

Intersection guide

Teachers resource

Name:



There are 3 types of intersection that we use in Bike Ed.

1. T-intersection
2. Signed cross-intersection
3. Unsigned intersection

It is important for riders to experience negotiating intersections as they incorporate the concepts of giving way, decision making, bike skills and riding defensively with a safe attitude. These road skills can then also be applied as pedestrians and, later on, as drivers.

This guide will show how to set up each of these courses as part of a Bike Ed lesson, as well as a free riding practice intersection course that combines all these elements in a miniaturised road network

The focus of these intersections should be on decision making around other road users. Get the riders used to going through the courses without bikes first, before progressing to bike riding.

Stay at the most complex location (the centre intersection) to help riders as they start to make these decisions.

Should these be too complex, a good activity to build decision making skill is the 'Figure 8 riding' which uses the same concepts with less complexity.



T-intersections

T-intersections are the least complex of the intersections. It is a straight path/road with another coming from the side (which will have a 'Stop' or 'Give Way' sign).

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.

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 turn right or left.

The course may be set up such that there is one lane approaching the intersection and student may turn either left or right, or two lanes approaching with the left lane turning left and the right lane turning right. The teacher should be at the intersection, observing and providing feedback to students as they negotiate the intersection.

Modifications

The teacher may call 'left' or 'right' when students approach the stop line, to indicate the direction they should turn.

Progressions

Additional walkers/joggers/riders may travel back and forth along the main thoroughfare (Solid red line A-A) so that riders must pick safe gaps in the traffic. The traffic may be bike riders or those without bikes.

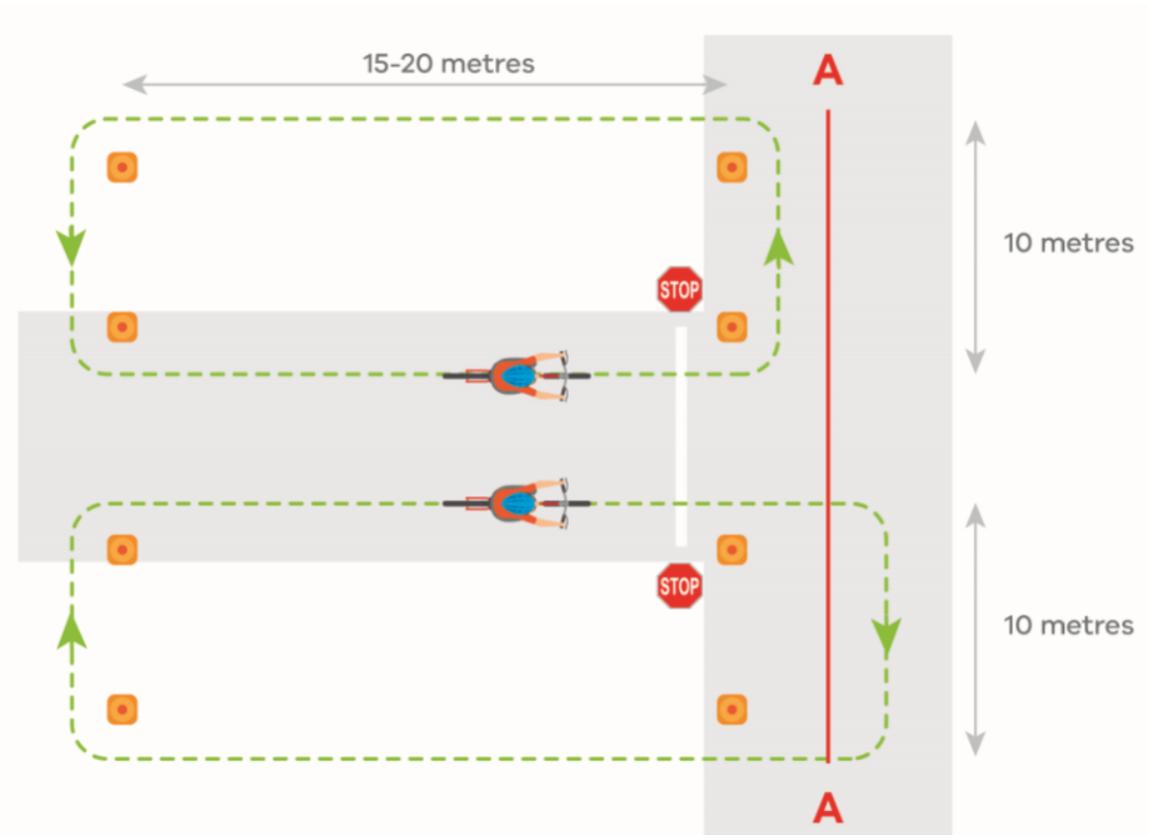
Teaching points

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.

Equipment

Cones, stop and give way signs

Safety

Must be completed at low speed. Keep two bike lengths distance maintained between riders.

Signed cross-intersections

Signed cross-intersections are more complex however they function specifically on which direction the 'Stop' or 'Give way' sign is facing.

Riders from the side of the intersection that faces a 'Stop' or 'Give way' sign should stop at the line on the path/road and wait until the intersection is clear and it's safe to enter.

Riders can approach from any leg and should react to the signs facing them.

As riders get more comfortable, you may introduce riders or pedestrians walking the red A-A line. These will have priority and the riders will have to give way to them.

Riders may progress to making turns at the intersection. The law is that left turners will have priority over right turners, so right turning bikes must give way.

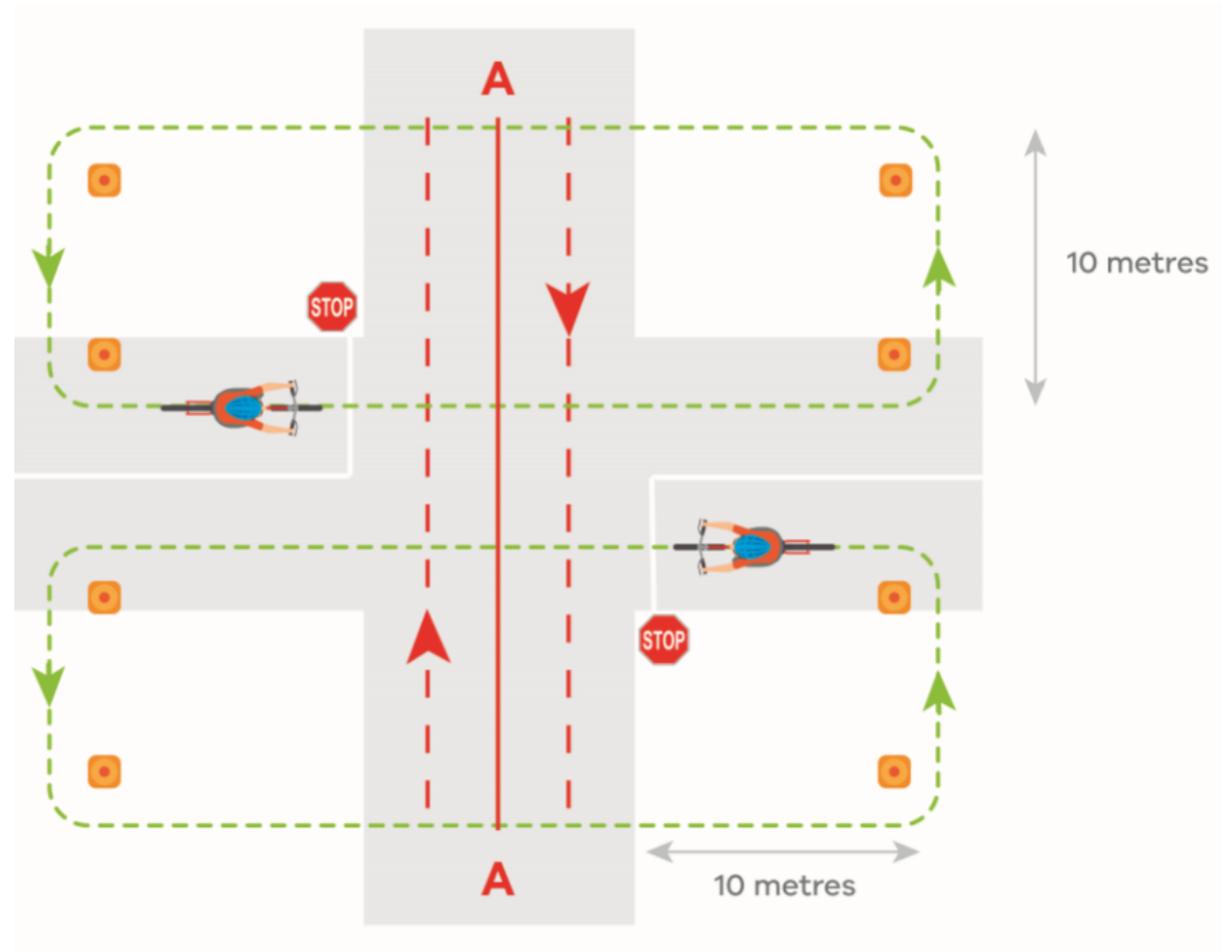
- This activity will involve students riding their bicycles through a cross-intersection, stopping at the stop/give way signs and proceeding through the intersection, then continuing around the outside of the course back to the intersection.
- Have the students walk their bikes through the course slowly. 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 go though, turn right, or turn left.
- The teacher should be at the intersection, observing and providing feedback to students as they negotiate the intersection.
- Once students are comfortable making the movements, add some bike riders/walkers to the intersection (moving along the red A-A line) to help students practice judging gaps in traffic.

Modifications

- The course may be set up such that there is one lane approaching the intersection and student may turn either left or right or continue straight.
- The teacher may call 'left', 'right' or through when students approach the stop line, to indicate the direction they should turn.

Progressions

Additional walkers/joggers/riders may travel back and forth along the main thoroughfare (Solid red line A-A) so that riders must pick safe gaps in the traffic. The traffic may be bike riders or those without bikes.



Signed cross-intersections continued

Teaching points

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.

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

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?

Equipment

Cones, stop and giveaway signs.

Safety

- Must be completed at low speed.
- Keep two bike lengths distance maintained between riders.
- Pedestrians must walk at a consistent speed to provide predictability for bike riders.
- Pedestrians should be wearing brightly coloured clothing.

Unsigned intersections (and roundabouts)

Unsigned intersections are more complex. There are no signs telling riders who has priority and who must give way. The simple rule is: "Give way to the rider on your right hand side".

This activity will involve students riding their bicycles through a roundabout/ unsigned intersection.

The route for the activity will be a continuous loop through the course. Riders will ride straight through the intersection, then turn left at the end, then circling around back to the intersection from the next approach. See the diagram for details.

Explain that, at roundabouts or intersections without signs, we give way to the rider on your 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 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' at points around the outside of the circuit, who will act as school crossing supervisors. Riders will have to stop when confronted with these stop signs.

Teaching points

Who goes first?

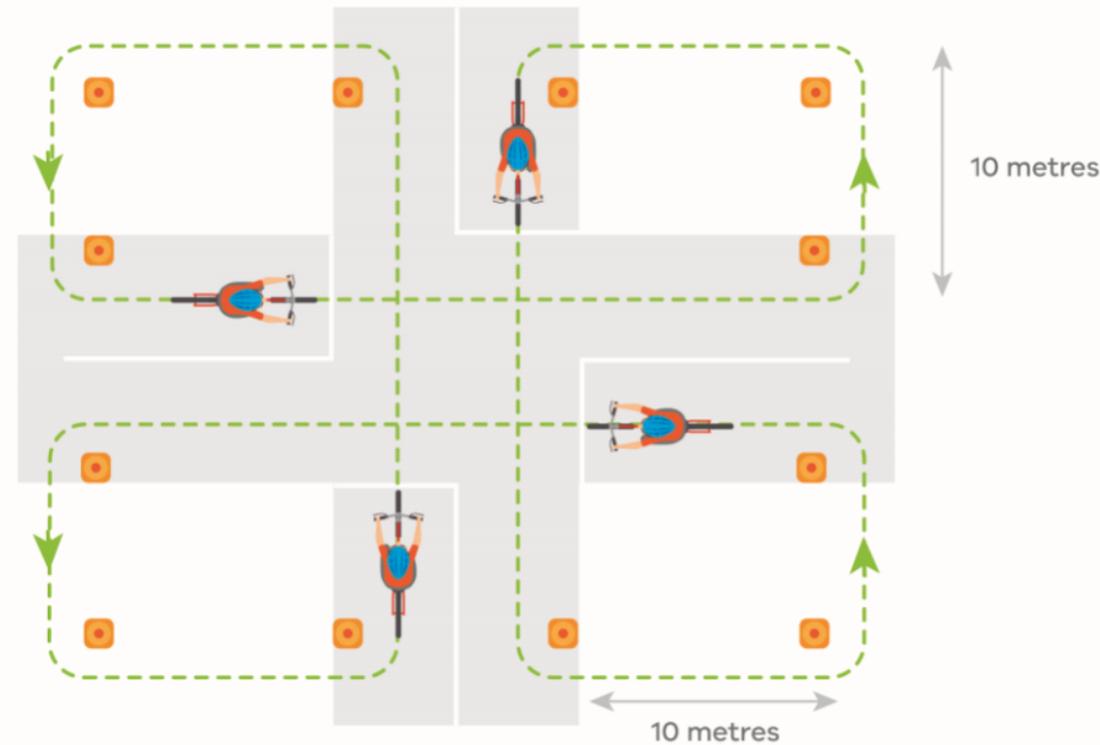
- At the intersection, those at the stop sign must wait.
- If there are two people opposite each other at the stop sign, the person turning right must wait until the other people have gone.

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

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?

Equipment

Cones/line marker, and stop and give way signs.

Safety

- Keep two bike lengths distance maintained between riders.
- Non-riders/helpers are to stay off the riding areas.
- Limit riding to a safe speed.

Intersection course

The intersection course combines all the intersection ideas into one free riding course.

Riders can practice riding, making riding decisions and become comfortable with other road users in a safe place. Building a memory bank of experiences on the bike makes it easier to make good decision in unfamiliar circumstances.

The centre intersection can be altered to change the priority direction or to make it an unsigned intersection.

Students may be assigned as 'school crossing supervisors' or 'traffic controllers' around the outside of the course. They may present riders with 'Stop' signs at some locations, requiring riders to stop.

It is best for the teacher to be present predominantly at the centre intersection, as this is the most complex.

Sit students down and briefly revise the road rules:

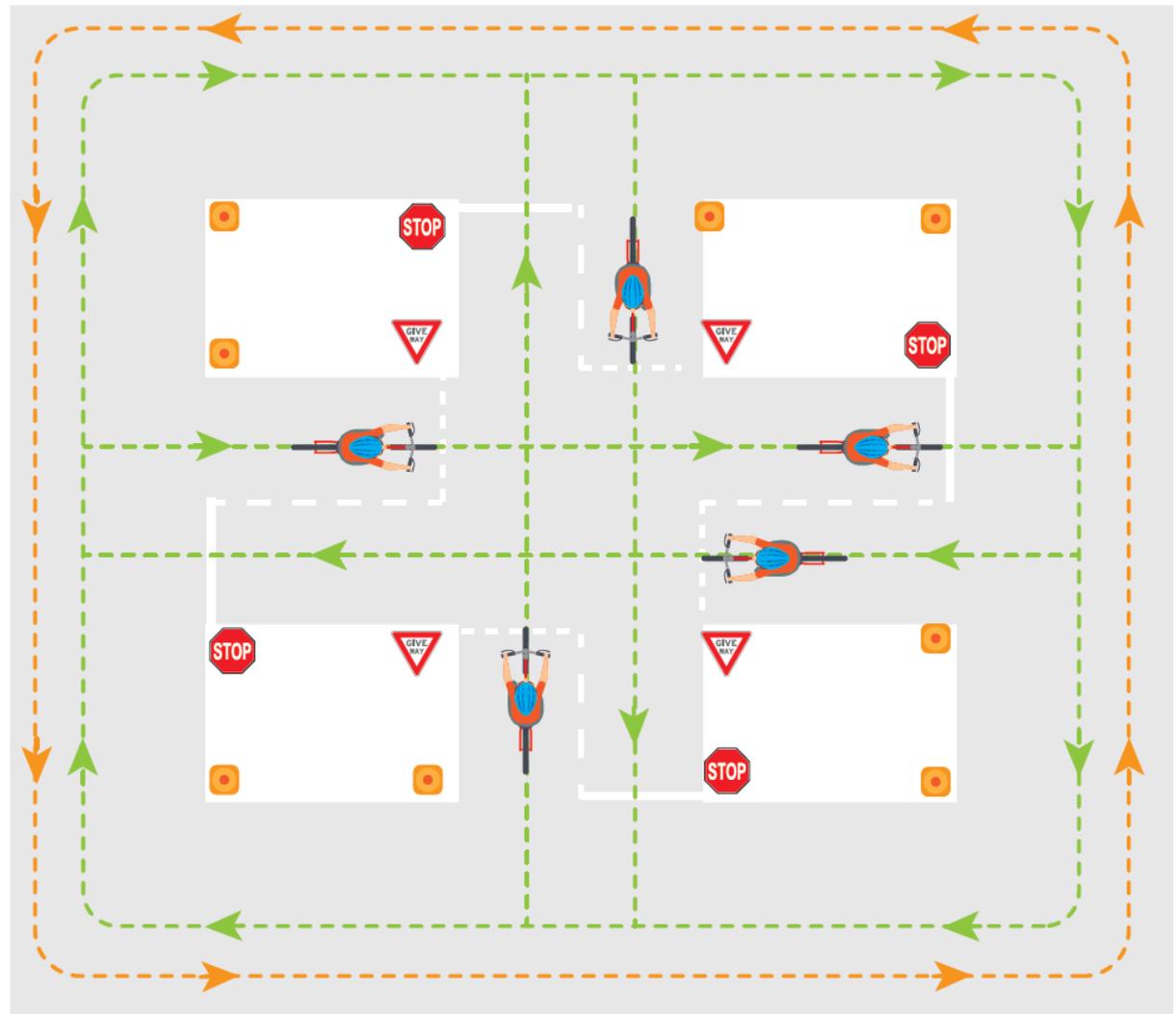
- Set up the practice intersection course.
- Walk through the intersection course without bikes, demonstrating how to behave at the T-intersections and the cross-intersections, as per the previous class.
- Riders will ride around the intersection (clockwise). They may enter the intersection at any of the four arms.
- Students may choose to ride any path around or through the course.

Modifications

Less confident riders may ride around the outside only, as it is easier. They can choose to ride through the middle once they have gained confidence.

Progressions

- Students not riding can be 'lollipop people' at various points around the outside of the course.
- 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.



Teaching points

Stop and give way signs require them to stop and wait until it is safe to proceed into the intersection.

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?

- Prepare in advance.
- Obey the road rules
- Look left and right before moving through.

If you are in doubt about what to do, what should you do?

What tips do other riders have to help people negotiate intersections?

Equipment

Cones or line marker, and stop and giveaway signs.

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

Safety

- Keep two bike lengths distance between bike riders.
- Non-riders or helpers are to stay off the riding areas.
- Limit riding to a safe speed.