

BIKE SAFETY

DRILLS AND ACTIVITIES



The Drills & Activities in this booklet pair with Portland Safe Routes to School's 10-lesson Bike Safety Education curriculum. Use it as a quick-look guide and reminder when setting up drills. There are more details about how to run the drills and teach the lessons in the full curriculum document.

Quick Tips for Drills:

- Give overview of drills, important notes, and other elements of the day inside instead of outside. It's hard to keep student attention while outside and when they are near the bikes.
- Hold students accountable for inappropriate behavior on the bikes as soon as possible.
- Demonstrate what drills should look like ahead of time, either on a whiteboard, or with chalk on the black top.



TABLE OF CONTENTS

- 1.1 What If? List
- 1.3 Principles of Bike Safety Activity

- 2.1 Helmet Fitting
- 2.2 Personal Safety Check (PSC)
- 2.3 Bike Fitting
- 2.4 Bike Safety Check

- 3.1 Basics of Braking
- 3.2 Ride in a Circle 1
- 3.3 Ride in a Circle 2
- 3.4 Braking with Signals
- 3.5 Slow Race!

- 4.1 Pop the Bubble
- 4.2 How Many Fingers?

- 5.1 Memory Relay

- 6.1 Simple Signals: On Campus
- 6.2 Simple Signals: Off Campus

- 7.1 Left Turn: On Campus
- 7.2 Left Turn: Off Campus

- 8.1 First to Stop ROW: On Campus
- 8.2 First to Stop ROW: Off Campus

- 9.1 ROW + Left Turns: Off Campus

Bonus Activities

- Foot Down
- Copenhagen Left: On Campus
- Copenhagen Left: Off Campus

Some Bike Safety Best Practices

1.1 WHAT IF? LIST

PERSONAL SECURITY

Goal: Students will share their experiences of traveling in the right-of-way. This will set the tone for the unit and guide the focus for the class.

Materials:

- 3 large sheets of paper
- Jumbo markers
- Tape

Set up time: 5 min.

> Before class: Write Traffic Laws, Personal Security, and Built Environment on the sheets of paper and post them on a wall.

Location: Gym

Time needed: 10 min.



ALPACA Principles:

Aware
Assertive

Getting ready:

- Have students sit or stand near the paper
- Define the three types of safety written on the paper

Directions:

1. Ask the class: What are some unsafe situation you have experienced or seen on your way to school or traveling around Portland?
* students should think about dangerous situations in the street, on the bus, in the bike lane they have seen, experienced, heard about.
2. Write down what the students are sharing on the paper
3. Once you have a good list, divide them into:
 - a) Traffic Laws (society's code of conduct in the right-of-way)
 - b) Personal Security (person-to-person interactions in public spaces)
 - c) Built Environment (interacting with vehicles and street infrastructure)
4. Let class know you will be addressing these concerns throughout the unit. Will have another opportunity to discuss on the last day.

Tips:

- Save list and check off concerns throughout the unit
- See examples from other students below

Examples of unsafe situations shared by students in previous classes:

Traffic Laws:

- Running red lights
- Speeding

Personal Security:

- Not knowing what to do around people experiencing homelessness
- Seeing someone be assaulted

Built environment:

- People on their phone while driving/riding/crossing the street
- Doors being opened in front of bike or scooter rider

What If? List lesson was used with permission by the Girl Strength Curriculum

1.3 PRINCIPLES OF BIKE SAFETY ACTIVITY

ALPACA

Goal: Students will learn the principles of bike safety

Materials:

- ALPACA signs and statements
- Yes/No signs
- Tape

Set up time: 5 min.

> Before class: Tape ALPACA and Yes/No signs around the gym walls

Location: Gym

Drill time: 15 min.

Getting ready:

- Quickly review ALPACA principles with students
- Point out where signs are located in the gym
- Let students know there may be more than one response to some statements

Directions:

1. Using provided ALPACA statements, read a statement and ask students to run to the correct ALPACA principle or answer (yes/no).
2. Once students have decided on their answer, have small groups at each sign discuss why they ended up at that sign/decision.
3. After reading through all the statements, facilitate a discussion with the larger group using provided talking points as a guide.

Tips:

- Mix up how students should get to their answers for each statement (i.e. skip, bear crawl, wheelbarrow, backwards, etc.)
- Keep the students moving. Yes/no and ALPACA principles are great ways to have discussions.

ALPACA Principles:



Aware
Legal
Predictable
Assertive
Considerate
Able to be seen (visible)

ALPACA Statements & Talking Points

1) I feel comfortable riding a bike or scooter. (Yes/No)

- i) Use this statement to talk about infrastructure
- ii) Assess how comfortable students are riding bikes

2) I ride or would like to ride a bike or scooter on the street. (Yes/No)

- i) Gain understanding of how your students ride

3) Which principle goes with this statement: People riding bikes and scooters must be on the right side of the road.

(Answer: Predictable, Legal, Able to be seen)

- i) Can talk about lane position and visibility

4) Which principle: People who ride bikes are allowed to ride side-by-side. (Legal, Considerate)

- i) Talk about sharing the road. Bikes can ride side-by-side, but it is considerate to go single file to allow faster traffic to pass on the left when safe.

5) A road user waves a person riding a bike or scooter through an intersection, but it's not the rider's turn to go. Should the rider go? (Yes/No)

- i) Talk about predictability and awareness: Some

drivers want to be kind and allow bikes/scooters to go even if it is not their turn. Unless rider is 100% certain that ALL road users at the intersections will stop, it is better to follow the rules of ROW.

6) If you are really good at riding bikes, you'll always be safe.

(Yes/No answer, but covers Aware, Legal, Predictable, Assertive, Considerate, Able to be seen)

- i) This is a great statement to talk about how skillful riding helps a lot, but if it isn't paired with the principles, it can be more dangerous.

7) Bike tricks are awesome! (Yes/No)

- i) Talk about how riding is fun, but looks different when sharing the road with other vehicles. Choose appropriate places to ride when you're doing tricks.

8) Slower speeds keep people safe and create a comfortable environment for everyone. (Legal, Courteous, Predictable)

- i) Talk about speeds and the power of impact
- ii) Talk about sharing the road between people driving, people riding bikes or scooters, and people walking

2.1 HELMET FITTING

PROPERLY FITTED HELMET

Goal: Every student will have a helmet that fits them for the duration of the unit

Materials:

- Helmets
- Masking tape
- Sharpie markers

Set up time: 2-5 min.

> Before class: Arrange the bags of helmets so the sizes are clearly separated.

Red = S, Blue = M, Grey = L & XL

Location: Gym

Time needs: 15-20 minutes



ALPACA Principles:
Legal

Getting ready:

- Tell students what sizes of helmets are in which colored bags; have students grab a helmet based on their best guess of what will fit
- Demonstrate proper helmet fit for class (see visuals below for tips)

Proper helmet fit instructions:

1. Without being buckled, helmet should sit comfortably on their head
2. Forehead should be covered - no more than two fingers from eyebrows to helmet
3. Tighten dial in back so helmet fits snugly
4. Straps near ears should create a triangle that frames the ear
5. When fastened, buckle should not be able to slide over the chin
6. When helmets fit properly, place a piece of masking tape on the helmet with student's name. They will use this helmet over the course of the program.

Tips:

- Have students partner up to check another student's helmet fit.
- Have students check helmets for cracks in the Styrofoam. Remind them to never drop, kick or throw their helmet.



Forehead should be covered, leaving no more than two fingers from the eyebrows to helmet



Straps near ears should create a triangle or "v" around the ear



Buckle should not be able to slide over chin. One finger should fit underneath strap (pc: Can-Bike Manitoba)



Tighten helmet using dial on the back - righty tighty, lefty loosey (pc: bikepgh.com)

A final test: When students shake their head yes and no, does the helmet still move around?

2.1 HELMET FITTING

PROPERLY FITTED HELMET

2.2 PERSONAL SAFETY CHECK (PSC)

READY TO RIDE

Goal: Every student in class will know how to prepare their personal gear for a bike ride

Materials:

- Students with their own helmets

Set up time: None

Location: Gym

Time needs: 5-10 minutes for first day; much less time needed as class progresses

Personal Safety Check Checklist:

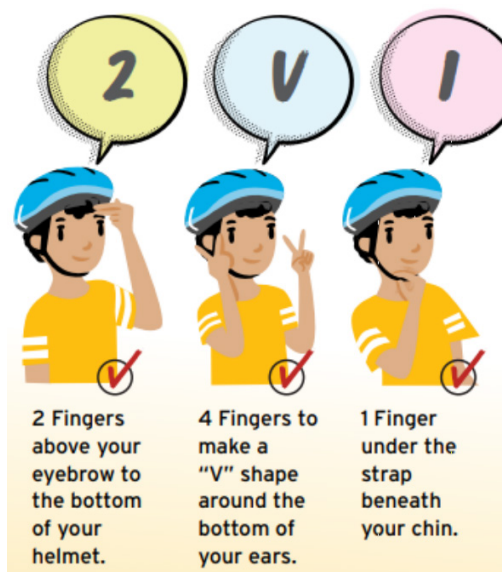
1. Helmet: make sure helmets are well adjusted and fit
2. Pant legs: roll up to make sure pants won't get caught in the chain
3. Shoe laces: tuck laces to avoid getting caught in pedals or chain
4. Closed-toe shoes (recommended): wear to avoid stubbing toes
5. Comfortable clothing: people ride in all sorts of clothes; however, we encourage students to wear something they can ride in comfortably
6. Attitude: focused and able to follow directions

Tips:

- See PSC visuals below
- This is important to do every day before starting Bike Safety class



ALPACA Principles:



Helmet fits properly!



- Pants rolled up (right leg/chain side for sure)
- Shoelaces tucked in
- Closed-toe shoes



- Comfortable clothes
- Ready to focus!

2.2 PERSONAL SAFETY CHECK (PSC)

READY TO RIDE

2.3 BIKE FITTING

PROPERLY FITTED BIKE

Goal: Every student in class will have a bike that fits them

Materials:

- Bikes

Set up time: 10 min.

> Before class: Arrange bikes so they are all facing the same direction and aligned by height.

Location: Gym

Time needs: 20 minutes

Getting ready:

- Have a few students walk with crouched knees while a few others walk upright in a short race. This demonstrates the importance of having a bike that fits.
- Instruct students how to use the quick release on a bike to adjust the seat height.

Directions:

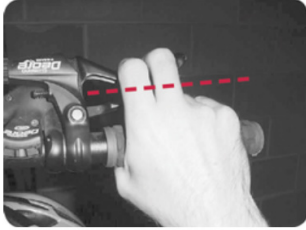
1. Have students line up shortest to tallest (or vice versa)
2. Lead the line of students behind the bikes, assigning each person to bikes that fit them.
3. Assist students with adjusting their seat height if needed.

Tips:

- See visuals below for bike fitting tips



ALPACA Principles:



1) Student's hands can reach brakes and shifters easily

2) Student can hop on and off the bike easily

3) When sitting on the saddle and legs are on the ground, students can stand on their tip-toes.

a) This helps achieve maximum power with each pedal stroke

b) When leg is not fully extended when the pedal is down, it's like running while crouching, you have less power and get tired sooner

Example of leg with good extension



2.3 BIKE FITTING

PROPERLY FITTED BIKE

2.4 BIKE SAFETY CHECK (BSC)

READY TO RIDE

Goal: Students learn how to properly assess whether their bike is safe and ready to ride

Materials:

- Bikes

Set up time: none

Location: Gym

Time needs: 10 minutes for first day; less time needed as class progresses

Getting ready:

- Have an example bike to show students how they will conduct the Bike Safety Check on their own bikes

Directions:

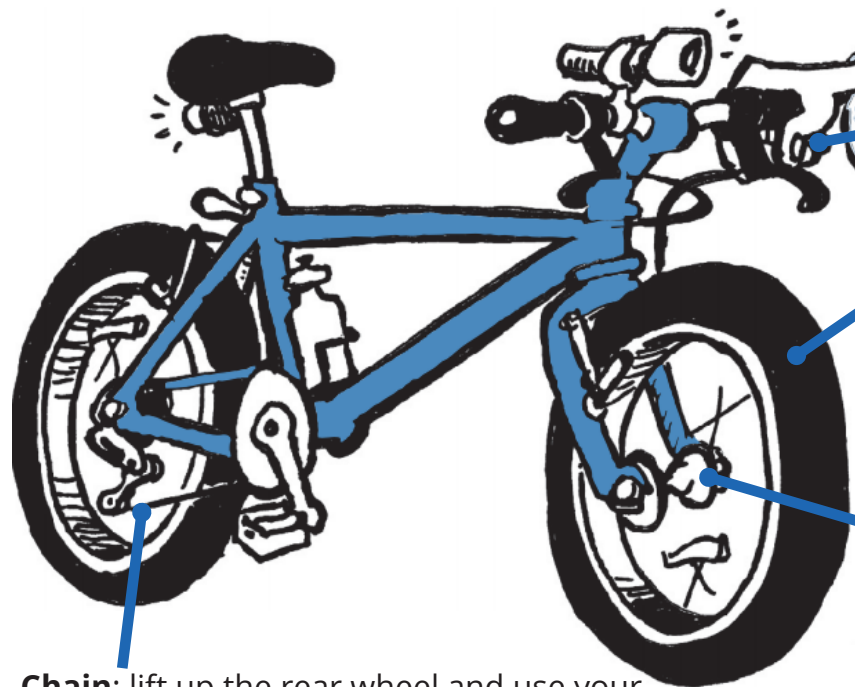
1. **Air** - check for air in front and back tires
2. **Brakes** - squeeze both brakes and push the bike forward and pull backward. Wheels should lock in place if brakes are working.
3. **Chain** - lift up rear wheel and pedal bike forwards, checking to see if the chain is engaged and working with the gears
4. **Quick release** - make sure quick release levers on wheels are closed. Students can also make sure their seat is at an appropriate height.

Tips:

- This is also referred to as the **ABC-Q** Check. This is important to do **each day** before the student rides their bike for the first time.
- See visuals below for ABC-Q Check visuals



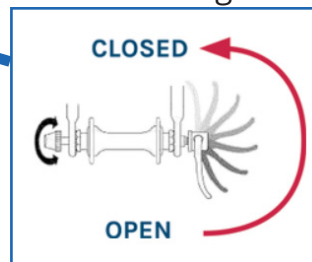
ALPACA Principles:
Legal



Brakes: squeeze both brakes, push bike back and forth. Wheels should lock in place.

Air: check for air in both tires. Fill up if needed.

Quick release: check both wheels to make sure they are closed and tight.



Chain: lift up the rear wheel and use your hand to pedal bike forwards. Make sure chain is moving smoothly.

2.4 BIKE SAFETY CHECK (BSC)

READY TO RIDE

3.1 BASICS OF BRAKING

BRAKING

Goal: Students will learn how to safely use both of their brakes to come to a controlled stop

Materials:

- Cones

Set up time: 5 min.

> Before class: Lay out cones in two lines approximately 15-20 yards apart

Location: Drill space on campus

Drill time: 15 min.

Getting ready:

- Line students up on one of the lines
- Explain to students that left brake lever stops their **FRONT** wheel and is the most powerful. The right brake lever stops their back wheel and has less braking power.

Directions:

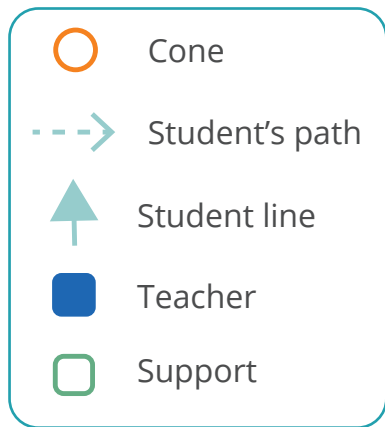
1. Tell students to ***stay seated*** and ride to the other line at a casual pace.
2. Shout "Stop" before students make it to the other line. When students hear "stop" they should brake with ***only their rear brake*** (right lever).
3. Have students line up again, then ride back and brake when instructed. This time they should ***use both right and left brake levers*** to stop.
4. Repeat if necessary.

Tips:

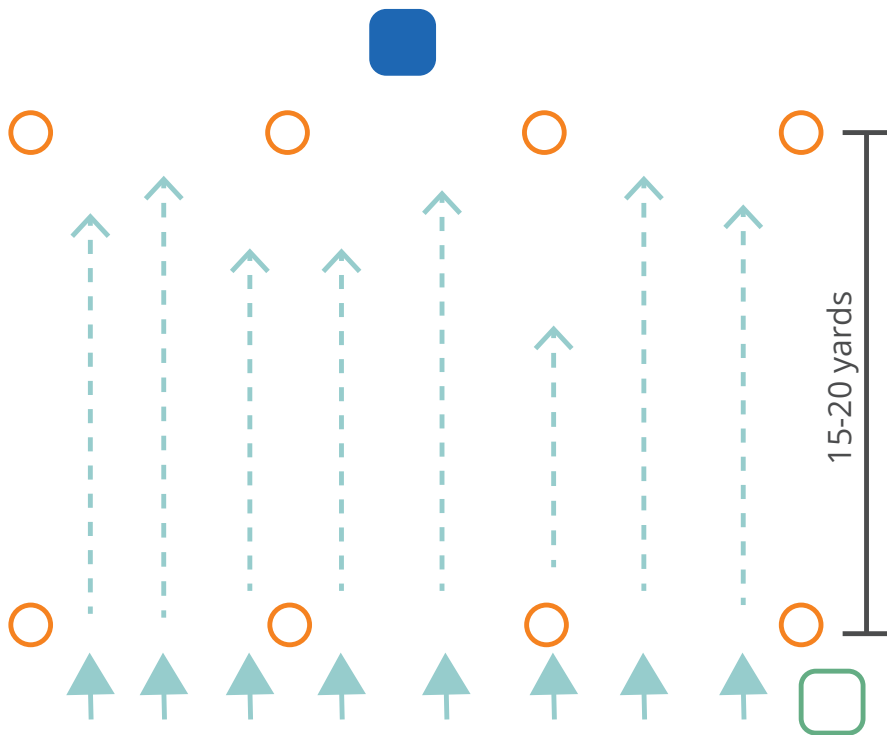
- Students should keep their weight back
- The Bike Safety Check is another opportunity to remind students which brake levers stop which wheel.
- Stopping with both hands at the same time is the safest way to be in control when braking.



ALPACA Principles:
Predictable



DRILL SET UP



3.1 BASICS OF BRAKING

BRAKING

3.2 RIDE IN A CIRCLE 1

RIDE WITH ONE HAND

Goal: Students will learn how to control their bike one-handed

Materials:

- N/A

Set up time: 0 min.

Location: Drill space on campus

Drill time: 5 min.

Getting ready:

- Students will be riding around the school campus in a long line, eventually a circle. Have them start in a line or designate leaders to begin riding and fall into one.

Directions:

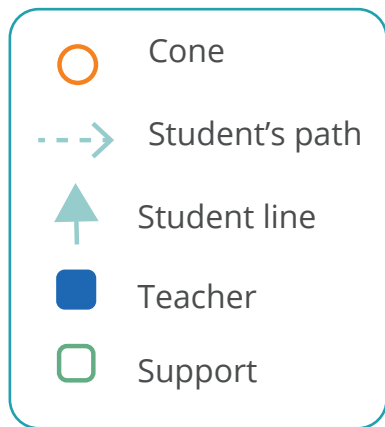
1. Have students ride around the drill space in a long line
2. Once students are riding at a steady speed and have enough space between them; call out to students to take one hand off the handlebars.
3. Call out for students to change hands a few more times

Tips:

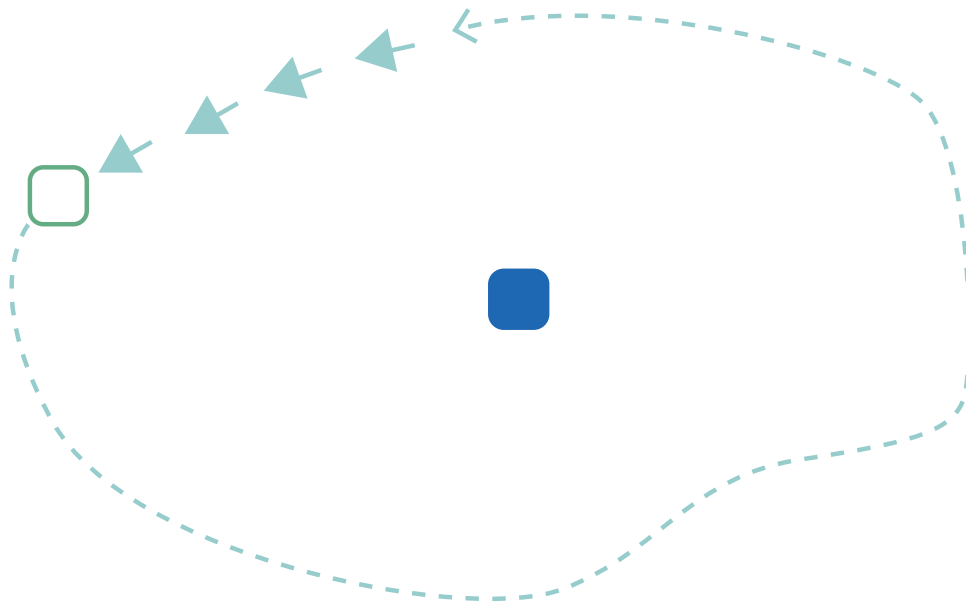
- Students should maintain “ghost space” (roughly the length of their own bike) between themselves and the person in front of them
- If a student is nervous to take their hands off the handlebars, encourage them to open their palm and slowly take their hand away while riding.
- This is a good exercise to incorporate at the beginning and/or end of each day to reinforce the skill. As students become more comfortable, set up multiple circles to increase leadership opportunities.



ALPACA Principles:
Assertive



DRILL SET UP



3.2 RIDE IN A CIRCLE 1

RIDE WITH ONE HAND

3.3 RIDE IN A CIRCLE 2

HAND SIGNALS

Goal: Students will learn how to use their signals

Materials:

- N/A

Set up time: 0 min.

Location: Drill space on campus

Drill time: 5 min.

Getting ready:

- Students will be riding around the school campus in a long line, eventually a circle. Have them start in a line or designate leaders to begin riding and fall into one.

Directions:

1. Have students ride around the drill space in a long line
2. Once students are riding at a steady speed and have enough space between them; call out which signal they should display (right turn, left turn, stop, slow down).

Tips:

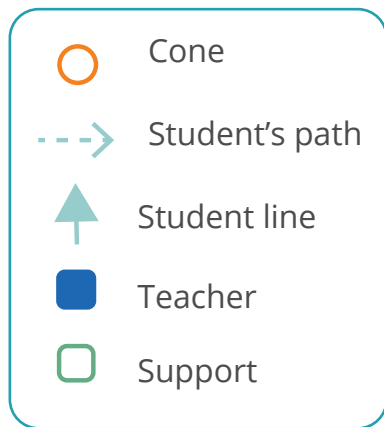
- Signals should be large, easy to read, and away from the body
- If a student does not feel comfortable signaling when they are on the road, it is legal for them to verbally communicate which direction they are turning or if they are stopping; however, it is not as visible.
- This is a good exercise to incorporate at the beginning and/or end of each day to reinforce the skill of displaying a signal.



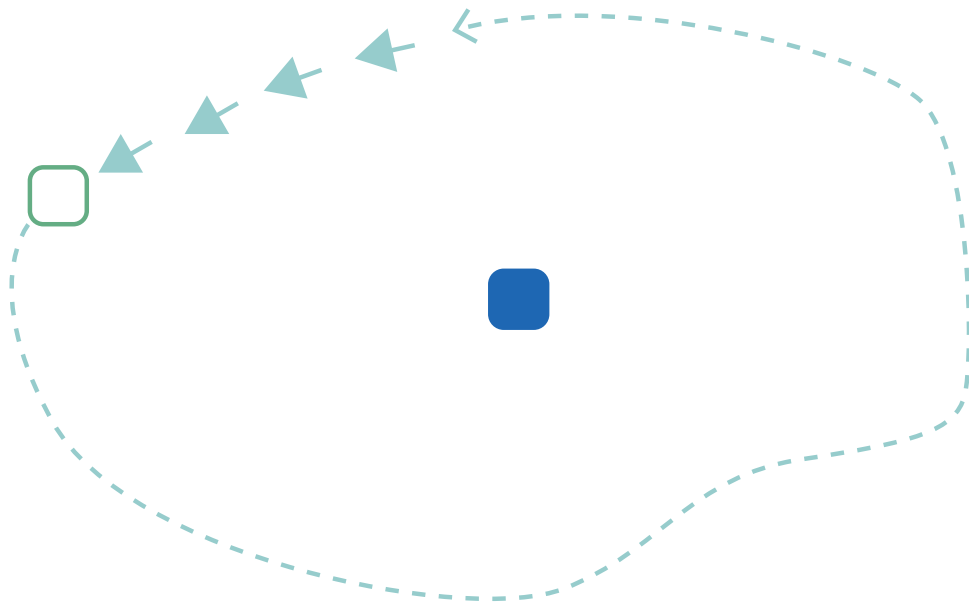
ALPACA Principles:

Predictable

Able to be seen (Visible)



DRILL SET UP



3.4 BRAKING WITH SIGNALS

HAND SIGNALS

Goal: Students will understand the benefits of signaling *before* braking

Materials:

- Cones

Set up time: 5 min.

Before class: Lay out cones in two lines approximately 15-20 yards apart

Location: Drill space on campus

Drill time: 20 min.

Getting ready:

- Line students up along one of the lines
- Review hand signals as a group

Directions:

1. Have students ride down to the other line at a comfortable pace.
2. The first time down they will brake *while holding* the LEFT signal. The second time they will brake *while holding* the STOPPING signal. The third time, the RIGHT.
3. After students have practiced braking with all the signals, bring group together or divide into smaller groups to discuss how signals work in tandem with braking.
4. Instruct students to go back to the line and repeat each signal *before* braking.

Tips:

- Signaling before braking helps ensure riders are stable and in control. A rider should always use both hands to brake, so should plan ahead to show their signal.
- Students should keep their weight back towards the rear of the bike
- Signals should be large, easy to read, and held away from the body

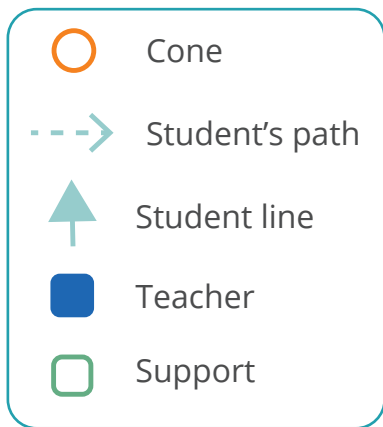


ALPACA Principles

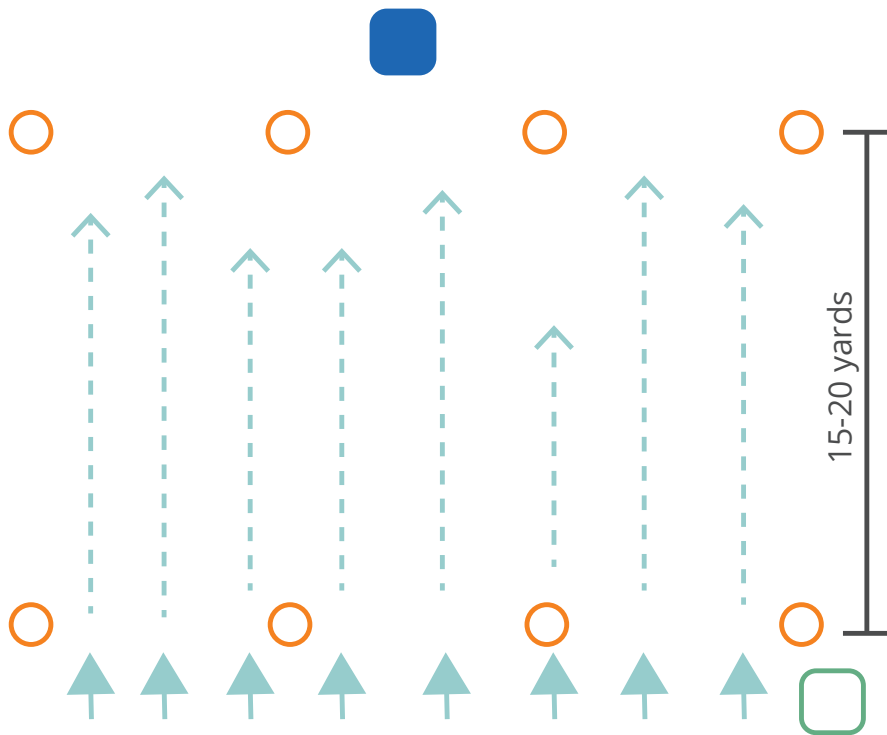
Legal

Predictable

Able to be seen (Visible)



DRILL SET UP



3.4 BRAKING WITH SIGNALS

HAND SIGNALS

Goal: Students will learn how to safely use both of their brakes to come to a controlled stop

Materials:

- Cones

Set up time: 5 min.

Before class: Lay out cones in two lines approximately 15-20 yards apart

Location: Drill space on campus

Drill time: 15 min.

Getting ready:

- Line students up on one of the lines - the "Start Line." Depending on space and number of students, there may be a need for two lines/start groups.
- Explain the rules (below)

Slow Race Rules:

1. "Race" from one line to the other when the teacher calls out "Ready, Set, Slow!"
2. There are three ways to get "out"
 - a) Not starting right away
 - b) Putting a foot on the ground
 - c) Not riding in a straight line
 - d) Crossing the line first

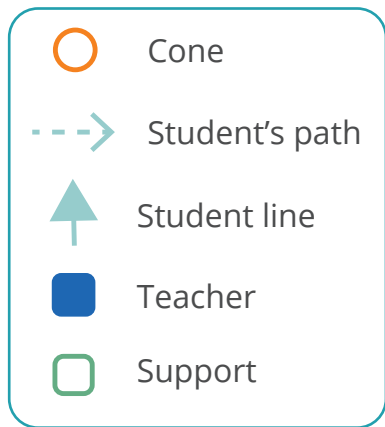
Tips:

- Slow races are a fun activity to add in if you have extra time
- Slow races help teach students to be in control of their bikes, improve balance, and be aware and responsive to other people riding near them

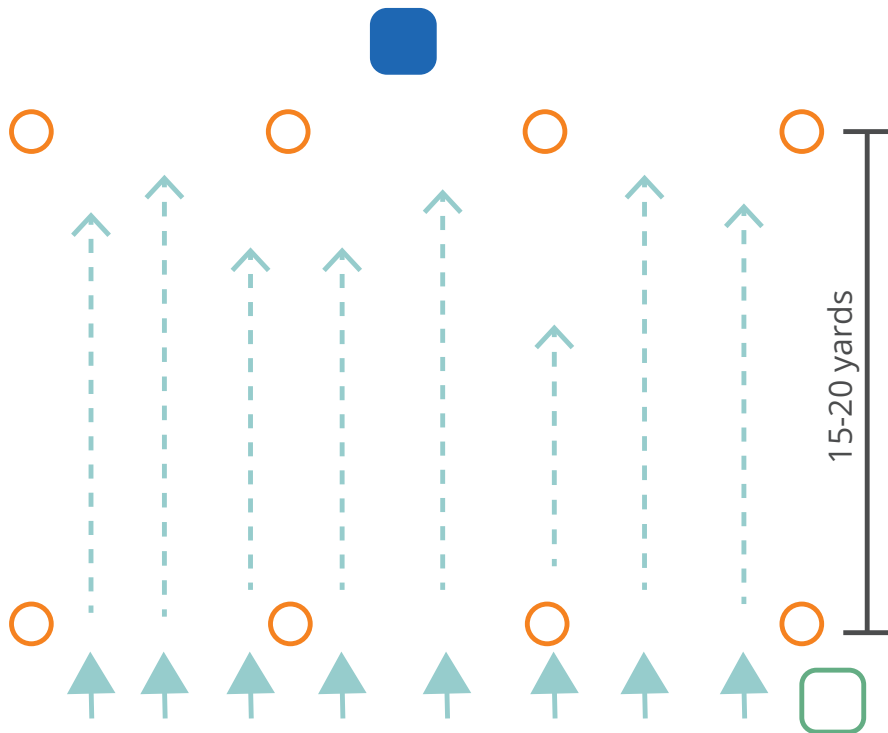


ALPACA Principles:

Aware
Assertive



DRILL SET UP



3.5 SLOW RACE!

BRAKING

4.1 POP THE BUBBLE

RIDE WITH ONE HAND

Goal: Students will learn how to control their bike one-handed

Materials:

- Chalk
- Cones

Set up time: 10 min.

> Before class: Using chalk, draw bubbles in an obstacle format and number them 1-11. If there are many students in the class, make as many courses as can fit.

Location: Drill space on campus

Drill time: 20 min.



ALPACA Principles:
Aware

Getting ready:

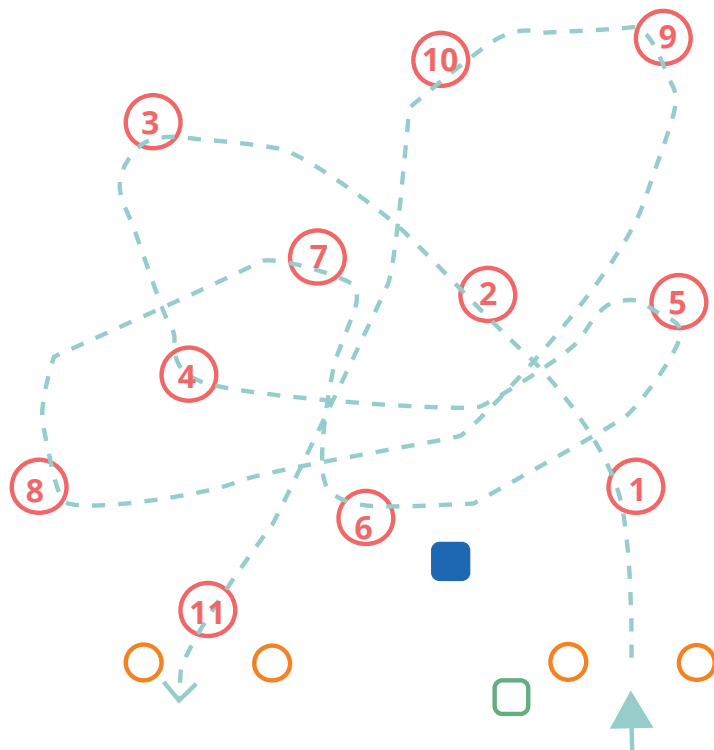
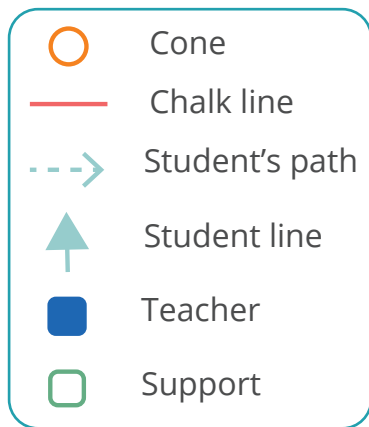
- Have students line up behind the start line for the obstacle course
- If there is more than one course, separate students into groups after explaining the drill.

Directions:

1. Leaving about two “ghost spaces” between themselves and the rider in front, students will ride through the course and “pop” the bubbles in chronological order with their wheels.
2. Encourage riders to move through the course with one hand on the handlebars. Students can also practice signaling before turning.

Tips:

- During the drill, encourage students to challenge themselves to ride one-handed. Also remind them about the strength of their front brake.
- This drill is also helpful in teaching students awareness of other people riding around them.
- Run through the drill more than once using different hands if you have the time.



DRILL SET UP

4.1 POP THE BUBBLE

RIDE WITH ONE HAND

4.2 HOW MANY FINGERS?

SHOULDER CHECK

Goal: Students will be able to conduct a shoulder check while maintaining a straight line

Materials:

- Cones
- Chalk (optional)

Set up time: 5 min.

Before class: Use cones and chalk (optional) to create as many lanes as can fit.

Location: Drill space on campus

Drill time: 10 min.

Getting ready:

- Have students line up at the end of each lane
- Walk through options for conducting a shoulder check: a) looking with both hands on handlebars (recommended option), b) dropping the left hand to turn, c) putting left hand on their left thigh and then looking

Directions:

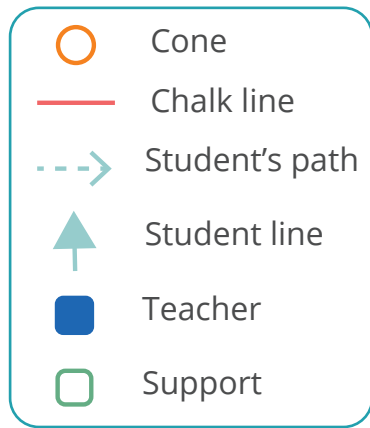
1. The first student in line starts riding down their lane. Before they reach the end, the student now waiting first in line will shout "Look Back!" and hold an amount of fingers in the air. The riding student will look back and shout how many fingers the other student is holding up.
2. After reaching the end of the lane, the riding student then goes back and gets in a new line.

Tips:

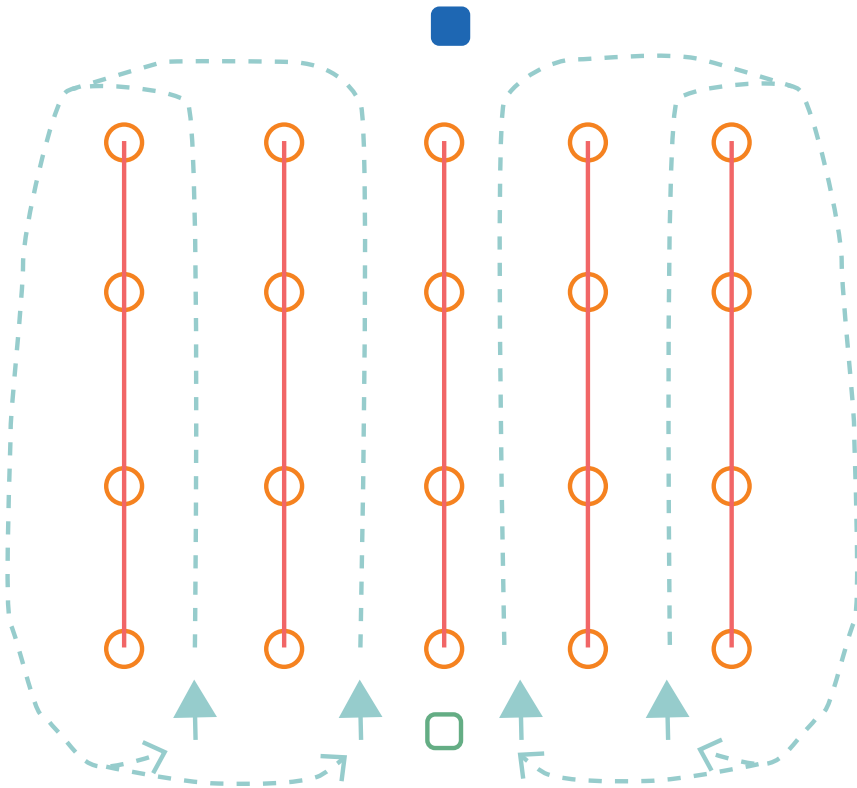
- Front wheels should stay straight when making the shoulder check
- Make sure students are rotating core but not moving their right hand



ALPACA Principles:
Aware



DRILL SET UP



4.2 HOW MANY FINGERS?

SHOULDER CHECK

Goal: Students will practice scanning their surroundings

Materials:

- Laminated ALPACA signs from Bike Safety binder
- Cones

Set up time: 5 min.

Before class: Place ALPACA cards on the ground or on the wall in an open area (gym, blacktop, field, etc.), and set out cones to make four lines of students.

Location: Drill space on campus

Drill time: 15 min.

Getting ready:

- Designate a boundary where students can ride (e.g. around the playground, stay on the blacktop, etc.)

Directions:

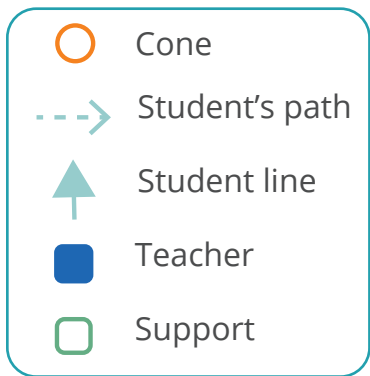
1. Students will ride around the open area with very little instruction, other than to stay within the boundary.
2. After they ride around for a few minutes, split the class into four groups and have each group line up behind a cone.
3. The drill then transitions into a relay race. Tell the students the order in which they need to ride around each ALPACA sign before they return to their line.

Tips:

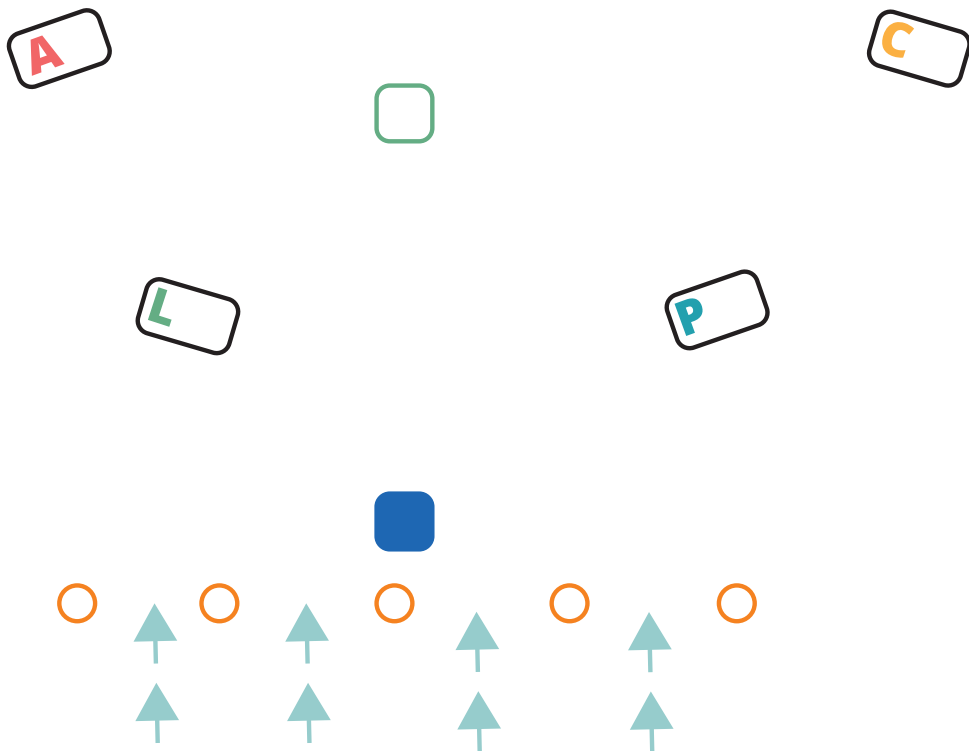
- Students need to be aware of where people are in all directions
- Did students notice the cards when they were riding around before the relay started? If not, consider talking about being aware of what's going on even when they are out having fun.



ALPACA Principles:
Aware



DRILL SET UP



6.1 SIMPLE SIGNALS: ON CAMPUS

RIGHT & STRAIGHT

Goal: Students will be able to go straight and right through an intersection

Materials:

- Chalk
- Cones

Set up time: 10 min.

Before class: Use chalk and cones to set up a "T" intersection. For larger classes you can use a 4-way intersection to limit wait time.

Location: Drill space on campus

Drill time: 20 min.

Getting ready:

- Demonstrate how the drill will run by drawing it on a whiteboard, with chalk on the blacktop, or showing in person.
- Walk through the steps students will need to follow at each stop sign (see below)
- Split students into three groups (up to four if a larger class)

Directions:

1. Have students line up behind one of the 'WAIT' lines on the diagram.
2. The lead rider will approach a 'STOP' line and demonstrate the following skills: a) signal stop while riding b) come to a complete stop at the line c) practice looking for traffic d) signal right if they are turning e) make a shoulder check before turning left to get in line
3. The rider at the 'WAIT' line waits until the rider in front has left the 'STOP' line before beginning their approach.

Tips:

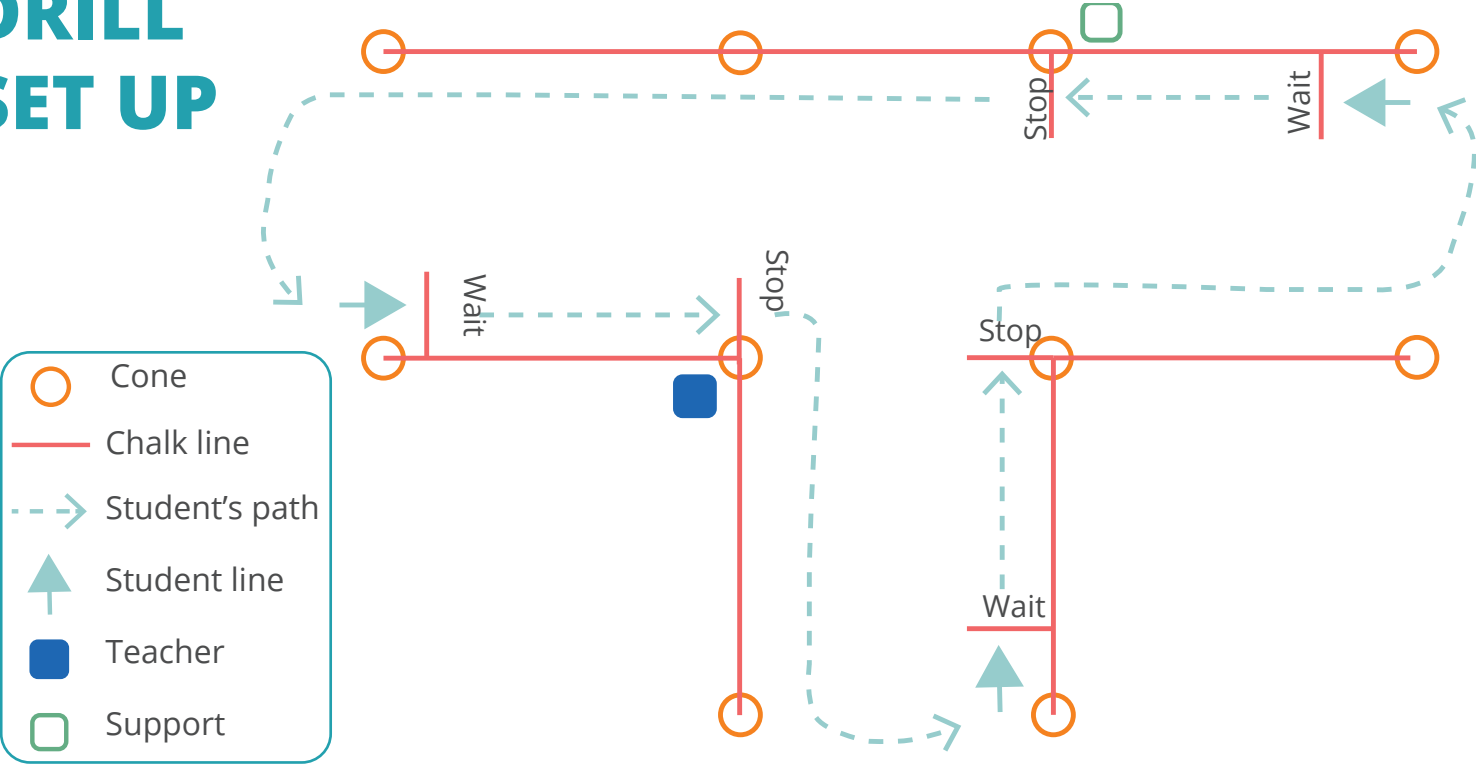
- Students should have both hands on the handlebars when turning
- Support volunteers can be deployed as pedestrians to emphasize right-of-way
- Remind students to signal before stopping at the intersection



ALPACA Principles:

Aware
Legal
Predictable

DRILL SET UP



6.2 SIMPLE SIGNALS: OFF CAMPUS

RIGHT & STRAIGHT

Goal: Students will be able to go straight and right through a neighborhood intersection

Materials:

- Chalk
- Cones

Set up time: 10 min.

Before class: Use chalk and cones to mark a nearby "T" or 4-way intersection with WAIT and STOP lines

Location: Mellow neighborhood intersection near the school

Drill time: 20 min.

Getting ready:

- Ride as a group to the neighborhood intersection
- Split students into three groups just like in Drill 6.1

Directions:

1. Students line up behind one of the 'WAIT' lines on the diagram.
2. The lead rider will approach a 'STOP' line and demonstrate the following skills: a) signal stop while riding b) come to a complete stop at the line c) practice looking for traffic d) signal right if they are turning e) make a shoulder check before turning left to get in line
3. Rider at the 'WAIT' line waits until the rider in front has left the 'STOP' line before beginning their approach.

Tips:

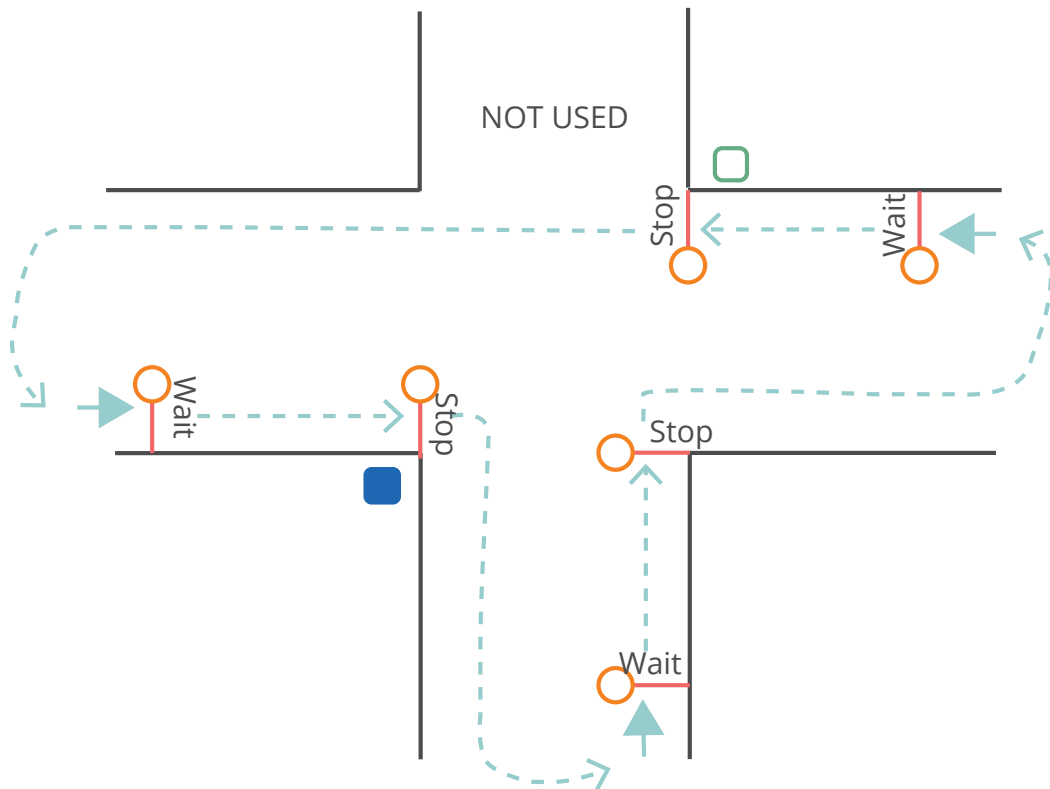
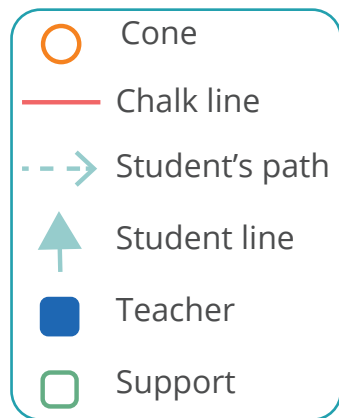
- Students should have both hands on the handlebars when turning
- Support volunteers can be deployed as pedestrians to emphasize right-of-way
- Remind students to signal before stopping at the intersection



ALPACA Principles:

Aware
Legal
Predictable

DRILL SET UP



6.2 SIMPLE SIGNALS: OFF CAMPUS

RIGHT & STRAIGHT

7.1 LEFT TURN: ON CAMPUS

LEFT TURN

Goal: Students will be able to execute a left turn after taking the lane

Materials:

- Chalk
- Cones

Set up time: 5 min.

> Before class: Use chalk and cones to set up a 4-way intersection with WAIT and STOP lines.

Location: Drill space on campus

Drill time: 10-15 min.

Getting ready:

- Demonstrate how the drill will run by drawing or showing it in person.
- Remind students the steps to follow at each stop line and the 0 and 1st rules of right-of-way (0: don't get hit! & 1: first goes first)
- Split students into four groups

Directions:

1. Each group of students lines up behind a 'WAIT' line.
2. The leaving student will a) SHOULDER CHECK, b) SIGNAL LEFT, c) RIDE in the MIDDLE to TAKE THE LANE. While they are at the intersection they will need to think about the first rule of right-of-way.
3. After they have executed their turn, student will need to make a U-turn to get back in line.
4. Once the STOP line is clear, the student at the WAIT line may go.

Tips:

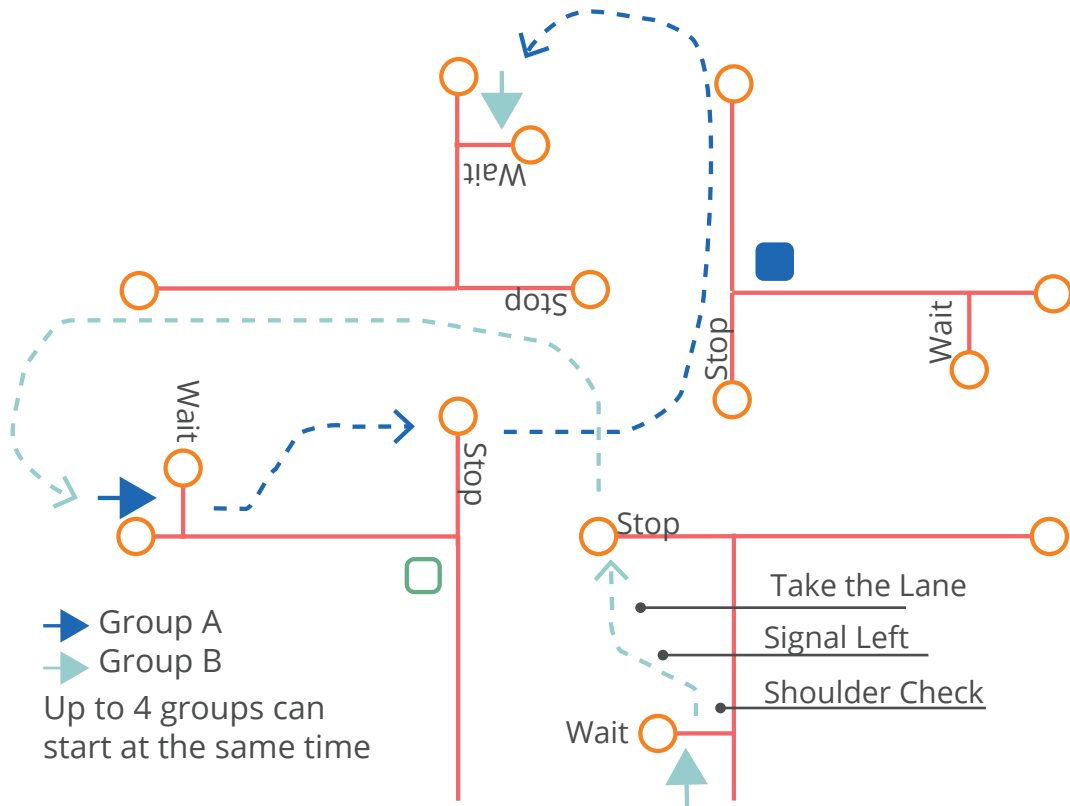
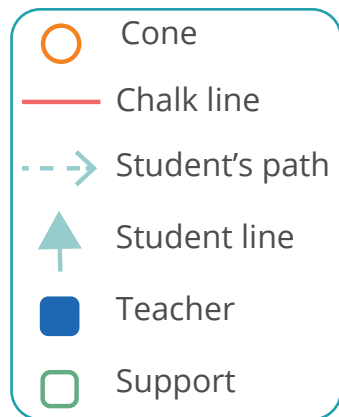
- Students will need to be aware of each other, ride responsibly, and follow right-of-way rules.
- Students should make eye contact and communicate with other students



ALPACA Principles:

Aware
Predictable
Assertive
Able to be seen

DRILL SET UP



7.1 LEFT TURN: ON CAMPUS

LEFT TURN

7.2 LEFT TURN: OFF CAMPUS

LEFT TURN

Goal: Students will be able to conduct a left turn after taking the lane

Materials:

- Chalk
- Cones

Set up time: 10 min.

> Before class: Use chalk and cones to mark WAIT and STOP lines at a nearby, 4-way intersection.

Location: Mellow intersection near campus

Drill time: 20 min.

Getting ready:

- Ride as a group to the neighborhood intersection
- Split students into four groups

Directions:

1. Each group of students lines up behind a 'WAIT' line.
2. The leaving student will a) SHOULDER CHECK, b) SIGNAL LEFT, c) RIDE in the MIDDLE to TAKE THE LANE. While they are at the intersection they will need to think about the first rule of right-of-way.
3. After they have executed their turn, student will need to make a U-turn to get back in line. They must look for other road users.
4. Once the STOP line is clear, the student at the WAIT line may go.

Tips:

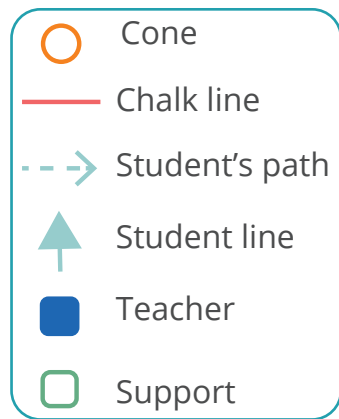
- There is a lot happening in this drill! Students will need to be aware of each other, ride responsibly, and follow the 0 and 1 right-of-way rules.
- Students should stop as far right as they can. If there is another student already at the stop line, they should fall in line behind them.
- Students should make eye contact and communicate with other road users



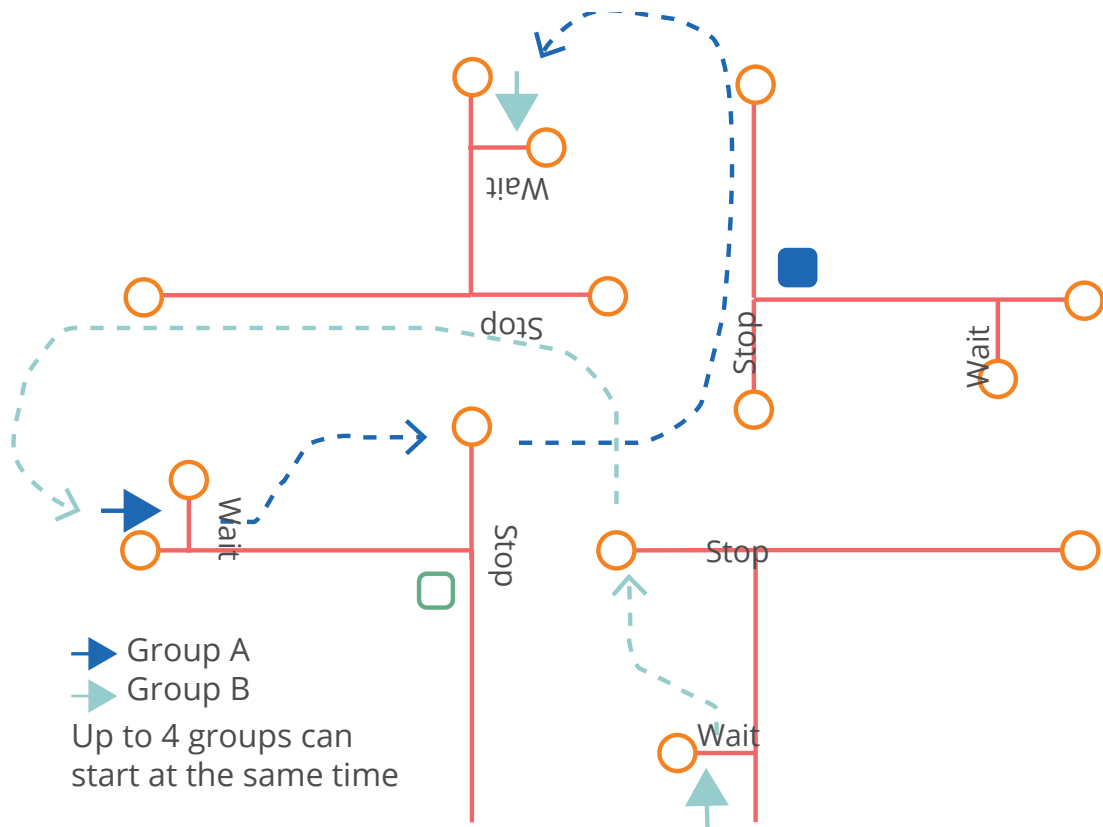
ALPACA Principles:

Aware
Legal
Predictable
Assertive

DRILL SET UP



▶ Group A
▶ Group B
Up to 4 groups can start at the same time



7.2 LEFT TURN: OFF CAMPUS

LEFT TURN

8.1 FIRST TO STOP ROW: ON CAMPUS

ROW: FIRST TO STOP

Goal: Students will be able to proceed through an intersection utilizing the rules of a 4-way stop

Materials:

- Chalk
- Cones

Set up time: 10 min.

Before class: Use chalk and cones to set up a 4-way intersection.

Location: Drill space on campus

Drill time: 15 min.

Getting ready:

- Split students into four groups
- Remind students of the 4-way stop rules:
 - a) the person who gets to the intersection first goes first
 - b) if two people reach the intersection simultaneously, the person on the left must yield the right-of-way to the person on the right

Directions:

1. Each group of students lines up behind a 'WAIT' line.
2. Four students may start at the same time. They will need to pay attention to who gets to the 'STOP' line first and respond accordingly.
3. Students **can choose to go straight or right** with appropriate signaling.

Tips:

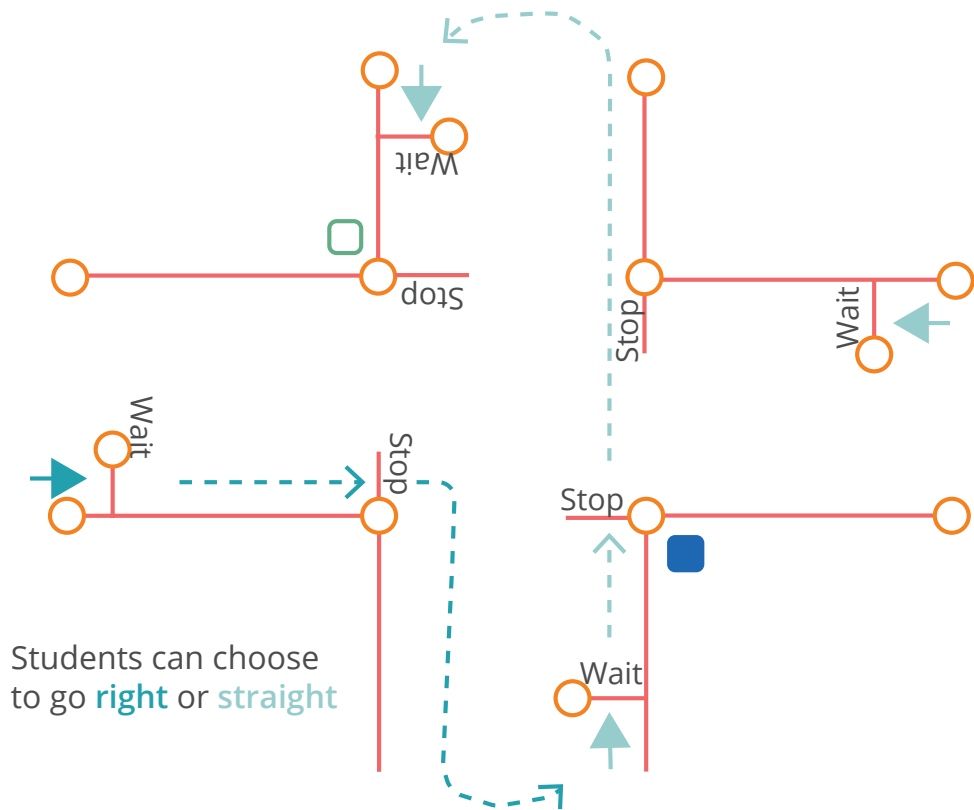
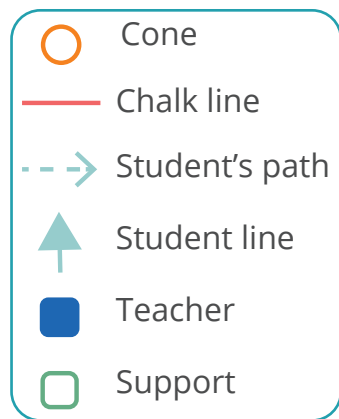
- Students should be looking at the other intersections before they arrive at their own 'STOP' line.
- Verbal communications are okay and encouraged

ALPACA Principles:



Aware
Legal
Predictable
Assertive
Considerate
Able to be seen (visible)

DRILL SET UP



8.1 FIRST TO STOP ROW: ON CAMPUS

ROW: FIRST TO STOP

8.2 FIRST TO STOP ROW: OFF CAMPUS

ROW: FIRST TO STOP

Goal: Students will be able to proceed through a neighborhood intersection utilizing the rules of a 4-way stop

Materials:

- Chalk
- Cones

Set up time: 10 min.

Before class: Use chalk and cones to set up a 4-way intersection.

Location: Mellow intersection near campus

Drill time: 15 min.

Getting ready:

- As a group, ride to the neighborhood intersection
- Split students into four groups
- Remind students of the 4-way stop rules:
 - a) the person who gets to the intersection first goes first
 - b) if two people reach the intersection simultaneously, the person on the left must yield the right-of-way to the person on the right

Directions:

1. Each group of students lines up behind a 'WAIT' line.
2. Four students may start at the same time. They will need to pay attention to who gets to the 'STOP' line first and respond accordingly.
3. Students **can choose to go straight or right** with appropriate signaling.

Tips:

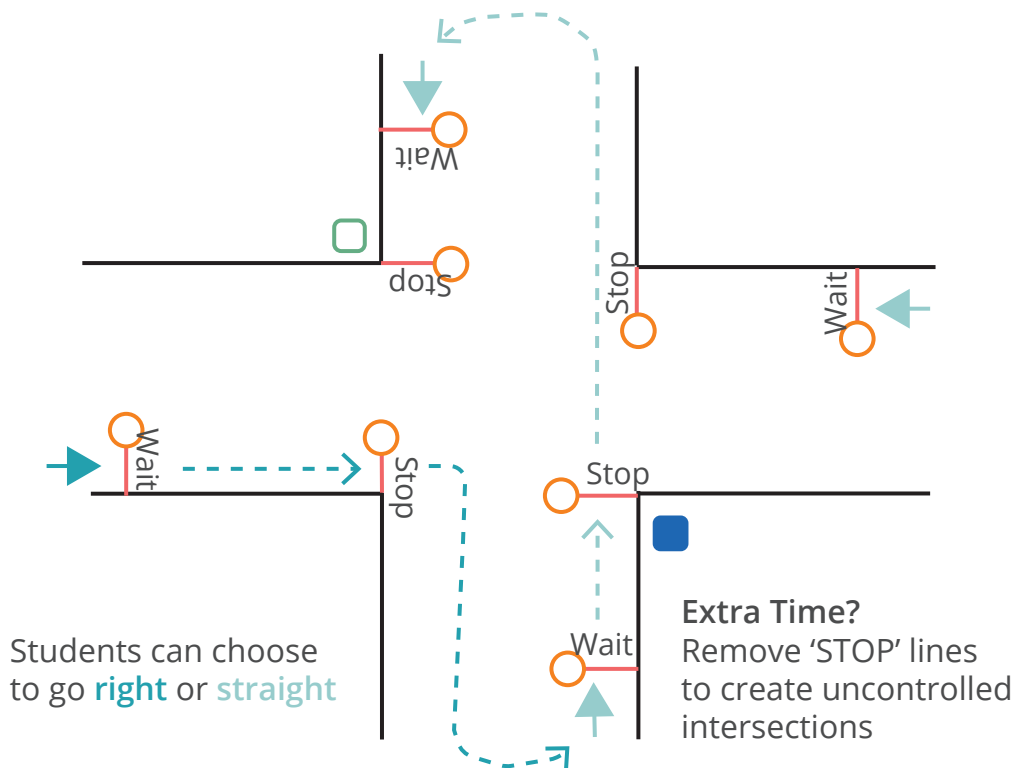
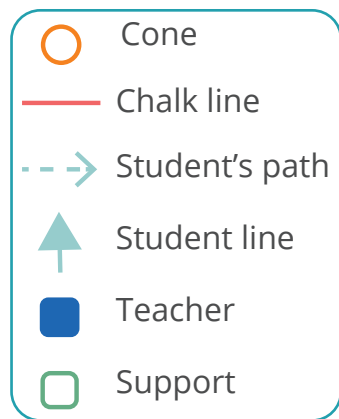
- Emphasize scanning before approaching an intersection. Students should be looking at the other intersections before they arrive at their own 'STOP' line.
- Verbal communications are okay and encouraged

ALPACA Principles:



Aware
Legal
Predictable
Assertive
Considerate
Able to be seen (visible)

DRILL SET UP



8.2 FIRST TO STOP ROW: OFF CAMPUS

ROW: FIRST TO STOP

9.1 ROW + LEFT TURNS: OFF CAMPUS

ROW: FIRST TO STOP

Goal: Students will be able to proceed through a neighborhood intersection utilizing the rules of a 4-way stop, this time adding left turns to the mix.

Materials:

- Chalk
- Cones

Set up time: 10 min.

Before class: Use chalk and cones to set up a 4-way intersection.

Location: Mellow intersection near campus

Drill time: 15 min.

Getting ready:

- As a group, ride to the neighborhood intersection
- Split students into four groups
- Remind students of the 4-way stop rules:
 - a) the person who gets to the intersection first goes first
 - b) if two people reach the intersection simultaneously, the person on the left must yield the right-of-way to the person on the right

Directions:

1. Four students may start at the same time. They will need to pay attention to who gets to the 'STOP' line first and respond accordingly.
2. Students **can choose to go straight, right, or left** with appropriate signaling.

Tips:

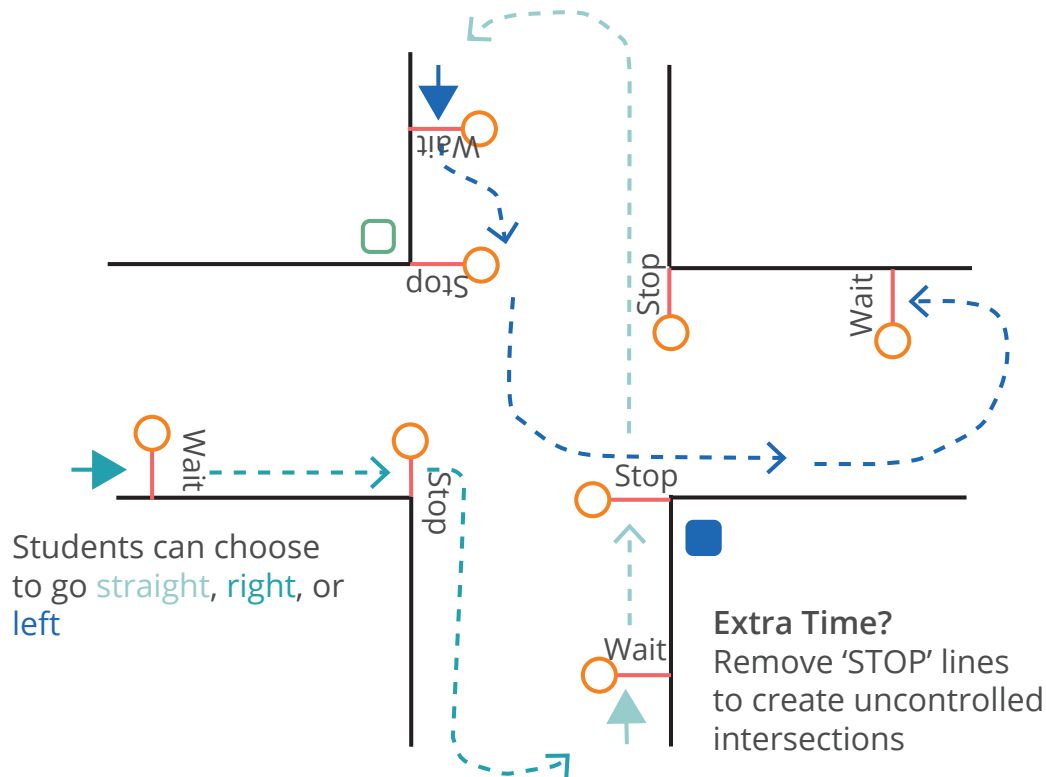
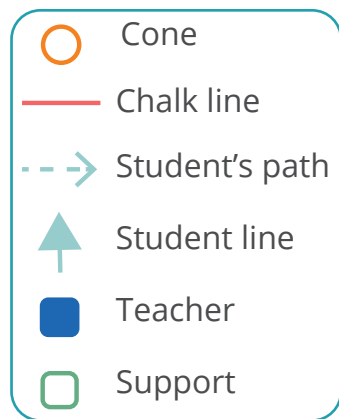
- Emphasize scanning before approaching an intersection
- Verbal communications are encouraged
- Road positioning will be important, especially for students turning left. Remind them about taking the lane.



ALPACA Principles:

Aware
Legal
Predictable
Assertive
Considerate
Able to be seen (visible)

DRILL SET UP



9.1 ROW + LEFT TURNS: OFF CAMPUS

ROW: FIRST TO STOP

Goal: Students will be able to control their bike at slow speeds and be aware of their surroundings

Materials:

- Cones (optional)

Set up time: 5 min.

Establish a large boundary with cones, helmets, or other materials.

Location: Grassy area on or off campus

Drill time: 10-15 min.

Getting ready:

- Let students know the boundary they must stay within while riding.
- Explain the rules (below)

Foot Down Rules:

1. Students ride around within the boundary. There are no rules about how and where they may ride, just that they stay inside the boundary.
2. Once every student is riding, count down until the game starts.
3. There are two ways to get “out”:
 - a) putting a foot down
 - b) riding outside of the boundary

Students who have been called “out” must find a way to vacate the riding area quickly without disrupting other students.

4. As the number of students decreases, make the border area smaller.
5. Last student riding wins! Repeat as time and interest allows.

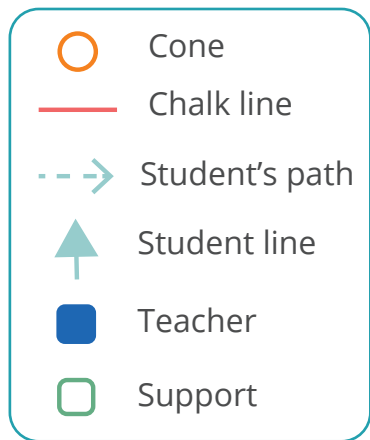
Tips:

- If students are intentionally riding into each other, use your discretion to call them “out” of the game.



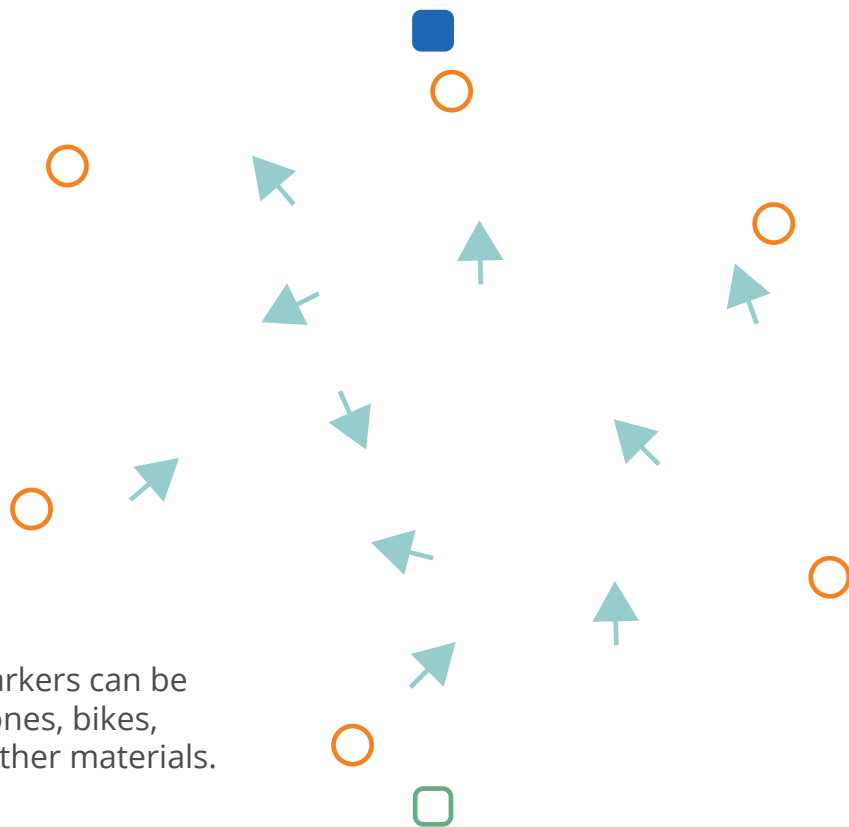
ALPACA Principles:

Aware
Assertive



DRILL SET UP

Boundary markers can be made with cones, bikes, helmets, or other materials.



FILLER: FOOT DOWN

SKILL BUILDING FUN!

COPENHAGEN LEFT: ON CAMPUS

COPENHAGEN LEFT

Goal: Students will be able to conduct a Copenhagen left turn

Materials:

- Chalk
- Cones

Set up time: 10 min.

Before class: Use chalk and cones to set up a 4-way intersection.

Location: Drill space on campus

Drill time: 20 min.

Getting ready:

- Demonstrate how the drill will run by drawing or showing it in person.
- Remind students the steps to follow at each stop line and the 0 and 1st rules of right-of-way (0: don't get hit! & 1: first goes first)
- Split students into four groups

Directions:

1. Each group of students lines up behind a 'WAIT' line.
2. Lead rider approaches a 'STOP' line and a) signals stop while riding b) comes to a complete stop c) looks left to avoid traffic, right to line up with traffic d) points to where they are going e) rides through the intersection e) stops and wait before crossing the intersection again.
3. Once the STOP line is clear, the student at the WAIT line may go.

Tips:

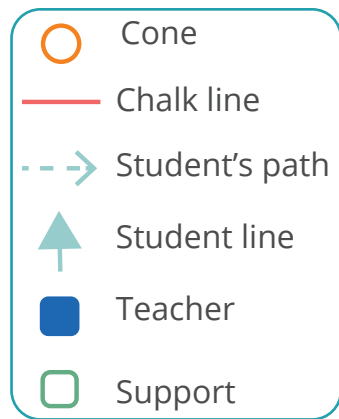
- There is a lot happening in this drill! Students will need to be aware of each other, ride responsibly, and follow right-of-way rules.
- Students should stop as far right as they can. If there is another student already at the stop line, they should fall in line behind them.
- Students should make eye contact and communicate with other riders.



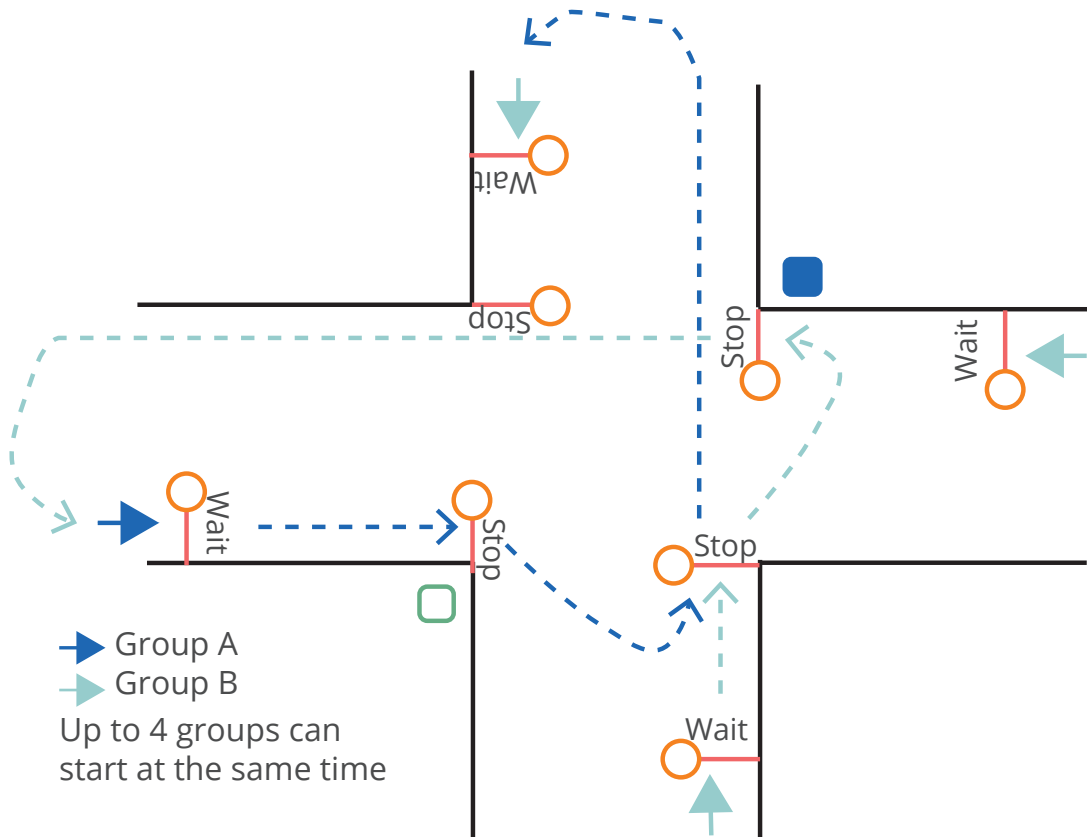
ALPACA Principles:

Aware
Legal
Predictable
Assertive

DRILL SET UP



➡ Group A
➡ Group B
Up to 4 groups can start at the same time



COPENHAGEN LEFT: OFF CAMPUS

COPENHAGEN LEFT

COPENHAGEN LEFT: OFF CAMPUS

COPENHAGEN LEFT

Goal: Students will be able to conduct a Copenhagen left turn at a neighborhood intersection

Materials:

- Chalk
- Cones

Set up time: 10 min.

Before class: Use chalk and cones to mark WAIT and STOP lines at a nearby 4-way intersection.

Location: Mellow intersection near campus

Drill time: 20 min.

Getting ready:

- Ride as a group to the neighborhood intersection
- Split students into four groups

Directions:

1. Each group of students lines up behind a 'WAIT' line.
2. Lead rider approaches a 'STOP' line and a) signals stop while riding b) comes to a complete stop c) looks left to avoid traffic, right to line up with traffic d) points to where they are going e) rides through the intersection e) stops and wait before crossing the intersection again.
3. Once the STOP line is clear, the student at the WAIT line may go.

Tips:

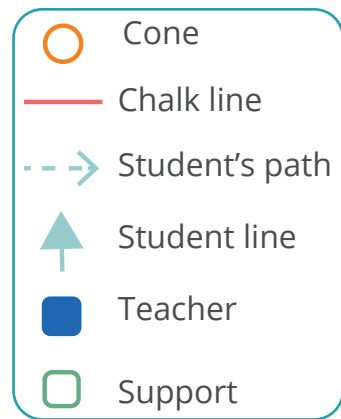
- There is a lot happening in this drill! Students will need to be aware of each other, ride responsibly, and follow the 0 and 1 right-of-way rules.
- Students should stop as far right as they can. If there is another student already at the stop line, they should fall in line behind them.
- Students should make eye contact and communicate with other road users

ALPACA Principles:

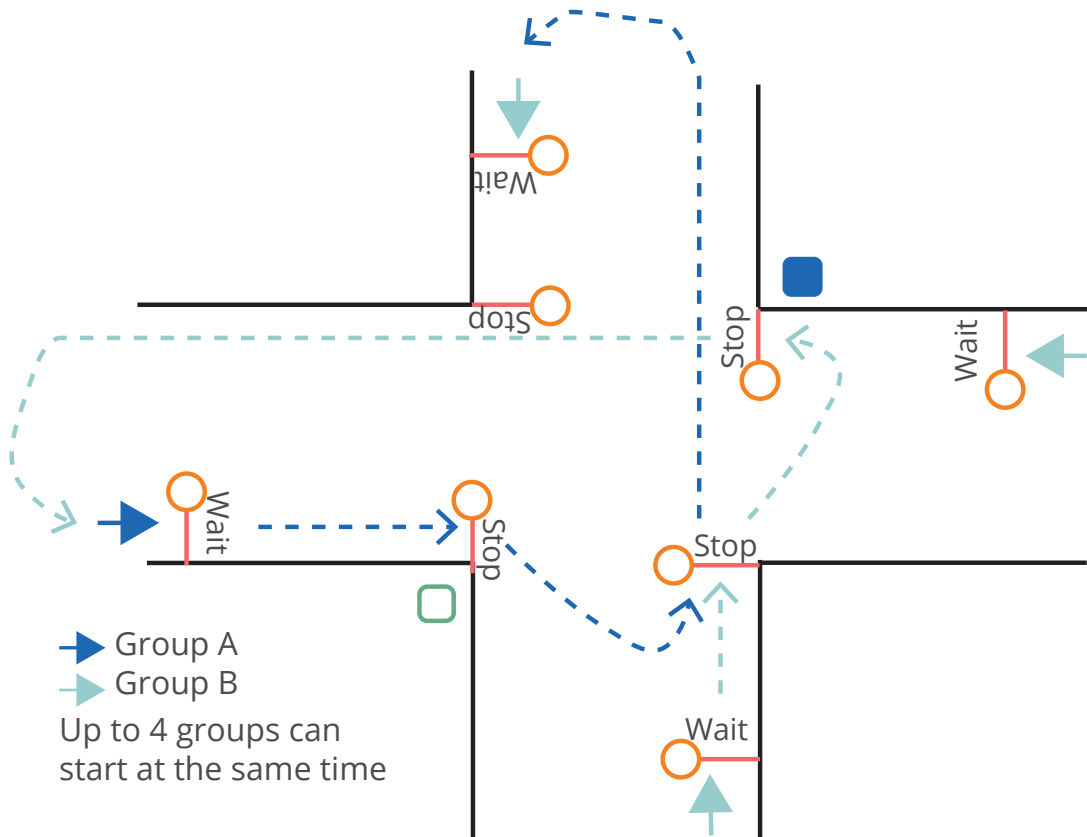


Aware
Legal
Predictable
Assertive

DRILL SET UP



➡ Group A
➡ Group B
 Up to 4 groups can
 start at the same time



COPENHAGEN LEFT: OFF CAMPUS

COPENHAGEN LEFT

SOME BIKE SAFETY BEST PRACTICES

For bike safety education to have the most impact, students need to experience riding on the street.

As the teacher, you will need to manage on-street activities in a way that allows students to learn and experience the road while also keeping them safe.

Best places to practice bike skills:

Streets with speed limits under 25 mph

- Neighborhood streets
- School property (not active parking lots)
- Uncontrolled intersections (no stop signs or traffic lights)

Are students ready to ride on the road?

Students ready to **practice drills on the road** can do the following:

- Start and stop with ease
- Ride in a straight line
- Brake safely
- Follow the pace of a rider in front of them
- Follow ALPACA principles
- Follow directions

Students ready for the **community ride** can do the following:

- Follow traffic laws
- Ride on the right side of the road
- Communicate with other road users



