding around others?

Each group shares one response with the class.

Teaching Points

Ensure students are tuning in to keys to riding safely in a group, such as staying aware, maintaining a safe speed, keeping a safe gap between riders, using communication and signals, and riding predictably.

Safety Checks.

Approx. 5 minutes

Resource Requirements

Bicycles (at least one per two students), helmets (one per student), helmet fit guide, and ABCD check guide.

Safety

- If using a class set of helmets, ensure that the helmets have been cleaned for hygiene.
- Dropping the bike should only be from a very small height (approx. 5-10cm).
- Ensure bike seats are at the appropriate height for the student.

Activities & Differentiation

Helmet & clothing check

Reminder from the teacher how to correctly put on helmet and check that they are wearing correct clothes.

- Two finger check (above eyebrow, under chin strap and forming a 'V' at the ear) and tighten the dial.
- Clothing is brightly coloured, for good visibility.
- Long pants are close fitting at the base, so stop it catching in the chain.
- Shoes are sturdy, close toed and non-slip, for stopping and protection.

Teaching Points

We must always wear a helmet when on a bike because it protects our head and our very important brain. Just as important, is for the helmet to be fitted correctly, otherwise it won't work properly.

If we aren't dressed properly then we can't be seen easily, so someone might run into us.

We must check the bike before we ride. If the bike has a problem, then it might be unsafe to ride on.



LESSON PLAN

Unit 4 Lesson 7: Group ride 1



- Students will put on their own helmets.

** For suggestions regarding safety considerations and how to adapt the helmet and clothing safety check to accommodate students with specific religious or cultural clothing, please email bikeed@transport.vic.gov.au.*

ABCD bicycle check

Each student completes a check of their bicycle, as led by the teacher. Use ABCD check guide. The ABCD check is as follows:

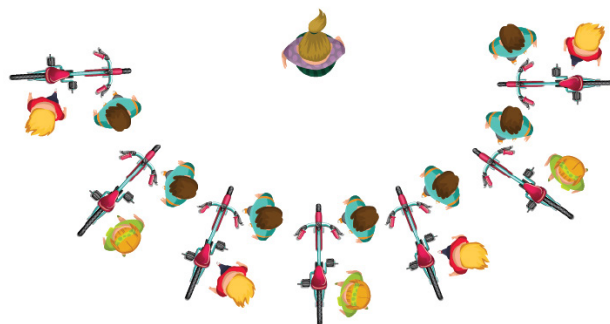
- A. Is there air in the tyres? Squeeze the tyre walls.
- B. Do the brakes work? Squeeze each brake whilst lightly pushing the bike.
- C. Does the chain move smoothly? Inspect the chain and move the pedals.
- D. Is anything loose on the bike? Check with a very small drop (whilst still holding on to the bike).
- E. You may also choose to add "E" for handlebar Ends: check that the end caps at the ends of the handlebars are not missing or damaged, as the hollow pipe of the handlebar can cause injury in a fall.

Attitude check

Try your best, have fun, respect others.

Key Questions

- Why do we wear a helmet?
- What are the best ways to make sure that cars and other riders can see you?
- Why do we do a bike check before we ride?



Activity 1. Venn Ride-agram.

Approx. 5 minutes

Resource Requirements

Cones and stop and give-way signs.
Chalk can be used to create line markings, draw stop and give way signs, and draw directional arrows on the ground. Signs may be printed and laminated, with beanbags used to stop them blowing away.

Activities & Differentiation

This activity will involve students riding their bicycles on two overlapping square circuits. Where the circuits overlap, students must give way to the right.

- Remind students of the Figure 8 activity completed previously where they had to give way to other riders.
- You may wish to first have the students walk their bikes through the course slowly. Explain that the stop sign or give way sign means that they must stop at the line and then wait for the intersection to be clear

Safety

- Must be completed at low speed.
- Students must maintain at least two bike lengths distance to other bike riders.

Teaching Points

Negotiating your movements with other bike riders and road users on paths is very important.

Most important for students is to have a safe attitude, where each bike rider will act in the safest, most predictable way possible to avoid collisions.

Key Questions

How do you avoid collisions in the overlapping courses?

- Safe attitude.
- Low speed.



LESSON PLAN

Unit 4 Lesson 7: Group ride 1



before they can continue.

- The teacher should be at a position to observe both intersections, ensuring safety and providing feedback to students as they negotiate the intersections.

Modifications

- The teacher may wish to limit the number of bike riders using the rectangles at first to allow easier gaps to be picked.
- The course can be set up with stop signs at the intersections, or give way signs, a mix, or no signs at all (unsigned intersection).
- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources), or maybe choose to be pedestrian traffic until they gain the confidence to participate on a balance bike.

Progressions

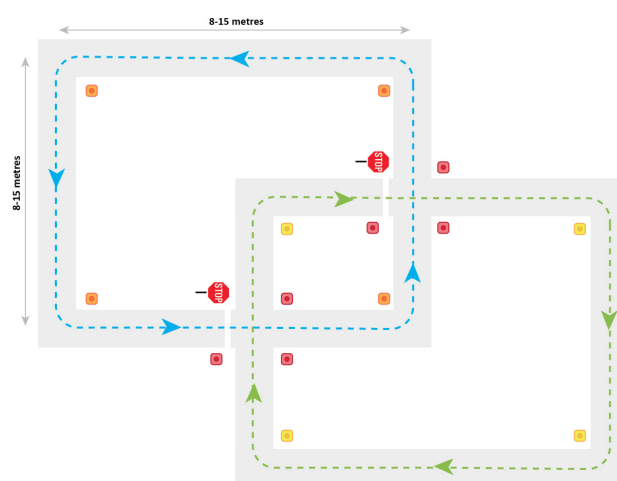
- Encourage students to practice signalling and voice calls of “slowing” and “stopping” while riding around the course.
- More confident students can choose to turn left (ensure they are signalling their intentions) at the intersections to swap to the other rectangle.

- Understanding Give Way to the right road rules.
- Controlled stopping.
- Communication.
- Safe distance between riders.

Why do we stop at the stop line?

- It's the law.
- So that others can safely predict our behaviour. Safe, predictable behaviour means that people can avoid us on the road.
- To give us time to make a safe decision at the intersection, such as picking a safe gap to ride into.

Activity Setup



Activity 2. Group ride.

Approx. 20 minutes

Resource Requirements

- Bikes, helmets, safety vests, mobile phone.
- There must be at least one accredited Bike Ed instructor present on any school bike ride outside of school grounds.

Activities & Differentiation

Begin with a pre-ride briefing of all important rules for the ride.

- Overview of the route we will be riding.
- What obstacles/intersections/hazards we are expecting to encounter.
- The distance we are covering.

Safety

- Recommended that there be a teacher at the front, back and middle of the group.
- Students must follow the rules set out in the pre ride briefing.

Teaching Points

This is an initial ride to help students understand what will be required when we do the longer class ride later on. The length will only be short (approximately 20 minutes) but it will give inexperienced riders the confidence to try the longer class ride in the final lesson.



LESSON PLAN

Unit 4 Lesson 7: Group ride 1



Explanation of the rules for the class ride:

- Keep to the left side of the road, with at least 1 metre space from the parked cars.
- Ride in single file unless the leader calls you to 'Double up!'
- If one rider stops, then all riders stop. This must be communicated by voice to the leader ('Stopping!')
- No overtaking on the road
- Groups ride at the speed of the slowest rider.
- Two bike lengths between bike riders

Call for questions:

Thumbs up/down/sideways for understanding.

Group ride:

Lead the ride safely from the school, following the chosen route. Ensure that teachers and students have been briefed on the route and what to expect.

- Remember to keep the pace as slow as the slowest rider to ensure that everyone is prepared for the longer class ride.
- Follow the route, demonstrating a safe line to ride that provides clearance from parked cars (to prevent 'dooring').
- Model loud commands (Left, Right, Slowing, Stopping) and good hand signals, reinforcing these with the students.
- If a student stops, ensure that you stop everyone so that you ride in a group.
- If you are feeling confident with the group you can find a longer, straight road (if possible) to practice moving from single to double file, and back again.

Pick an easy ride with few hills if possible. Quiet streets near the school make a good route with several left turns.

If required, have students get off their bikes and walk them across the road if you (or they) do not feel comfortable with the situation.

Students require a permission note to go off school grounds. This should be prepared prior to class and include both the short ride and the longer class ride.

- If you wish, use the model wording provided in the resources.

This ride should be at a slow pace to allow students to acclimatize to the road environment. Make the ride as simple as possible to build the confidence of less experienced riders.

Key Questions

- What do I expect to see when I'm doing the ride?
 - Roundabouts, parked cars, traffic, etc.?
- What things am I doing to stay safe on the road?

Reflection & closure.

Approx. 5 minutes

Activities & Differentiation

Bring students together to debrief on the ride.

Provide your perspective on what they did well and what they should improve on.

Students should complete a brief written reflection on their bike riding experience. Questions to answer include:

- What are you better at now than you were at the start of the program?
- What do you want to get better at?

Key Questions

Ask students for feedback on what they found to be interesting.

- What things did they notice that was different to what they expected?
- What did students notice about the other road users they rode with?



LESSON PLAN

Unit 4 Lesson 7: Group ride 1



- What were the most interesting things that you found during the community ride?
- What would you do differently in the next ride?

Thumbs up/down/sideways: how confident are you about doing the longer class ride later in the program?



Lesson 8: Planning to avoid hazards

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Bikes are for everyone!

Anyone can ride a bike. However, some students may require additional assistance in the form of modified equipment and differentiated teaching. Suggestions for activity differentiation are provided throughout the lesson plans. Some students may also benefit from learning support aids such as social stories and other resources. If you would like further information on options for equipment modifications, adaptive bicycles and assistive technology, and learning support aids to assist with the delivery of Bike Ed, please email bikeed@transport.vic.gov.au.



SUGGESTED STAGE

While this Unit is designed for Years 7 and 8 (age range 12-15 years), you may choose to use these lessons for a different age range, depending on the development, maturity and existing bike riding experience level of your students.



SUGGESTED DURATION

This is the eighth of nine lessons for Unit 4 – Riding independently.
Suggested lesson duration: 45 minutes.



LEARNING INTENTIONS

- For students to use a variety of technologies and other information (with teacher oversight) to plan several routes for lesson 9, identifying and minimising the hazards and planning alternatives.



SUCCESS CRITERIA

- Map several alternative safe routes using technologies and other information (such as local knowledge).
- Identify and minimise hazards through planning on the routes.
- Choose the safest route for the group ride, justifying the reason.
- Retell the planned route with others.



EQUIPMENT

Workbook, worksheets, video projector, maps, computers.
Optional riding activity: bikes and helmets.





CURRICULUM LINKS

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CONTENT DESCRIPTORS (Geography)

VC2HG8S02 collect, organise and process information and data from primary and secondary sources, including fieldwork, and using geospatial technologies and digital tools as appropriate.

VC2HG8S03 represent and describe information and data using a range of formats, including maps constructed with geospatial technologies.

(HPE)

VC2HP8M01 refine and transfer movement skills in a variety of movement situations, including indoor, outdoor and aquatic settings.

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ACHIEVEMENT STANDARD (EXTRACT) (Geography)

By the end of Level 8, students:

- collect, organise, process and represent information and data from primary and secondary sources using geospatial technologies.

(HPE)

By the end of Level 8, students:

- apply and transfer movement skills and movement concepts across a range of situations. They implement and evaluate the effectiveness of movement strategies on movement outcomes. They propose and evaluate strategies designed to promote personal health and wellbeing outcomes.



LEVEL 7 – 8 RUBRIC: BIKE ED

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
Students can identify safety issues in their own and others' bikes, clothing, and equipment, and suggest practical solutions to improve safety.	Students can undertake some of the basics of bike maintenance: · change a flat tyre · check tyre pressure · adjust seat height to fit individual · clean and oil the chain · fix a punctured tube	Students can undertake all of the basics of bike maintenance: · change a flat tyre · check tyre pressure · adjust seat height to fit individual · clean and oil the chain · fix a punctured tube
Students demonstrate successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands).	Students demonstrate successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands) and are beginning to take the lead or serve as role models for others.	Students demonstrate and can lead successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands).

Continued overleaf.



LESSON PLAN

Unit 4 Lesson 8: Planning to avoid hazards



LEVEL 7 – 8 RUBRIC: BIKE ED (Continued)

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
Students obey all road safety rules whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs).	Students obey all road safety rules whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs) and are beginning to take the lead or serve as role models for others.	Students lead others in adherence to all road safety rules, instructions and norms whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs).
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Students can identify and mitigate hazards in a community setting with assistance. Students can plan a safe travel route using a range of technologies and information (with teacher oversight)	Students can plan a safe travel route using various geospatial technologies and information (with teacher oversight) based on current conditions, hazards and the environment.	Students can plan several safe travel routes alternatives using various geospatial technologies and information (with teacher oversight), choosing the best and safest route based on current conditions, hazards and the environment.

Tuning in activity. Observations from on-road ride.

Approx. 5 minutes

Resource Requirements

- Workbook and pen.

Safety

- N/A.

Activities & Differentiation

Brief recap of the ride that students did previously. Students, in groups of 2-3, write down at least five different hazards that they saw whilst they were on the recent community ride.

- For each hazard, describe how it is hazardous and how you negotiated it safely.

Compare this list with the group next to you. Pick one of the items from your list and share it with the class, including how you safely negotiated it.

Teaching Points

What types of hazards were there?

- Cars, intersections, parked cars, pedestrians, slippery surfaces, loose stones etc.

Key Questions

- Where are you looking to see the hazards (i.e., always scanning around the scene)?
- Which hazards do you think are the most common?
- How would you avoid the hazards?



Activity 1. Virtual ride.

Approx. 10 minutes

Resource Requirements

- Computers for students.

Activities & Differentiation

Distribute iPads or computers for each student or one between two.

- Using Google Street View, students should do a virtual bike ride through the route.
- Students should rank the key intersections and locations by difficulty, writing this down on the maps.
- After ranking, talk through the most difficult intersection(s) with the class. Show how we will be negotiating them and providing strategies on negotiating similar locations.

Modification

- If no IT is available, the activity can be teacher led using a screen at the front of the classroom.

Safety

- N/A.

Teaching Points

Teachers should focus on map reading skills in addition to gaining familiarity with the route and riding from a bike riders' perspective.

Key Questions

- Why did you rank this as the most difficult location?
- Which was the easiest place to ride? Why?

Progression

If time allows challenge students to find a better route to ride.

The criteria should be:

- Easy to ride (i.e., not too hilly)
- Safe to ride (safe roads, safe intersections, identify potential hazards)
- The right length to fit in class (approx. 60 minutes)

Plot the ride on a fresh map. Provide a justification- for the ride that addresses the key criteria.

Activity 2. Road hazards story worksheet.

Approx. 15 minutes

Resource Requirements

- Hazard perception worksheets, video projector.

Activities & Differentiation

Hand out the worksheet, where students will need to identify common hazards in a road scene.

- Students will take these hazards and create a story of a hypothetical ride where they encounter these hazards.

Safety

- N/A.

Teaching Points

One of the best ways to react to hazards is if you've already imagined them. This means that you can already have a plan and then simply enact it when you encounter the hazard in real life.

Key Questions

- How do we know what the hazards are?
 - Does it have the potential to affect our riding path? Such as a car crossing the bike lane, or dog, or a slippery bit of road?
- How should we be reacting to them?
 - Don't make sudden movements, like swerving, as you may put yourself in the way of other road users



LESSON PLAN

Unit 4 Lesson 8: Planning to avoid hazards



- behind you.
- Slow down in a controlled manner, and ride at a speed where you can easily deal with the hazard.

Activity 3. Route planning.

Approx. 10 minutes

Resource Requirements

- Printed maps, and/or digital devices and mapping apps such as Google Maps, RideWithGPS, Strava, etc.

Safety

- N/A.

Activities & Differentiation

In groups of 2-4, students will:

- Choose a starting point and destination – eg riding to school from home, or from school to a recreational or entertainment activity.
- Plan the safest riding route, considering hazards, intersections, and using bike infrastructure (bike shared paths, bike lanes, priority bike routes) where possible.
- Plot the ride on Google Maps (or other mapping tool of their choosing)

Present the planned route to the class and provide a virtual ride-through using Google Street View. Discuss the main intersections they will be passing through, and the key hazards they will find at these key locations, and how they plan to negotiate them.

Teaching Points

Key understandings are:

- Becoming more familiar and comfortable with using route-planning tools, maps and apps.
- Making choices to determine the safest riding route, considering hazards, intersections, and using bike infrastructure (bike shared paths, bike lanes, priority bike routes) where possible.
- Identifying hazards and potential hazards in route planning.
- Appropriate reactions to hazards.

Key Questions

- What tools can we use to plan a safer route?
- What are the best ways to avoid a hazard?
- Do you know these roads and intersections?
- Can you think of any hazards when you have walked or driven down these roads before?

Optional. Follow the leader.

Approx. 5 minutes

Resource Requirements

- Bicycles and helmets.

Safety

- Students must maintain at least two bike lengths distance to other bike riders.
- Ensure full safety checks are completed before any bike riding activity.

Activities & Differentiation

If you wish to (and can) get the students out of the classroom and onto their bikes, then do some practice following the teacher on bikes. This is what they will be doing next class on their outside ride, so this is a good skill to practice.

Teaching Points

Teacher or assistant should lead the ride since moderating the speed will be important.

Signaling

- Communication is very important so that group



LESSON PLAN

Unit 4 Lesson 8: Planning to avoid hazards



Practice ride for next class

Ask students about what is important when you are riding with other people?

- Keeping space between yourself and the bikes around.
- Keep at least two bike lengths between yourself and the bike in front.
- Remember signaling and head-checks.

Follow the leader

Set up a large square or oval circuit for students to ride around.

Students ride in a single file around the course.

- Students must be careful to maintain the two bicycle lengths between them and the bike in front.

An alternative is for the teacher to lead a ride around the school ground or surrounds. This is preparation for the out of school ride next class.

- Include hand signals and voice calls that need to be passed back along the group – such as hand signals for turning, and calls for “slowing”, “stopping”, or pointing out obstacles (pot-holes, posts, speed humps, sticks, rocks, dogs, potential car doors, etc).

Modifications

- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources).

For students who are struggling or nervous about taking a hand off the handlebars to signal, suggest that they follow this process. Once they can ride for at least 10 metres completing the task, they can move to the next step.

1. Start by simply loosening the grip with the signaling hand, to feel how the balance needs to shift.
 2. Take the hand off the grip completely but hover it approx. 5-10cm above the grip.
 3. Take the hand off the grip and place it on the knee on the same side.
 4. Take the hand off and move it very slowly outwards away from the body.
 5. Progress to a full signal.
- *Note that the first 3 steps have the hand in line with the body, so that the balance point is not disrupted by moving the arm sideways. Explain this to students so they understand the importance of moving the arm out slowly, until they are very comfortable with the process.*

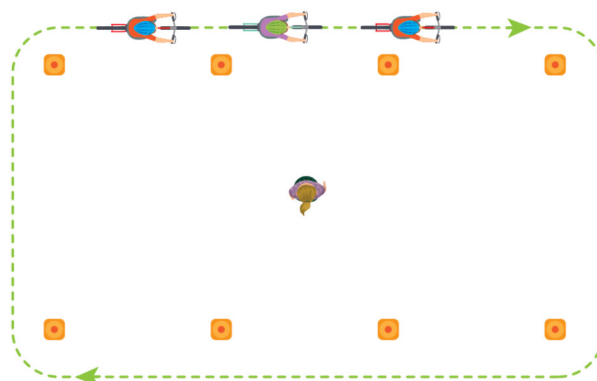
members and other road users (cars etc.) are not going to be surprised by our movements.

- Use both voice and arm signals.

Head checks

- The head check should be smooth and brief, just long enough to see what's around.
- The tendency is for riders to drift in the direction they are doing the head-check. Make sure that the riders keep riding straight.
- To avoid drifting while performing a head check over the right shoulder, lock the right elbow (straight arm), and bend the left. This locks the handlebars in position and prevents them turning outwards when you turn your head. (for the left side head check, lock the left elbow).
- It is easier to turn your head when you tuck your chin slightly towards your armpit first, especially for those with limited range of motion.

Activity Setup



Key Questions

- Why do we need to keep space between the bikes?
 - To help us prevent any collisions.
 - Safe attitude!
- Why do we signal?
 - So that other people can know what we are going to do, so they can avoid us.
 - Safe!
- Why do we do a head-check?
 - Because we want to make sure that nobody is coming when we turn or change lanes.
 - We can't see behind us, so we need to do a quick look so that we know what's coming.
 - Safe!



Reflection & closure.

Approx. 5 minutes

Activities & Differentiation

Reflect on route mapping and hazard identification activities.

Thumbs up/down/sideways: Are you confident in knowing how to use technology to plan and map a safe route?

Key Questions

- What are the most common hazards, and how do we best negotiate them?
- What are the most important things to look for when selecting a route to ride?
- Why should we look to check our route online before we go for a ride?
- Are you confident negotiating the hazards we will be seeing on the class ride?



Lesson 9: Long group ride (90 minutes)

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Bikes are for everyone!

Anyone can ride a bike. However, some students may require additional assistance in the form of modified equipment and differentiated teaching. Suggestions for activity differentiation are provided throughout the lesson plans. Some students may also benefit from learning support aids such as social stories and other resources. If you would like further information on options for equipment modifications, adaptive bicycles and assistive technology, and learning support aids to assist with the delivery of Bike Ed, please email bikeed@transport.vic.gov.au.



SUGGESTED STAGE

While this Unit is designed for **Years 7 and 8** (age range 12-15 years), you may choose to use these lessons for a different age range, depending on the development, maturity and existing bike riding experience level of your students.



SUGGESTED DURATION

This is the ninth and final lesson for Unit 4 – Riding independently.
Suggested lesson duration: 90 minutes.



LEARNING INTENTIONS

- For students to safely participate in a group ride in the community (more complex traffic environment).



SUCCESS CRITERIA

- Follows instructions and works as a group during the community ride.
- Exhibits bike control skills (safe distancing, safe speed) during the community ride.
- Adheres to road rules during the community ride.
- Uses hand signals, head checks, scanning and voice commands at all times during the ride.
- Reflect on their own safe experiences and learning from Bike Ed.



EQUIPMENT

Bicycles (one per student), helmets, high visibility vests, whistle, water bottles, first aid kit, mobile phone, completed permission slips and risk assessment.



LESSON PLAN

Unit 4 Lesson 9: Long group ride (90 minutes)



CURRICULUM LINKS

The Bike Ed program is designed to support all students by emphasizing the importance of safety and promoting independent travel skills. The Bike Ed program caters for all students and recognizes the need to teach safety and independent travel for all. Acknowledging the diverse needs of learners, we are committed to providing tailored assessment materials for students working at levels below the Foundation stage (A-D curriculum). For more information please email bikeed@transport.vic.gov.au.

CONTENT DESCRIPTORS (Geography)

VC2HG8S02 collect, organise and process information and data from primary and secondary sources, including fieldwork, and using geospatial technologies and digital tools as appropriate.

VC2HG8S03 represent and describe information and data using a range of formats, including maps constructed with geospatial technologies.

(HPE)

VC2HP8M01 refine and transfer movement skills in a variety of movement situations, including indoor, outdoor and aquatic settings.

VC2HP8M02 design and demonstrate how movement strategies can be manipulated to improve movement outcomes.

VC2HP8M03 demonstrate and explain how movement concepts related to effort, space, time, objects and people can be manipulated to improve movement outcomes.

VC2HP8M04 adapt and perform movement sequences in a variety of contexts, demonstrating how the movement elements of time, effort, space, people and objects can enhance performance.

ACHIEVEMENT STANDARD (EXTRACT) (Geography)

By the end of Level 8, students:

- collect, organise, process and represent information and data from primary and secondary sources using geospatial technologies.

(HPE)

By the end of Level 8, students:

- apply and transfer movement skills and movement concepts across a range of situations. They implement and evaluate the effectiveness of movement strategies on movement outcomes. They propose and evaluate strategies designed to promote personal health and wellbeing outcomes.



LEVEL 7 – 8 RUBRIC: BIKE ED

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
Students can identify safety issues in their own and others' bikes, clothing, and equipment, and suggest practical solutions to improve safety.	Students can undertake some of the basics of bike maintenance: · change a flat tyre · check tyre pressure · adjust seat height to fit individual · clean and oil the chain · fix a punctured tube	Students can undertake all of the basics of bike maintenance: · change a flat tyre · check tyre pressure · adjust seat height to fit individual · clean and oil the chain · fix a punctured tube
Students demonstrate successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands).	Students demonstrate successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands) and are beginning to take the lead or serve as role models for others.	Students demonstrate and can lead successful communication to other riders whilst riding outside of the school (head scan, head checks, hand signals, voice commands).

Continued overleaf.



LEVEL 7 – 8 RUBRIC: BIKE ED (Continued)

By the end of Level 6	Progressing towards Level 8	By the end of Level 8
Students obey all road safety rules whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs).	Students obey all road safety rules whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs) and are beginning to take the lead or serve as role models for others.	Students lead others in adherence to all road safety rules, instructions and norms whilst riding outside the school (Keep to the left side of the road, leave at least 1 metre space from the parked cars, give way to the right, obeys all traffic signals and signs).
Students obey all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths).	Students obey all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths) and serve as role models for others.	Students lead others in obeying all road safety instructions and norms whilst riding outside the school (follows all instructions from the teacher ride in single file and does not overtake unless instructed, maintains safe space between riders of two bike lengths).
Students can identify and mitigate hazards in a community setting with assistance. Students can plan a safe travel route using a range of technologies and information (with teacher oversight)	Students can plan a safe travel route using various geospatial technologies and information (with teacher oversight) based on current conditions, hazards and the environment.	Students can plan several safe travel routes alternatives using various geospatial technologies and information (with teacher oversight), choosing the best and safest route based on current conditions, hazards and the environment.



THIS LESSON INCLUDES A FINAL RIDE OUTSIDE OF THE SCHOOL GROUNDS

You will need to have at least two teachers for the first 20 students and one teacher per 10 students thereafter. At least one teacher must be an accredited Bike Ed instructor. <https://www2.education.vic.gov.au/pal/excursions/guidance/adventure-activities>. Permission forms to allow students to participate in outside bike rides must be returned prior to the ride and a risk assessment must be undertaken and approved.

The importance of inclusion in group ride activities outside of school grounds for all students regardless of ability cannot be underestimated.

Statistics show that road incidents involving children on bikes often occur while the rider is entering the roadway, or at intersections. As such, real-world education and guided experience with these scenarios are crucial to ensuring safety of children riding a bicycle and interacting with other road and path users.

The out-of-school group ride helps students develop confident, independent bike riders, ultimately encouraging the use of a bicycles for active transport, promoting physical activity and reducing car use. As the end-point of a program, the group ride provides a realistic and relevant goal and reward for students, allowing for application and consolidation of riding skills developed throughout the Bike Ed program. Many



LESSON PLAN

Unit 4 Lesson 9: Long group ride (90 minutes)



students find this activity the most empowering and exciting component of the program.

If you would like additional resources and support for including all students in a group ride regardless of ability, please email bikeed@transport.vic.gov.au.

Tuning in activity. Brainstorming hazards.

Approx. 5 minutes

Activities & Differentiation

Think/pair/share in groups of 2 or 3, brainstorming responses to the following questions:

- What hazards are you expecting to see on the road ride today, and how might you deal with them?
- What other road users might you need to interact with?
- What are you most looking forward to about the ride?

Each group shares one response with the class.

Teaching Points

Ensure students are tuning in to hazards they may encounter on the road ride today.

Safety Checks.

Approx. 5 minutes

Resource Requirements

Bicycles (at least one per two students), helmets (one per student), helmet fit guide, and ABCD check guide.

Safety

- If using a class set of helmets, ensure that the helmets have been cleaned for hygiene.
- Dropping the bike should only be from a very small height (approx. 5-10cm).
- Ensure bike seats are at the appropriate height for the student.

Activities & Differentiation

Helmet & clothing check

Reminder from the teacher how to correctly put on helmet and check that they are wearing correct clothes.

- Two finger check (above eyebrow, under chin strap and forming a 'V' at the ear) and tighten the dial.
- Clothing is brightly coloured, for good visibility.
- Long pants are close fitting at the base, so stop it catching in the chain.
- Shoes are sturdy, close toed and non-slip, for stopping and protection.
- Students will put on their own helmets.

* For suggestions regarding safety considerations and

Teaching Points

We must always wear a helmet when on a bike because it protects our head and our very important brain.

Just as important, is for the helmet to be fitted correctly, otherwise it won't work properly.

If we aren't dressed properly then we can't be seen easily, so someone might run into us.

We must check the bike before we ride. If the bike has a problem, then it might be unsafe to ride on.



LESSON PLAN

Unit 4 Lesson 9: Long group ride (90 minutes)



how to adapt the helmet and clothing safety check to accommodate students with specific religious or cultural clothing, please email bikeed@transport.vic.gov.au.

ABCD bicycle check

Each student completes a check of their bicycle, as led by the teacher. Use ABCD check guide. The ABCD check is as follows:

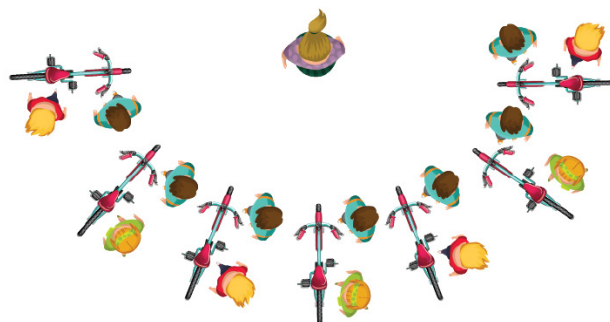
- A. Is there air in the tyres? Squeeze the tyre walls.
- B. Do the brakes work? Squeeze each brake whilst lightly pushing the bike.
- C. Does the chain move smoothly? Inspect the chain and move the pedals.
- D. Is anything loose on the bike? Check with a very small drop (whilst still holding on to the bike).
- E. You may also choose to add "E" for handlebar Ends: check that the end caps at the ends of the handlebars are not missing or damaged, as the hollow pipe of the handlebar can cause injury in a fall.

Attitude check

Try your best, have fun, respect others.

Key Questions

- Why do we wear a helmet?
- What are the best ways to make sure that cars and other riders can see you?
- Why do we do a bike check before we ride?



Activity 1. Move on over.

Approx. 5 minutes

Resource Requirements

Cones. Chalk can be used to create line markings, and draw directional arrows on the ground. This setup works extremely well using the side-lines of a tennis court as the "bike lanes".

Activities & Differentiation

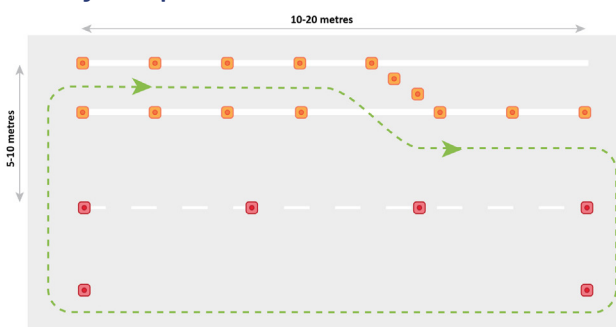
This activity will involve students riding in a simulated bike lane that ends (due to a parked car) and must then merge into the "traffic lane" and ride 1 metre out from the edge of the lane.

- Remind students about the skill of scanning behind (head-checks), and signalling. Introduce the concept of indicating to show that you are changing lanes. Explain when you would have to do this.
- You may wish to first have the students walk (with or without) their bikes through the course slowly. Explain the scan, signal, scan process and when each step should occur.

Safety

- Must be completed at low speed.
- Students must maintain at least two bike lengths distance to other bike riders.

Activity Setup



LESSON PLAN

Unit 4 Lesson 9: Long group ride (90 minutes)



Modifications

- You may wish to have this activity occurring on only one side of a rectangle (not both as in the second progression diagram), and a different (less complex) activity such as slalom, along the opposite edge of the rectangle; so that the teacher can closely observe for safe merging and provide feedback.
- If students are not confident taking a hand off to signal, they can use their voice to say “merging” instead.
- If students are not confident to scan behind without swerving out of the lane, they can practice just looking sideways to start with, and build up to checking behind.
- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources).

Progressions

- As students become competent at the task, some students will be instructed to take the traffic lane from the start (diagram overleaf; following the blue line and arrows), and they then become traffic that the bike lane traffic must give way to / merge into.
- Initially, the traffic lane riders should ride slowly enough to allow a gap for the merging rider to merge in front of them. As skills progress, traffic lane riders can choose to speed up so that the bike lane cannot merge in front of them and must slow or stop to give way; or may choose to slow down to make merging possible; simulating real-life situations in traffic.
- For this progression, the confident riders should begin the green path (bike lane) only when they are ready, with less confident riders taking the blue path (traffic lane) until they are confident to take the bike lane.
- As students get more familiar with this activity, they could choose which lane they take (bike lane or traffic lane) by signalling their intentions.
- A teacher or non-riding student can stand in the area where the “parked car” is in the bike lane and have their arm out as if it is an opened door, reminding students that they need to be one metre out to avoid getting “doored”. The student or teacher in the parked car could hold a pool noodle out as the “door” instead of holding their arm out. Note: this should be a distance indicator only, and should not be allowed to make contact with the student on the bike.

Teaching Points

Negotiating your movements with other bike riders and road users on paths is very important. Most important for students is to have a safe attitude, where each bike rider will act in the safest, most predictable way possible to avoid collisions.

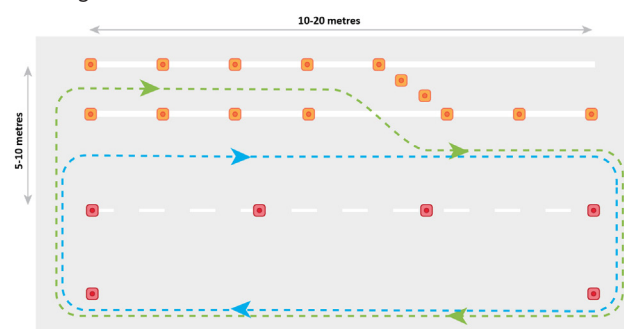
Key Questions

How do you avoid collisions when merging into a traffic lane?

- Safe attitude.
- Low speed.
- Understanding the road rules for merging.
- Scan, signal, scan.
- Communication (signalling).
- Being prepared to slow and stop if there is not space to merge.

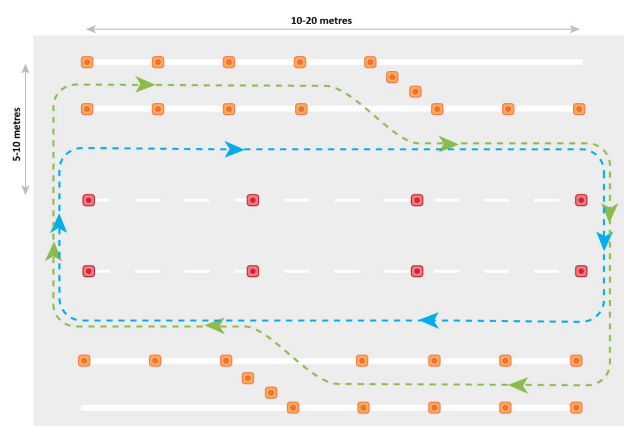
Progression Activity Setup

Adding a “traffic lane” of riders.



Alternate Setup

Using both sides of a circuit so students get two opportunities to practice.



Activity 2. Pre-ride briefing

Approx. 5 minutes

Activities & Differentiation

Begin with a pre-ride briefing of all important rules for the ride.

- Overview of the route we will be riding.
- What obstacles/intersections/hazards we are expecting to encounter.
- The distance we are covering.

Explanation of the rules for the class ride:

- Keep to the left side of the road, with at least 1 metre space from the parked cars.
- Ride in single file unless the leader calls you to 'Double up!'
- If one rider stops, then all riders stop. This must be communicated by voice to the leader ('Stopping!').
- No overtaking on the road.
- Groups ride at the speed of the slowest rider.
- Two bike lengths between bike riders.

Teaching Points

Students require a permission note to go off school grounds. This should be prepared prior to class and include both the short ride and the longer class ride. If you wish, use the model wording provided in the resources.

Key Questions

- What do I expect to see when I'm doing the ride?
 - Roundabouts, parked cars, traffic, hazards, etc.?

Call for questions.

- Thumbs up/down/sideways for understanding.

Activity 3. Group ride.

Approx. 30-60 minutes

Resource Requirements

- Bikes, helmets, safety vests, mobile phone.
- There must be at least one accredited Bike Ed instructor present on any school bike ride outside of school grounds.

Safety

- Recommended that there be a teacher at the front, back and middle of the group.
- Students must follow the rules set out in the pre ride briefing.

Activities & Differentiation

Lead the ride safely from the school, following the chosen route. Ensure that teachers and students have been briefed on the route and what to expect.

- Remember to keep the pace as slow as the slowest rider to ensure that everyone is prepared for the longer class ride.
- Follow the route, demonstrating a safe line to ride that provides clearance from parked cars (to prevent 'dooring').
- Model loud commands (Left, Right, Slowing, Stopping) and good hand signals, reinforcing these with the students.
- If a student stops, ensure that you stop everyone so that you ride in a group.

Teaching Points

This is a longer ride to provide students the ability to undertake bike riding in a supervised environment, which will help provide them with the confidence to undertake more independent riding in the future.

Pick an easy ride with few hills if possible. Quiet streets near the school make a good route with several left turns.

If required, have students get off their bikes and walk them across the road if you (or they) do not feel comfortable with the situation.

This ride should be at a slow pace to allow students to acclimatize to the road environment. Make the ride as simple as possible to build the confidence of less experienced riders.



LESSON PLAN

Unit 4 Lesson 9: Long group ride (90 minutes)



- If you are feeling confident with the group you can find a longer, straight road (if possible) to practice moving from single to double file, and back again.

Key Questions

- What things am I doing to stay safe on the road?

Activity 4. Post-ride Debrief.

Approx. 5 minutes

Activities & Differentiation

Bring students together to debrief on the ride.

Provide your perspective on what they did well and what they should improve on.

Students should complete a brief written reflection on their bike riding experience. Questions to answer include:

- What were the most interesting things that you encountered during the community ride?
- If you were going to do the ride again, what would you do differently?

Thumbs up/down/sideways on their experience doing the community ride.

Key Questions

Ask students for feedback on what they found to be interesting.

- What things did they notice that was different to what they expected?
- What did students notice about the other road users they rode with?

Reflection & Closure.

Approx. 5 minutes

Resource Requirements

Certificates for each student.

Safety

N/A

Activities & Differentiation

Hand out the certificates to the students.

The aim of the certificate is to provide students with a memento of their participation in bike riding classes and an opportunity to reflect on their achievements.

Encourage students to reflect on their effort, participation in activities, personal challenges they have overcome, improvements in bike riding proficiency, or any specific goals they have met throughout the program.

Every student should receive a certificate of achievement to encourage their ongoing bike riding participation and improvement.

Thumbs up/down/sideways for their overall effort and achievements in Bike Ed Unit 4.

Key Questions

Encourage students to reflect on their effort and participation in activities.

- Were there any personal challenges that you have needed to overcome?
- What are you most proud of?
- Do you feel like you're a better bike rider now than you were at the start of the program?



Appendix 1: Riding station activities for Lessons 1 and 2

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Bikes are for everyone!

Anyone can ride a bike. However, some students may require additional assistance in the form of modified equipment and differentiated teaching. Suggestions for activity differentiation are provided throughout the lesson plans. Some students may also benefit from learning support aids such as social stories and other resources. If you would like further information on options for equipment modifications, adaptive bicycles and assistive technology, and learning support aids to assist with the delivery of Bike Ed, please email bikeed@transport.vic.gov.au.



RIDING STATIONS GUIDE

This guide provides setup instructions for each of the riding station activities. Use this plan to help you set up the riding stations for Unit 4, lessons 1 and 2.

Note: These activities are designed to be self-assessed with measurements however the measurements are optional.



EQUIPMENT

Bicycles (at least one per two students), helmets, cones, ball, measuring tape, stopwatch, ground markings, removable tape.



LESSON PLAN

Unit 4 Appendix 1: Riding station activities for Lessons 1 and 2



Station 1. Slow ride.

Resource Requirements

- Start and finish cones, stopwatch.

Activities & Differentiation

The aim of this activity is to ride 10 metres in the longest time possible. This requires the rider to ride as slowly as possible.

- Set up cones 10 metres apart. The rider starts at one of the cones and partner stands at the finish cone with a stopwatch.
- The rider must ride in a straight line between the cones.
- The partner will time the ride with a stopwatch and enter the result into the self-assessment sheet.

Modifications

- Set up the activity over a longer distance.
- Allow students to set their own individual distance and time goal – aiming for improvement over several attempts and according to skill level.

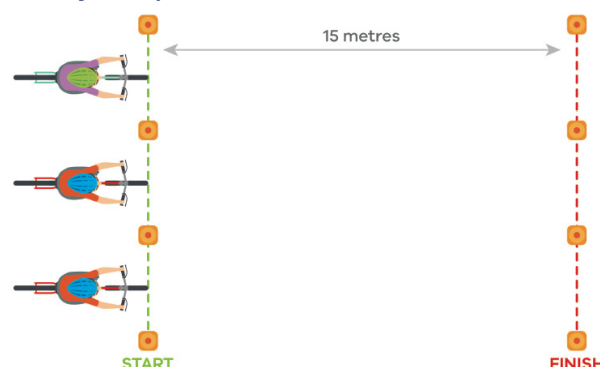
Progressions

- Challenge students to ride within 2 parallel lines on the ground (or lines of cones).
- Students can experiment with a different gear selection to see what works best for them.
- Students can try to complete the distance sitting in the seat vs standing up on the pedals and compare the results.
- Suggest students hold their pedals level (at 3 and 9 o'clock), with small pedal movements backwards and forwards, to help maintain balance.
- Challenge students to think about where they are looking.
- Suggest students use their brakes to control their speed and maintain balance.

Safety

- Only one rider on course at a time.
- Timers to stand at least 2 metres away from the finish cone.

Activity Setup



Teaching Points

- Balancing: keep pressure on the pedals with your feet and use movements with the handlebars to keep the bike straight.
- Taking turns with your partner.

Key Questions

- Is it easier to ride quickly or slowly?
- What did you find was the best advice to help with balancing at slow speed?
 - Which gear selection worked best? (this varies between riders)
 - Did sitting or standing allow for more control and balance? (this varies between riders)
 - Where were you looking? Ahead, or just in front of you? (staring at a fixed point, whether close or in the distance, helps you maintain balance)
 - Did you find that holding your pedals level (at 3 and 9 o'clock), rather than continuing to pedal slowly, helped you maintain your balance?
 - Did using your brakes also help you maintain control while riding slowly?
- How does riding in a slow, controlled way help improve your health and fitness?
- In which real-life situations would you be required to ride very slowly?



Station 2. Single push.

Resource Requirements

- Long measuring tape (approx. 20m), start and finish cones.

Activities & Differentiation

The aim of this activity is to travel the furthest distance with only a single push of the pedal.

- Set up one cone as a start cone with a long measuring tape running alongside. Place finish cone, or other marker or line, to denote a finish point for safety.
- Stand stationary at the start line with a foot on the pedal. Push down on the pedal and then stop pedaling. Once you place a foot on the ground you must stop.
- The partner will then use the tape measure to measure the distance travelled from where the front wheel touches the ground.

Remind students: just before you push off, you also need to look ahead to where you want to go. This is very important to gain momentum, maintain a straight line, and developing this crucial skill early in a rider's journey.

Modifications

- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources), with one push off from the ground to start, and see how far they can coast and balance.
- If the terrain allows, start this activity on a slightly downhill slope, ensuring you have a "stop" line to finish if they make it all the way.

Progressions

- Confident riders can try the activity starting with their non-dominant foot and compare the results.
- If the terrain allows, progress to running on a slightly uphill slope, so that students can compare the effects.
- Students can also experiment with a different gear selection to see what works best for them to get the best starting power.

Safety

- Partner is to stay clear of the rider.
- Provide a finish code or line to prevent riders from continuing beyond the activity area.

Activity Setup



Teaching Points

- A strong first pedal, like a normal starting "power pedal" position, where the pedal on the dominant side is at 45 degrees (i.e., in line with the down tube).
- Balancing: keep pressure on the pedals with your feet and use minor movements with the handlebars to keep the bike straight.
- Keep looking ahead to keep going in a straight line.
- Measurement is from where the front wheel touches the ground.
- Taking turns with your partner.

Key Questions

- What are the benefits of a strong first pedal?
- How do we measure accurately?
- When riding a bike what kind of terrain would you use a strong first pedal and a continual coast?



LESSON PLAN

Unit 4 Appendix 1: Riding station activities for Lessons 1 and 2



Station 3. Slalom.

Resource Requirements

- Several cones (approx. 20), start and finish cones.

Activities & Differentiation

The aim of this activity is to turn between as many cones as possible in a set distance.

- Place a start and finish cone 15 metres apart (depending on space) and seven cones place at even distances in a straight line between the start and finish line.
- Students will ride from end to end turning between the cones. The student will be successful if they complete the course without touching a cone or touching the ground with their foot.
- If students complete the run successfully then the partner will add another cone, making sure to have all cones evenly spaced.
- If they are unsuccessful, they will remove a cone.
- Write down the highest number of cones successfully completed.

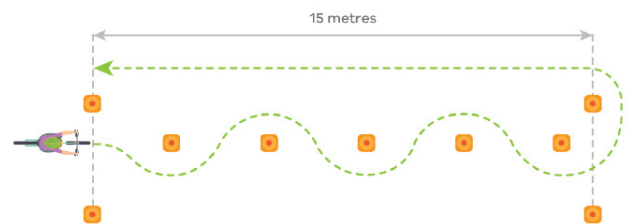
Modifications

- Can begin with fewer cones or reduce the distance between the start and finish line.
- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources).
- As a more gradual progression to adding cones, you may use flat markers or chalk markings on the ground so that the students are not afraid to hit or run over the markers.
- Rather than using cones or markers, draw a curvy line on the ground (as per the dotted line in the diagram) for students to try to follow with their front wheel, rather than going around objects.

Safety

- Other riders are to stay clear of the course when not riding.

Activity Setup



Teaching Points

- Keep pedaling to maintain balance.
- Turning skills: Lean slightly into the turn and rotate the handlebars. Smooth movements, rather than fast jerky movements.
- Look in the direction you want the bike to go. Don't look at the cone, look where you want the bike to go.
- Braking when turning is dangerous, especially when slippery. Apply the brakes when riding straight, then turn once you have slowed down.

Key Questions

- As the turns increased, did you need to slow down or speed up?
- Can you provide one piece of advice for someone that was struggling with this skill?

Progressions

- Can begin with more cones or keep the same number of cones but reduce the distance between the start and finish lines.
- More experienced and confident riders can try to ride the course with one hand off the handlebar. Try this with one hand first, and then the other.
- More advanced riders may also try to have their front wheel go one side of the cone, and rear wheel go the other side. This is quite a challenge and will successfully slow down riders who are speeding through the circuit.



LESSON PLAN

Unit 4 Appendix 1: Riding station activities for Lessons 1 and 2



Station 4. Bean bag drop.

Resource Requirements

- Bicycles (at least one per two students), helmets (one per student), cones, bean bags/small foam balls/tennis balls, and hoop or bucket.
- Set up multiple lanes if more than 2 riders will be at this station at any one time.

Activities & Differentiation

The aim of this activity is to take a bean bag from the start line (passed to the rider by scoring partner or picked up from the top of a cone) and drop it in a bucket/hoop at the other end.

- Set up cones approximately 10 metres apart, as per the diagram.
- One point is allocated per bean bag or foam ball successfully dropped into the bucket or hoop.
- When one rider drops their bean bag into the bucket, their partner can start, but riders must be careful to avoid each other while riding the course. If using one bike between two, riders must swap at the start line to take turns completing the course.
- Riders continue to take turns for the duration of the allocated time.

Modifications

- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources).
- If students are struggling to hold the bean bag, they may put it in their pocket or basket on the bike and stop at the hoop, if necessary.

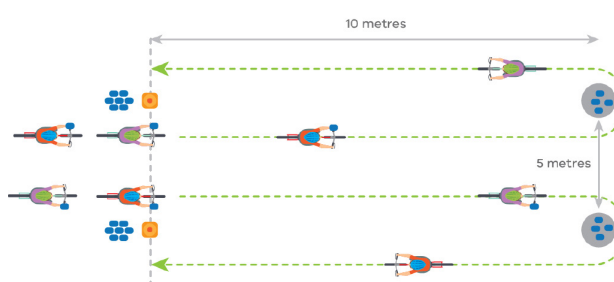
Progressions:

- Challenge students to try holding the bean bag with their right or left hand.
- Suggest that balls are worth more points than bean bags as they are harder to carry, and harder to carry multiple at a time.
- You may allow multiple bean bags to be carried, but all points are lost for each that is dropped or misses the bucket – essentially the tally starts again.

Safety

- The partner is to stay a safe distance away from the rider.
- Ensure that students do not ride through the course too quickly.

Activity Setup



Teaching Points

- Balance: keep pedalling to maintain balance.
- Riding one-handed: requires that the riding will be slow and steady, with a strong grip on the handlebars. This is excellent practice for signaling on the road.
- Taking turns with your partner.

Key Questions

- How will I carry the bean bag?



LESSON PLAN

Unit 4 Appendix 1: Riding station activities for Lessons 1 and 2



Station 5. Hit the spot.

Resource Requirements

- Removable ground markings/chalk, as well as start and finish cones.

Activities & Differentiation

The aim of this game is to have the rider control the bike such that front wheel makes contact with as many of the ground markings as they can within the area.

- Set up the area (with cones or other markings) such that it is approximately 10 metres long and only 2 metres wide. It should be narrow enough that riders will not be able to do U-turns in the area.
- Within the designated area, place the ground markings randomly throughout. It is important that the markings are placed such that it is very difficult to ride over every marking in a single ride. This may mean having some markings on opposite sides, which will encourage decision making for most riders, or extreme levels of bike control for the most adept.

Modifications

- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources).
- You may wish to set up a pattern of floor markings as either 'easy', 'medium' or 'difficult', to give goals for different students.
- Use different coloured markers or chalk to differentiate levels.
- Chalk markings or spots can also be different sizes to differentiate between different levels.

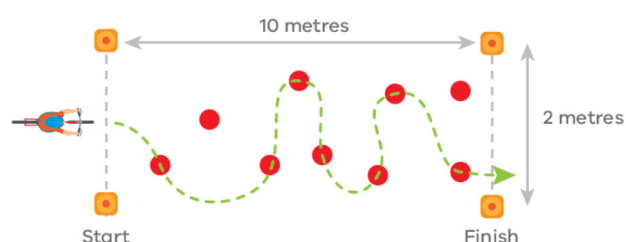
Progressions

- You could include numbers or words for each marker. Students could try to get to a specific total by adding the numbers they roll over, or they could construct a sentence with words they roll over.
- Challenge riders to touch the marker **only** with their front wheel, or their back wheel, and not the other; or with BOTH tyres to get the points or get double points.
- Place markers or chalk marks that must be avoided as well as hitting the others.

Safety

- Use a non-slip ground marking.
- The partner is to stay a safe distance away from the rider.
- Ensure that students do not ride through the course too quickly.

Activity Setup



Teaching Points

- Balancing: Keep pedalling to maintain balance.
- Turning skills: Lean slightly into the turn and rotate the handlebars. Smooth movements rather than fast jerky movements.
- Turning is sharper when going slowly but much more difficult.
- Measurement accuracy: Only count the spots actually hit, not just where it was close.
- Taking turns with your partner.
- Plan your route so that you can get the greatest number of hits in the easiest way.

Key Questions

- Which route are you going to choose to follow to pick up the greatest number of hits?
- When would you have to manoeuvre your bike like this in real life?



Station 6. Straight line riding.

Resource Requirements

- Start cone, existing ground line or removeable tape.
- Alternatively, a "lane" can be drawn on the ground with chalk which riders must keep their front tyre within.

Activities & Differentiation

The aim of this activity is to control the bike such that you can ride on the marking for the longest distance.

- Set up the line on the ground for at least 15 metres. The line should be approximately 5 cm wide.
- The partner will stay behind the bike, watching the wheels to make sure that it remains on the line. Once a wheel exits the line, the partner will measure the distance from the start to that point.

Modifications

- Have multiple options set up with different line or lane widths (eg 30cm, 15cm, and then narrower as you see fit) and allow students to self-select, or progress through the levels and compare their results on each.
- Taper the line, instead of stepping it, such that it is wider at the start and narrower at the end. This way the line gets progressively narrower, with the end being only 1cm but the start being up to 50cm.
- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources).

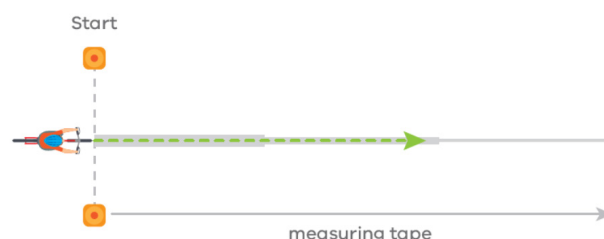
Progressions

- Can be ridden one handed by confident riders.

Safety

- Use a non-slip ground marking.
- The partner is to stay a safe distance away from the rider.
- Ensure that students do not ride through the course too quickly.

Activity Setup



Teaching Points

- Balancing: Keep pedalling to maintain balance.
- Staying straight: Lean forward in riding position and make small adjustments with the handlebars.
- Measurement accuracy: Make sure you measure the first point that they leave the line with the front wheel. They can always go again to improve their distance.
- Taking turns with your partner.

Key Questions

- What did the riders that did this well do differently to those who struggled?
- When would you need to ensure you were riding in a very straight line when riding your bike out in the community?



LESSON PLAN

Unit 4 Appendix 1: Riding station activities for Lessons 1 and 2



Station 7. Stop and go.

Resource Requirements

- Cones.

Activities & Differentiation

The aim of this activity is to control the bike such that you can stop and start without touching the ground with your foot.

- Set up four cones in a box, approximately 2m x 2m.
- The rider will ride into the box, brake to a complete stop and ride out of the box, without setting a foot on the ground.
- The partner will check that the rider has made a complete stop and not touched the ground.
- The partner will also measure the total time spent inside the box, with the aim being to spend as much time as possible.

Modifications

- Measure the time between the first moment the rider enters the box and when they have to put a foot down.
- Novice riders may be allowed to use their foot to balance before riding off again.
- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources). They can be encouraged to coast into the box, brake to pause, with the time measured from when they enter the box until when they have to put a foot down.

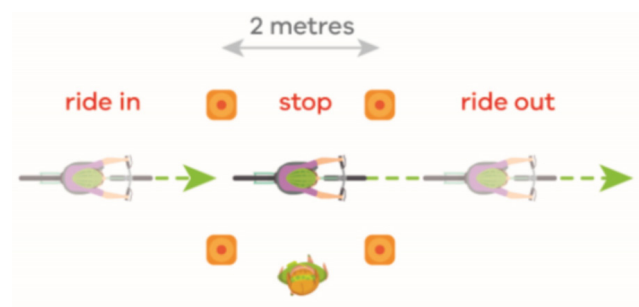
Progressions

- Can be ridden one handed by confident riders.
- Challenge riders to improve their time stationary in the stopping area.

Safety

- The partner is to stay a safe distance away from the rider.

Activity Setup



Teaching Points

- Balancing: Keep your feet on the pedals.
- Starting: Making a strong power pedal to restart.
- Measurement accuracy: Make sure you measure the first moment they arrive in the box and the last moment they leave.
- Taking turns with your partner.

Key Questions

- What did the riders that did this well do differently to those who struggled?



Appendix 2: Riding station activities for Lesson 5

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Bikes are for everyone!

Anyone can ride a bike. However, some students may require additional assistance in the form of modified equipment and differentiated teaching. Suggestions for activity differentiation are provided throughout the lesson plans. Some students may also benefit from learning support aids such as social stories and other resources. If you would like further information on options for equipment modifications, adaptive bicycles and assistive technology, and learning support aids to assist with the delivery of Bike Ed, please email bikeed@transport.vic.gov.au.



RIDING STATIONS GUIDE

This guide provides setup instructions for each of the riding station activities. Use this plan to help you set up the riding stations for Unit 4, lesson 5.

Note: These activities are designed to be self-assessed with measurements however the measurements are optional.



EQUIPMENT

Bicycles (at least one per two students), helmets, cones, ball, measuring tape, stopwatch, ground markings, removable tape, large water dish or bowl, plastic cups, measuring jugs, , witches hats or stands.



Station 1. Water drop.

Resource Requirements

- Cones, , large bowl or dish of water, plastic cups, and larger dish, and 2 bucket or clear jugs with liquid volume measurement markers.
- Set up multiple lanes if more than 2 riders will be at this station at any one time.

Activities & Differentiation

The aim of this activity is to carry the greatest amount of water in a plastic s from the start line to the jug at the finish line while minimizing how much is spilled.

- Set up the start line 10 metres away from a 2 water jugs or buckets (one for each rider). At the start line there should be a large bowl or dish with water, and a plastic cup for each rider.
- The rider must fill their cup with water at the start line and then carry the water, trying not to spill it, to then pour it into their jug at the other end.
- When one rider has poured their cup into the jug, their partner can start, but riders must be careful to avoid each other while riding the course. If using one bike between two, riders must swap at the start line to take turns completing the course.
- Students continue to take turns for the duration of the allocated time
- At the conclusion of the time, students record the total amount of water collected in the jug.

Modifications

- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources).
- If students are struggling to ride one-handed to carry the cup of water, they may choose to use a cup with a lid, or water bottle, and put it in their pocket or basket on the bike and stop at the jug to empty it.
- Have different sized and shaped cups, including some with handles, so riders can choose which cup they want to use to carry the water.
- Rather than having an individual score, it could be a pairs effort with both riders filling the same jug.

Safety

- Partner stays a safe distance away.
- Rider should stop safely if they drop the cup and return to the start line to wait for their next turn.

Activity Setup



Teaching Points

- Make sure that you ride smoothly.
- You don't need to completely fill the cup before you leave the start line, it may be better to fill it less so that you can ride without spilling it.
- Balance: keep pedalling to maintain balance.
- Riding one-handed: requires that the riding will be slow and steady, with a strong grip on the handlebars. This is excellent practice for signaling on the road.
- Taking turns with your partner.

Key Questions

- How will you carry the cup without spilling the water?
- How can you ride more smoothly to ensure that you don't spill the water?
- When would you need to ride one-handed in real life?
 - Signalling.

Progressions

- Challenge students to try holding the cup with their right or left hand.
- If water is spilled from the cup they must stop and go back to the start, challenging them to think about how much to fill the cup, and what sized cup to use.
- A jug may be placed half-way, which is easier and faster to carry the water to, and then the further jug is worth double the amount.



Station 2. Chicane.

Resource Requirements

- Measuring tape and cones.

Activities & Differentiation

The aim of this activity is to do the smallest diameter turn.

- Set up a straight starting line with cones to the side at 0.5 metre intervals up to 3 metres.
- The rider must ride directly along the starting line and then turn to go around the cone 3 metres away to make a turn of 3m diameter.
- If they are successful, they will attempt next closest (2.5 metres), and so on until they cannot complete the turn.
- The partner will measure the tightest turn made and enter the result into the self-assessment sheet.

Modifications

- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources).
- If nervous riders are afraid of hitting the cones, you can use flat markers or chalk markings on the ground so that they may be ridden over if needed.

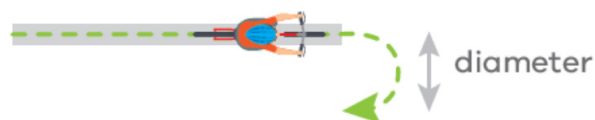
Progressions

- Can measure the tightest turn possible.
- Challenge riders to compare turning left AND right, as most people will have a dominant side which is easier.

Safety

- The partner is to stay a safe distance away from the rider.

Activity Setup



Teaching Points

- The key to doing it is to travel as slowly as possible without falling.
- Balancing: Keep pedalling to maintain balance.
- Turning skills: Lean slightly into the turn and rotate the handlebars. Smooth movements rather than fast jerky movements.
- Turning is sharper when going slowly but much more difficult.
- Taking turns with your partner.

Key Questions

- What is the diameter of a turn?
- How do we make a tight turn?
- When would you have to manoeuvre your bike like this in real life?

Station 3. Track stand.

Resource Requirements

- Stopwatch, cones.

Activities & Differentiation

The aim of this activity is to stay stationary on the bike for the longest amount of time without moving.

- Set up four cones in a box, approximately 2m x 2m.
- The rider will ride into the box, brake to a complete stop, and then stay still for as long as they can. The rider must stay on the bike without placing a foot on the ground.
- The partner will use the stopwatch to time how long the rider was able to remain stationary and enter the result into the self-assessment sheet.
- The partner will also act as a spotter, helping to protect the rider from falling.

Modifications

- Measure the time between the first moment the rider enters the box and when they have to put a foot down.
- Students who are not yet able to balance and pedal can still participate in this activity using a balance bike (refer to additional resources). They can be encouraged to coast into the box, brake to pause, with the time measured from when they enter the box until when they have to put a foot down.
- Students who are struggling to hold their balance may attempt this activity by sitting on the bike and counting how many times they need to touch a foot on the ground in a 20 second period instead.

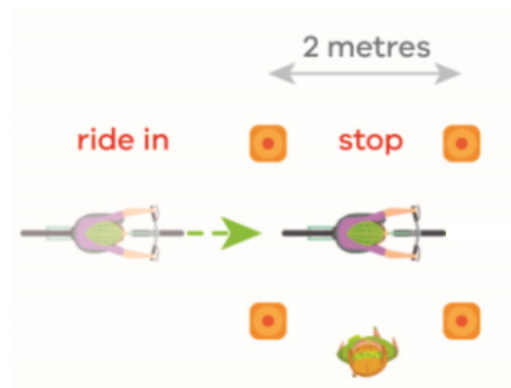
Progressions

- Challenge confident riders to track stand one-handed.

Safety

- Keep the area free of obstructions.
- Ensure that the partner is close by as a spotter to prevent any major falls.

Activity Setup



Teaching Points

- The key to doing this is balance and making small movements with your feet on the pedals and hands on the handlebars.
- The partner plays a very big role in this as a timer and safety helper.
- Taking turns with your partner.

Key Questions

- What techniques do you think will help you succeed?
- Where should the partner be to be the best safety spotter possible?
- When would this skill be useful while riding your bike in real life?
 - Riding in a group, where the person in front of you has stopped or slowed down
 - Pausing to look both ways at a give way sign (but not at a stop sign, where you must put a foot on the ground).

LESSON PLAN

Unit 4 Appendix 2: Riding station activities for Lesson 5



Station 4. Braking.

Resource Requirements

- Stopwatch, non-slip ground marking or chalk, cones.

Activities & Differentiation

The aim of this activity is to take the least amount of time to stop, whilst ensuring that you stop with the front tyre exactly on the dot.

- Set up will be two lines 5 metres apart, then a dot (tape on the ground) 3 metres past the second line.
- The rider must start at the first line and gain speed for the first 5 metres. After the rider crosses the next line, the rider must stop pedaling. A dot is placed 3 metres beyond this line and the rider must come to a complete stop with the front tyre on this dot. If the bike stops directly on the dot, the time that the whole journey (from start line to dot) is recorded. If the rider does not stop on the dot, then no time is recorded.
- The partner will record the time taken from the start until the stop, then judge if the bike stopped on the dot and enter the result into the self-assessment sheet.

Modifications

- If stopping directly on the dot is difficult, either increase the dot size or make a horizontal line to stop on.
- Alternatively, make 3 chalk circles for dots, each worth different time penalties. The smallest inner dot has no time penalty, the next largest circle adds 1 second to timing, and the largest circle adds 2 seconds to timing.

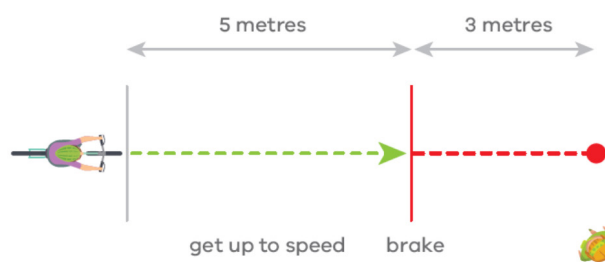
Progressions

- Confident riders can stop with the rear tyre on the dot, instead of the front tyre.
- Using the 3 circle option above, having the centre circle very small increases difficulty for skilled riders without compromising achievement for less-skilled riders.

Safety

- Keep the area free from obstacles.
- Partner stays a safe distance away.
- Non-slip markings for dot. (or chalk).

Activity Setup



Teaching Points

- This activity is designed to test starting and braking skill. A faster time can be achieved by braking later but this will require more skill to achieve accuracy.
- Good braking technique requires:
 - Keep bike straight.
 - Good posture. Pressure on feet, slightly standing off the seat, pushing body/hips backwards and bracing arms against the stopping force.
 - Smooth pulling of the brake levers, not pulling as hard as possible.
 - Using the correct braking technique (both brakes). The front brake will provide most stopping power but must be used with rear brake assistance to provide a smooth, safe stop.
- Braking too hard or having poor posture will result in losing balance and the rider flipping over the handlebars.
- Taking turns with your partner

Key Questions

- Is it easier to brake on the dot if you start braking earlier or later?
- Which brakes will you use to make the quickest, most accurate brake? Will you use the same pressure in each brake?
- When might you have to stop suddenly while riding your bike out in the community?



Station 5. Swapping turns.

Resource Requirements

- Cones.

Activities & Differentiation

The aim of this activity is for the rider and their partner to swap turns (taking the lead) with each other the greatest number of times in 20 metres.

- Set up with two cones 20 metres apart. Both students start single file at one end and both will finish at the other cone, 20 metres away.
- The riders must start in single file. One ‘turn swap’ is achieved when the rear rider full overtakes the other on the right and then returns to single file in front of their partner, whilst both are moving forwards towards the finish line.
- The partner will do the same thing and both riders will enter the result into the self-assessment sheet.

Modifications

- For students who are not comfortable doing this with another rider next to them, you can place cones at 3 metre intervals and riders are instructed to do a circle around each cone before continuing to the next. Each cone successfully circled receives a point.
- The distance can be increased to allow more time to complete a turn.

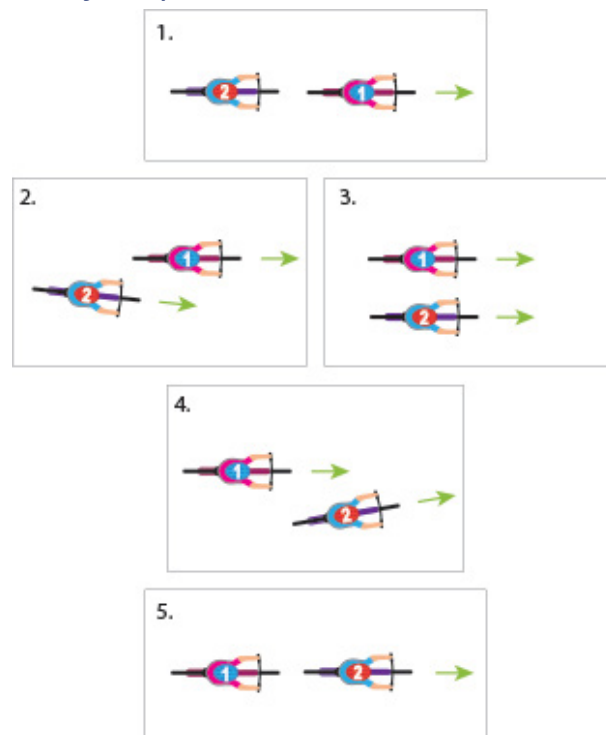
Progressions

- Can be ridden one handed by confident riders.
- Confident riders can be challenged that they must not stop, track stand or put a foot down.
- Riders can try swapping turns with the front rider moving to the right and going behind the other rider, instead of overtaking from behind.
- Confident riders can try this in groups of 3 or 4, with the rear rider overtaking the whole group to go to the front. This will likely require more space, and may be a continuous circuit around the space.

Safety

- Keep the area free of obstructions.
- Only one group on the course at a time.
- Speed must be kept slow for safety and to maximise the number of turns swapped.

Activity Setup



Teaching Points

- This activity will require the two riders to ride together, slowly, and alter speed to allow their partner to move beside and then in front of them to complete a full swap.
- Communication with your partner is very important for safety and success.

Key Questions

- What are the key skills required to do this well?
- Why is good communication while riding so important?
- How do we communicate on the bike?
 - Bell, voice, signals, lights, positioning, etc.

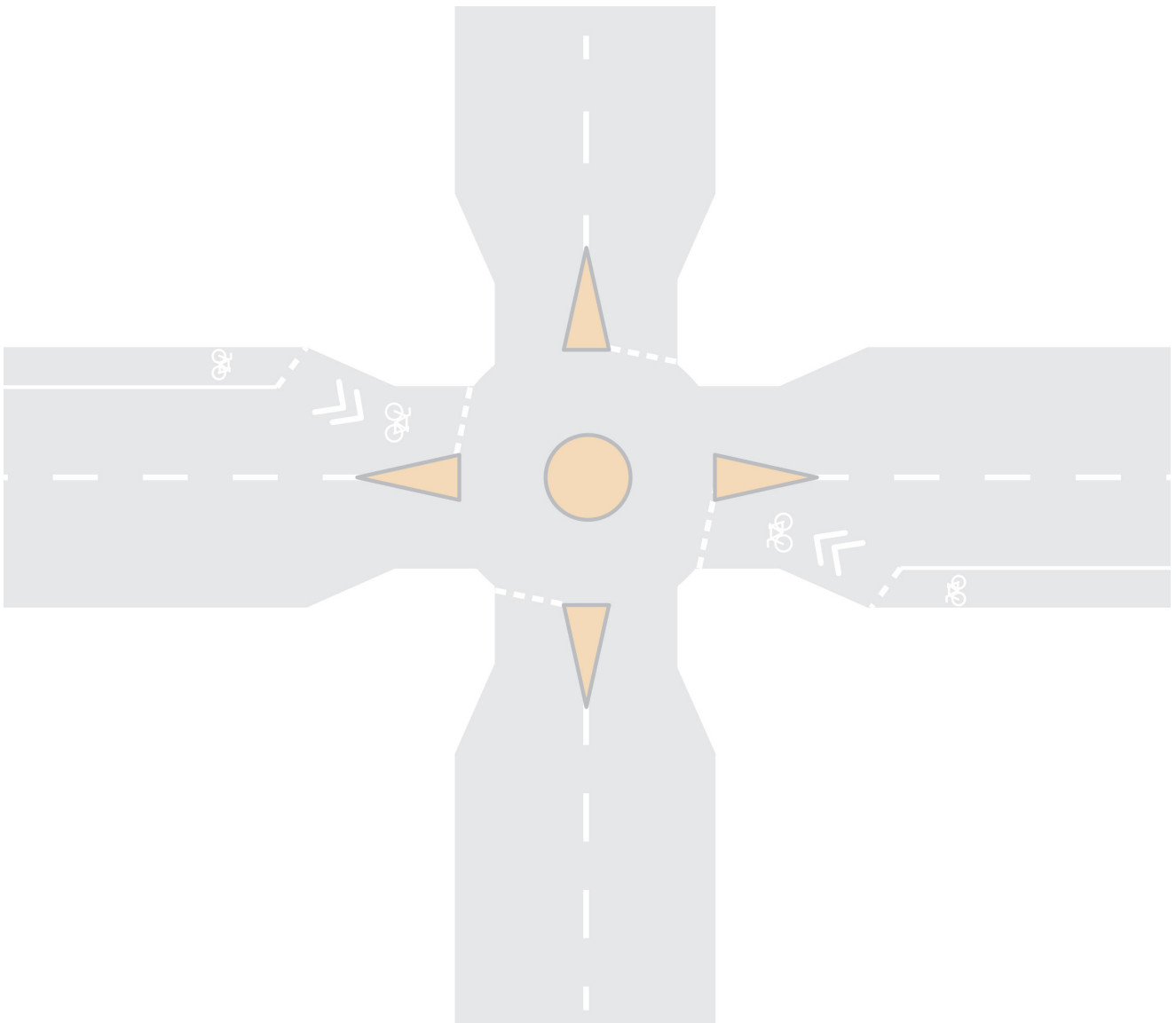


Intersections worksheet: Roundabouts



Draw the path of the bike rider entering the roundabout and:

1. Turning left,
2. Going straight,
3. Turning right.



Intersections worksheet: Turning right at crossroads

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Draw the 3 options for the bike rider entering the intersection and turning right.

