LESSON PLAN

Unit 4: Riding independently

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

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 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.

LESSON PLAN

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 study, 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

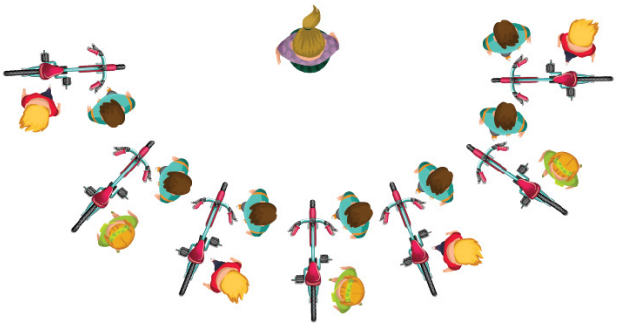
We must always wear a helmet when on a bike because it protects our head and our very important brain. Just as important, is for the helmet to be fitted correctly, otherwise it won't work properly.

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.

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).

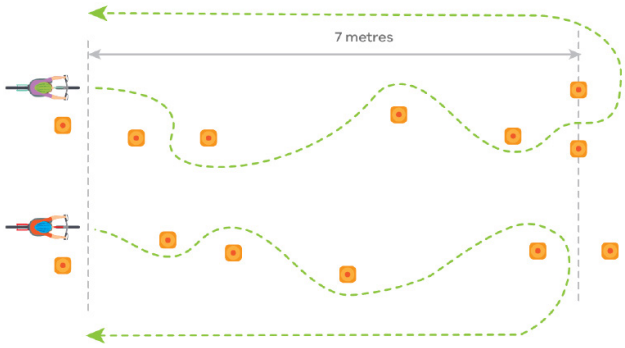
Modifications

- 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.

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

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 with to turn. The bike generally follows in this direction as this action usually results in the handlebar turn and lean that is required.

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?

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.

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.

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.

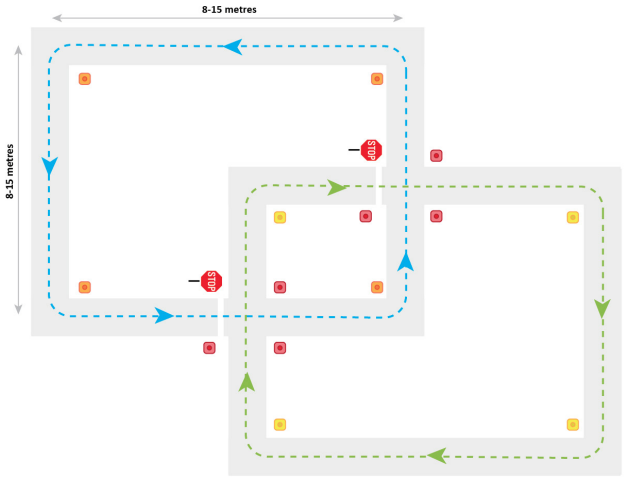
Modifications

- 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.

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.

- 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?