



BICYCLE EDUCATION



DRILL GUIDE



Oregon Department of Transportation
Safe Routes to School



ALTA - COMMUTE OPTIONS - CYCLE OREGON - THE STREET TRUST



This Drill Guide is supplemental to the Jump Start Bicycle Safety Education curriculum.



Its main purpose is as a field reference when setting up drills.



Reference the full curriculum for more details about each drill and for additional learning materials including materials to be printed for lessons.



QUICK TIPS



- 1** Give an overview of the drills before heading outside. It can be difficult to keep the students focused while outside and near the bikes.



- 2** Demonstrate and clarify what appropriate and safe behavior should like on bikes before introducing students to the bikes.



- 3** Demonstrate what drills should look like in advance, either with a projector, on a whiteboard, or with chalk on the blacktop.



Expectations for Riders



You may choose to integrate these tips and laws into your introductory conversations with students to ensure they understand the rules of the road!

VISIBLE

- Able to be seen
- Lane position
- Lights at night
- Using hand signals

LEGAL

- Wearing a helmet (under age 16)
- Using lights at night
- Obeying street signs
- Riding in the road rather than on the sidewalk
- Staying in your intended lane
- Using hand signals

PREDICTABLE

- Obeying street signs
- Appropriate lane position
- Using hand signals
- Having control of your bike

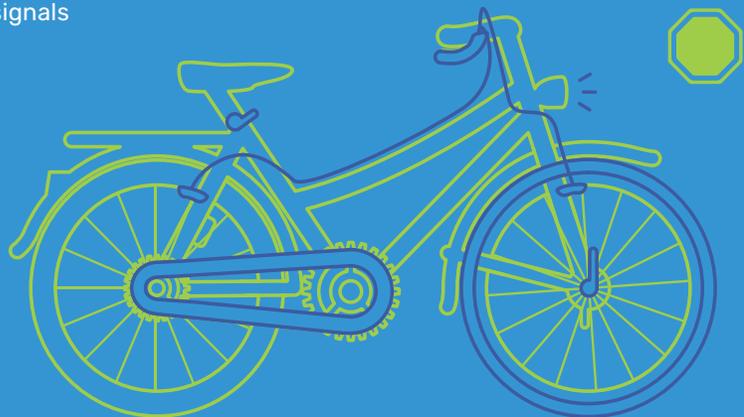
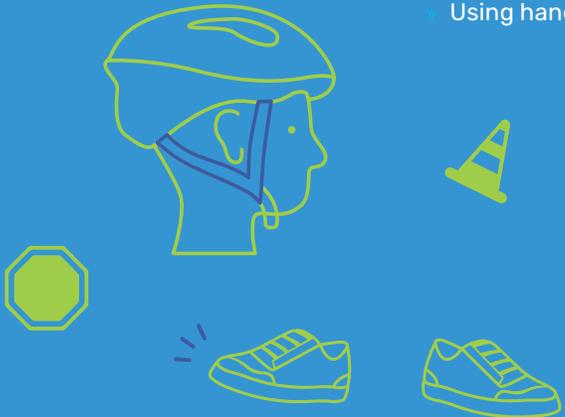


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LESSON 1

HELMET FITTING

MATERIALS

- ◆ Helmets (provided as part of fleet)
- ◆ Sharpie
- ◆ Masking tape
- ◆ Helmet fitting poster
- ◆ Laptop and projector (optional)

TIME

- ◆ 15–20 minutes

LOCATION

- ◆ Classroom or gym

PREPARATION

- ◆ Orient yourself to the helmet photos in Appendix A in the Neighborhood Navigators 2.0 curriculum and prepare to show students helmet photos.
- ◆ If showing Helmet Fitting video, have laptop or projector equipment ready.

ACTIVITY

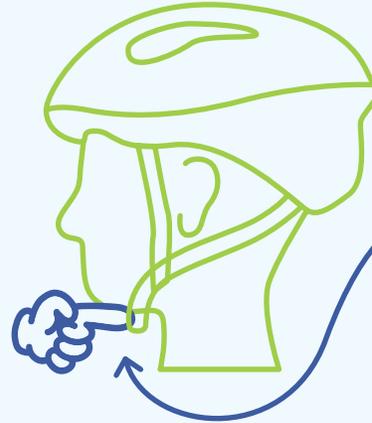
- ◆ Instruct students to put helmets on.
- ◆ Have them click the buckle and adjust straps.
- ◆ Have them tighten dial so helmet fits snugly.
- ◆ Have students partner up to check another student's helmet fit.
- ◆ Have students check helmets for cracks in the Styrofoam. Remind them to never drop, kick or throw their helmet.
- ◆ When the helmet fits properly, place a piece of masking tape on the helmet with the student's name. They will use this helmet over the course of the program.

TIPS

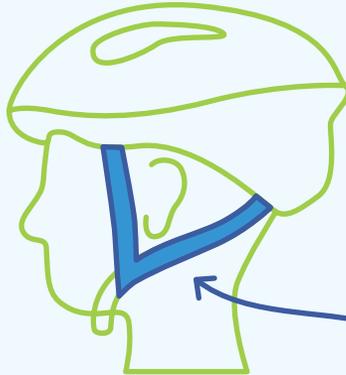
- ◆ Without being buckled, helmet should sit comfortably on their head.
- ◆ When fastened, buckle should not be able to slide over the chin.
- ◆ Encourage students to ask their partners for consent before fitting their helmet.
- ◆ To accommodate different hair styles or religious headwear, find larger helmets, use non-shaming language, and communicate with families ahead of time to ask about needs and accommodations



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



Buckle should be tight enough for only one finger to fit in between the strap and the chin



Straps should create a triangle or "V" shape around the ears



Dial on back of helmet should be tightened

⌋ Move head back and forth to check for movement of helmet. ⌋

LESSON 2

PERSONAL SAFETY CHECK

MATERIALS

- ♦ Helmets
- ♦ Helmet Fitting Poster

TIME

- ♦ 10 minutes

LOCATION

- ♦ Gym or outside

PREPARATION

- ♦ Print or make copies of the Helmet Fitting poster found in the curriculum.
- ♦ Have helmets organized by size.

ACTIVITY

Partner Safety Checks

- ♦ **HELMET:** Ensure helmets fit well and are adjusted properly.
- ♦ **PANT LEGS:** Roll up pant legs to make sure they don't get caught in the chain.
- ♦ **SHOELACES:** Tuck laces in or double knot to avoid getting caught in pedals or chain.
- ♦ **SHOES:** Check that shoes are on securely and closed-toe shoes are worn, if possible.
- ♦ **CLOTHING:** Ask their partner if their clothes feel comfortable for moving and being outside in.
- ♦ **ATTITUDE:** Ask their partner if they feel focused and ready to follow directions.

TIPS

- ♦ Remind students that this activity needs to be repeated each day of bicycle safety education as well as when they ride their bikes on their own.

Two fingers
from eyebrows
to helmet



"V" shape
around the
ears

One finger
under strap

HELMET FITS
PROPERLY

Pants
rolled up



Shoelaces
tucked in

Closed-toe
shoes

SHOES, SHOELACES
AND PANTS

Ready to
focus!



Comfortable
clothes

CLOTHING AND
ATTITUDE

LESSON 3

BIKE SAFETY CHECK

MATERIALS

- ♦ Helmets
- ♦ Bikes
- ♦ Bike pump
- ♦ ABC Quick Check Poster
- ♦ Instructor tool kit

TIME

- ♦ 10–20 minutes

LOCATION

- ♦ Gym or outside

PREPARATION

- ♦ Print or make copies of the ABC Quick Check Poster.
- ♦ Prepare bikes and helmets for student use.
- ♦ Have students line up shortest to tallest (or vice versa).
- ♦ Lead the line of students behind the bikes, assigning each person to bikes that fit them.
- ♦ Assist students with adjusting their seat height if needed.

ACTIVITY

Bike Checks

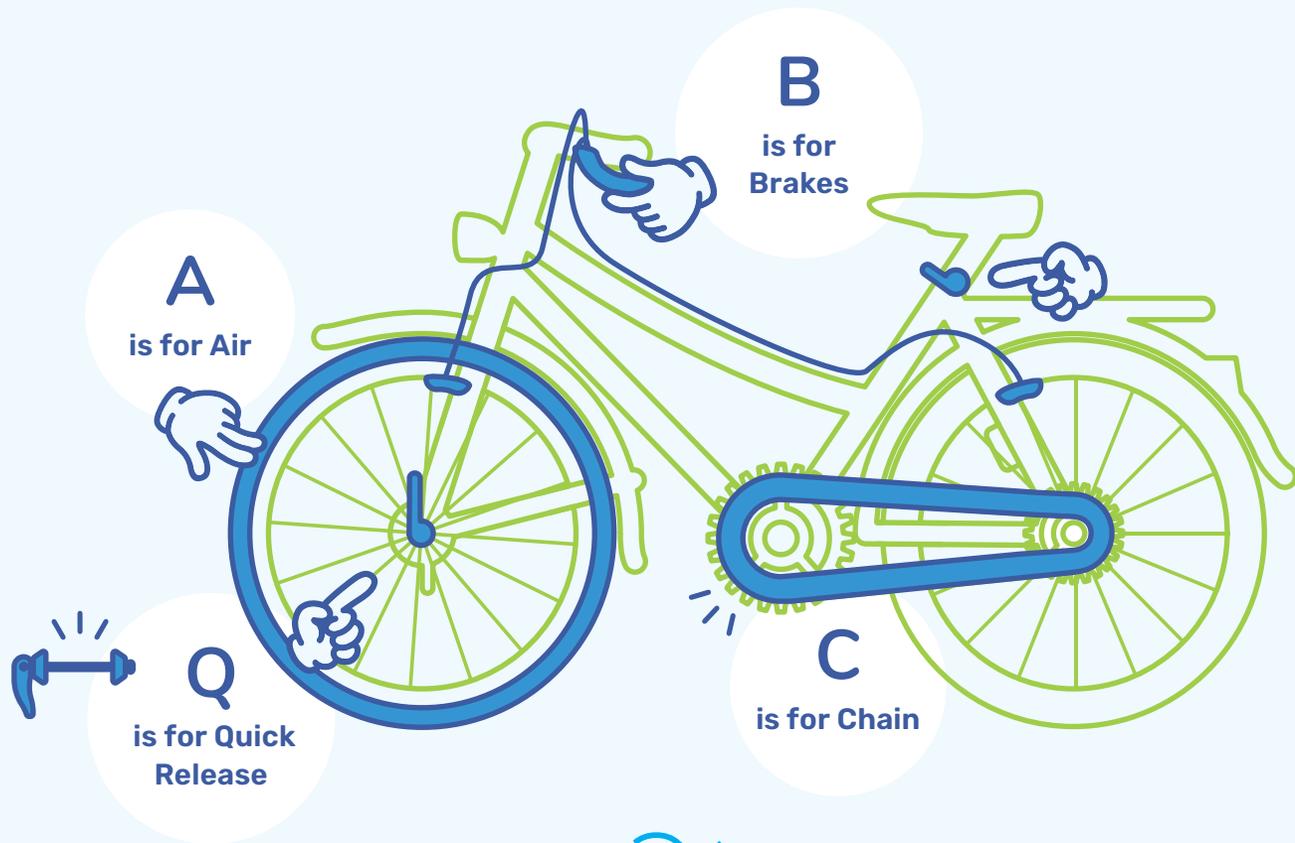
- ♦ A is for Air
- ♦ B is for Brakes
- ♦ C is for Chain
- ♦ Q is for Quick Release

Prepare for Drills

- ♦ Have students line up with their bikes facing you to do their bike safety check.

TIPS

- ♦ Remind students that the bike safety check needs to be repeated each day of bicycle safety education as well as when they ride their bikes on their own.



ABC QUICK CHECK

LESSON 4

FOLLOW THE LEADER

MATERIALS

- ◆ Cones
- ◆ Chalk or tape (If using blacktop, optional if conducted on the street)
- ◆ Bikes
- ◆ Helmets
- ◆ Instructor tool kit

TIME

- ◆ 5 minutes

LOCATION

- ◆ Gym or blacktop (preferred)

PREPARATION

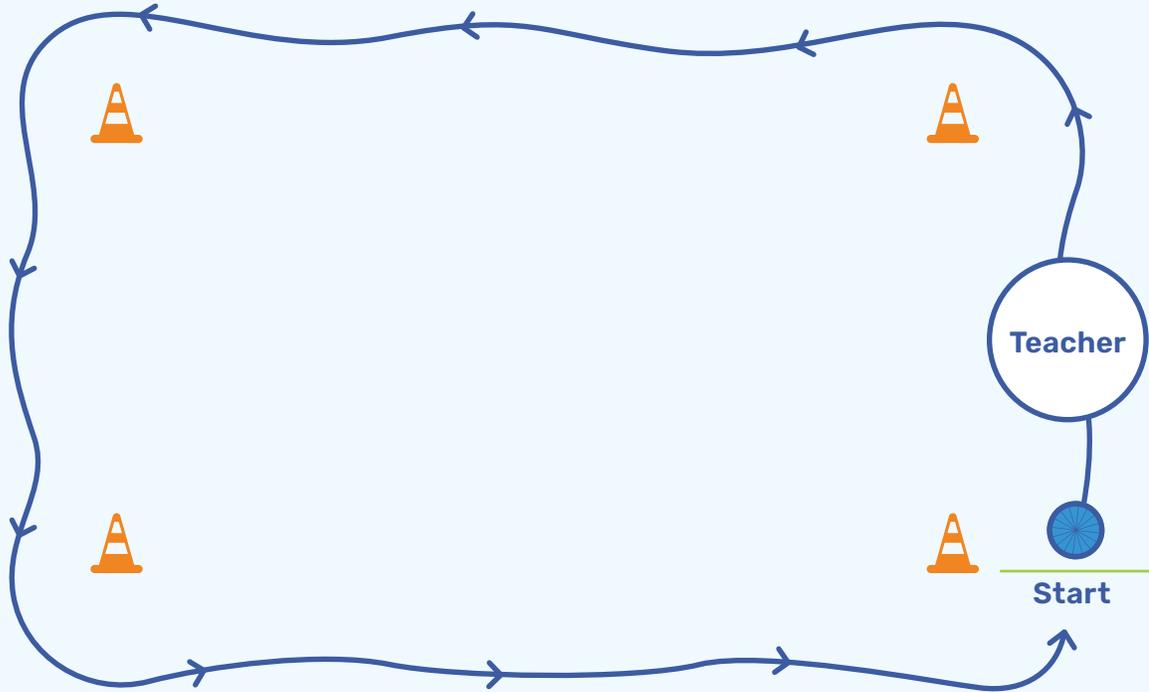
- ◆ Place cones at corners of designated space.

ACTIVITY

- ◆ After each student gets their bicycle, have them line up single file facing you while they do their bicycle safety check.
- ◆ Instruct students that after the bicycle safety check is complete, they will begin following you (or a volunteer) to practice riding in a line as group and passing along instructions. They will leave one bike length of space (a ghost rider) in between riders.
- ◆ Have the leader begin riding from one end of the line while students follow one after another. Continue until all of the students have had a chance to get comfortable on the bike.

TIPS

- ◆ This drill should be the first activity after students have received their bike for the day.
- ◆ New riders can skip their turn and stay back to begin practicing riding skills with a volunteer.
- ◆ Add skills practice as needed, such as: passing messages back through the line, hand signaling during turns, and shifting gears up and down.



DRILL SET UP | FOLLOW THE LEADER



LESSON 5

RED LIGHT, GREEN LIGHT

MATERIALS

- ◆ Cones
- ◆ Chalk or tape
- ◆ Bikes
- ◆ Helmets
- ◆ Instructor tool kit

TIME

- ◆ 10 minutes

TIPS

- ◆ Teach students about Power Pedal position.
- ◆ Stopping with both hands at the same time is the safest way to be in control when braking.
- ◆ Students should keep their weight back.
- ◆ This drill should be done multiple times if time allows.

LOCATION

- ◆ Gym or blacktop (preferred)

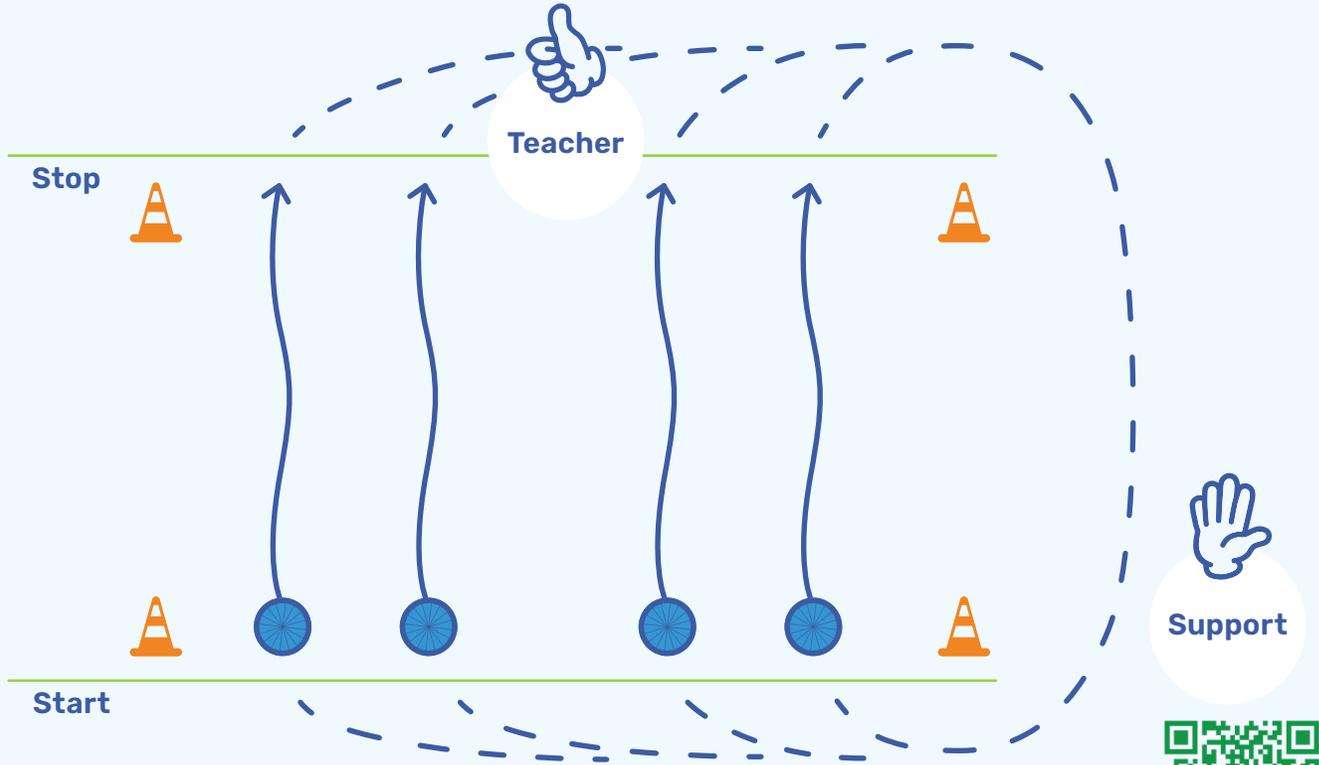
PREPARATION

- ◆ Chalk or tape start and stop lines within space allowed, at least 25 yards apart.
- ◆ Place cones at start and stop lines.
- ◆ If you have a portable stop sign, place this on the stop line.

- ◆ Remind students to brake with their hand brakes, not by rubbing their shoes on the ground.
- ◆ If you have a very wide space, groups of students can be larger. This activity can be run with all students going at once, if space allows.

ACTIVITY

- ◆ Students line up with bikes behind the start lines.
- ◆ When the instructor says go, the first student in each line goes.
- ◆ After students ride a short distance, say "Red Light!" All riders should stop as quickly as possible, using both brakes.
- ◆ Repeat, starting the second group and having students in first group follow the instructions as well.
- ◆ Repeat as needed until all students have reached the final stop line.
- ◆ Once students reach final stop line, have them return to the start.



DRILL SET UP | RED LIGHT, GREEN LIGHT



LESSON 6

HAND SIGNALS

MATERIALS

- ◆ Cones
- ◆ Chalk or tape
- ◆ Bikes
- ◆ Helmets
- ◆ Instructor tool kit

TIME

- ◆ 10 minutes

LOCATION

- ◆ Gym or blacktop (preferred)

PREPARATION

- ◆ Chalk or tape start and stop lines, at least 25 yards apart.
- ◆ Place cones at start and stop lines.
- ◆ If you have a portable stop sign, place this on the stop line.

ACTIVITY

- ◆ Students line up with bikes behind the start line.
- ◆ The first student goes, practicing braking while signaling right.
- ◆ Student returns back to the start on the outside of the course.
- ◆ When the student is biking back to the line, invite the next student to proceed.
- ◆ Repeat while signaling a stop, and then signaling left.

TIPS

- ◆ Help students learn hand signals before getting on bikes by acting out right turn, left turn, and stopping.
- ◆ This is a good exercise to incorporate at the beginning and/or end of each day to reinforce the skill of displaying signals.
- ◆ Explain to students to pay attention to their speed and braking while signaling, especially when using their right turn signal.

Hand Signals



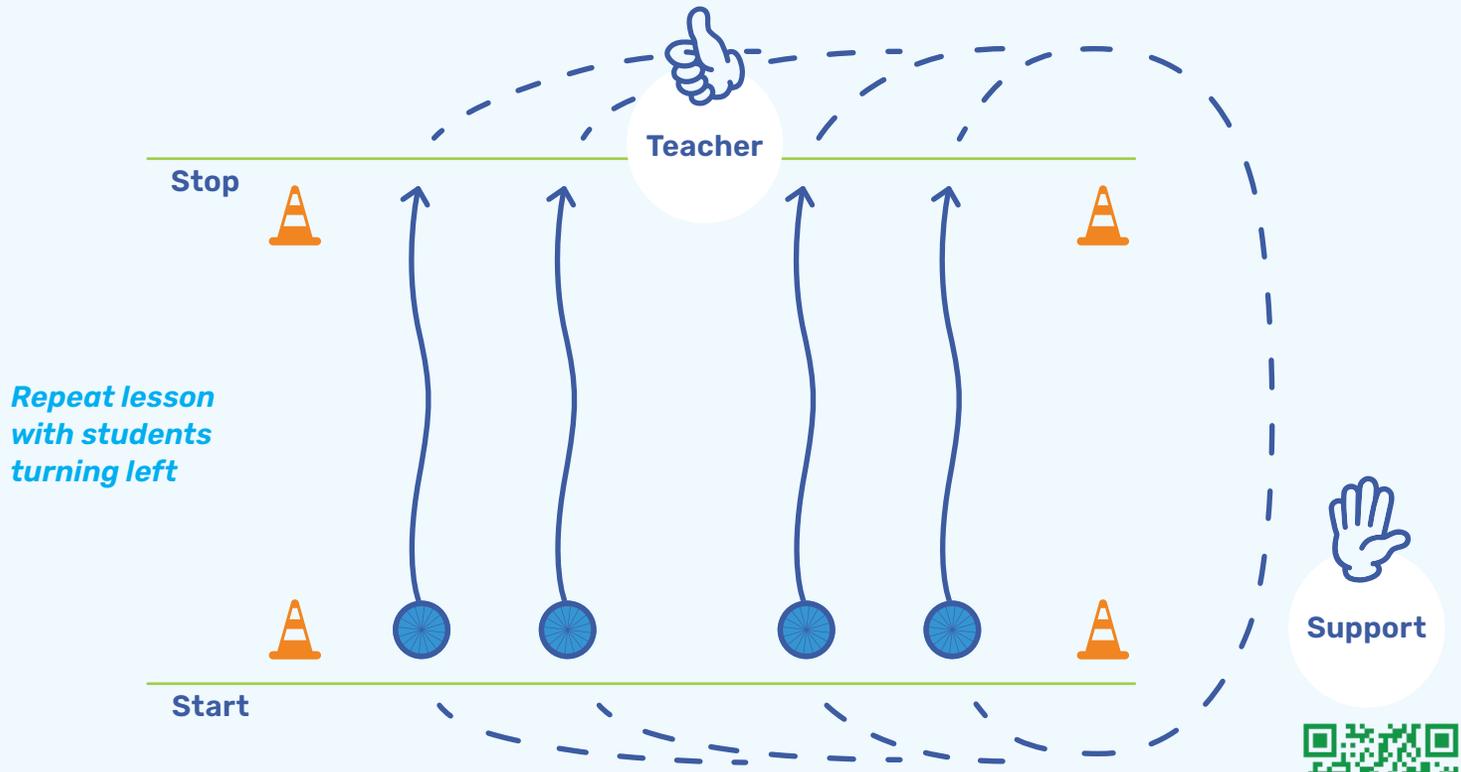
Left



Right



Stop



Repeat lesson with students turning left

DRILL SET UP | HAND SIGNALS



LESSON 7

SHOULDER CHECK

MATERIALS

- ◆ Cones
- ◆ Chalk or tape
- ◆ Bikes
- ◆ Helmets
- ◆ Instructor tool kit

TIME

- ◆ 10 minutes

LOCATION

- ◆ Gym or blacktop (preferred)

PREPARATION

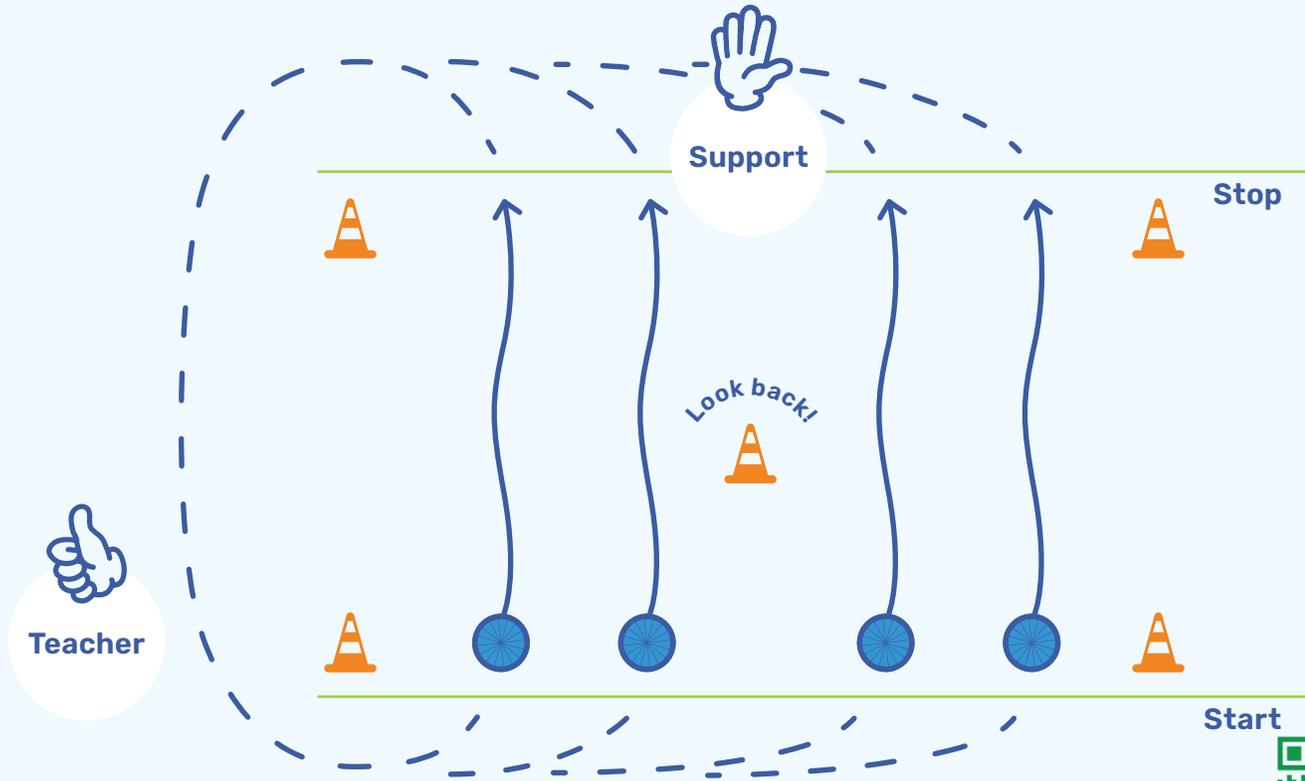
- ◆ Chalk or tape start and stop lines, at least 25 yards apart.
- ◆ Place cones along route.
- ◆ If you have a portable stop sign, place this on the stop line.
- ◆ Place a teacher to the left side of the course, approximately 10 feet from the start line.

ACTIVITY

- ◆ Students form four to six lines with bikes behind the start line.
- ◆ First students in each line starts riding.
- ◆ As the students reaches the mid-point, the instructor will shout, "look back!" and hold up a certain amount of fingers. The students will look back and state how many fingers they see.
- ◆ Students brakes at the stop line.
- ◆ Students returns back to the start on the outside of the course.
- ◆ When the students are biking back to the line, invite the next students to proceed.

TIPS

- ◆ Students can practice placing their left hand on their hip as they shoulder check.



DRILL SET UP | SHOULDER CHECK



LESSON 8

TAKING THE LANE

MATERIALS

- ◆ Cones
- ◆ Chalk or tape (If using blacktop, not needed if conducted on the street)
- ◆ Bikes
- ◆ Helmets
- ◆ Instructor tool kit

TIME

- ◆ 10 minutes

LOCATION

- ◆ Gym or blacktop (preferred)

PREPARATION

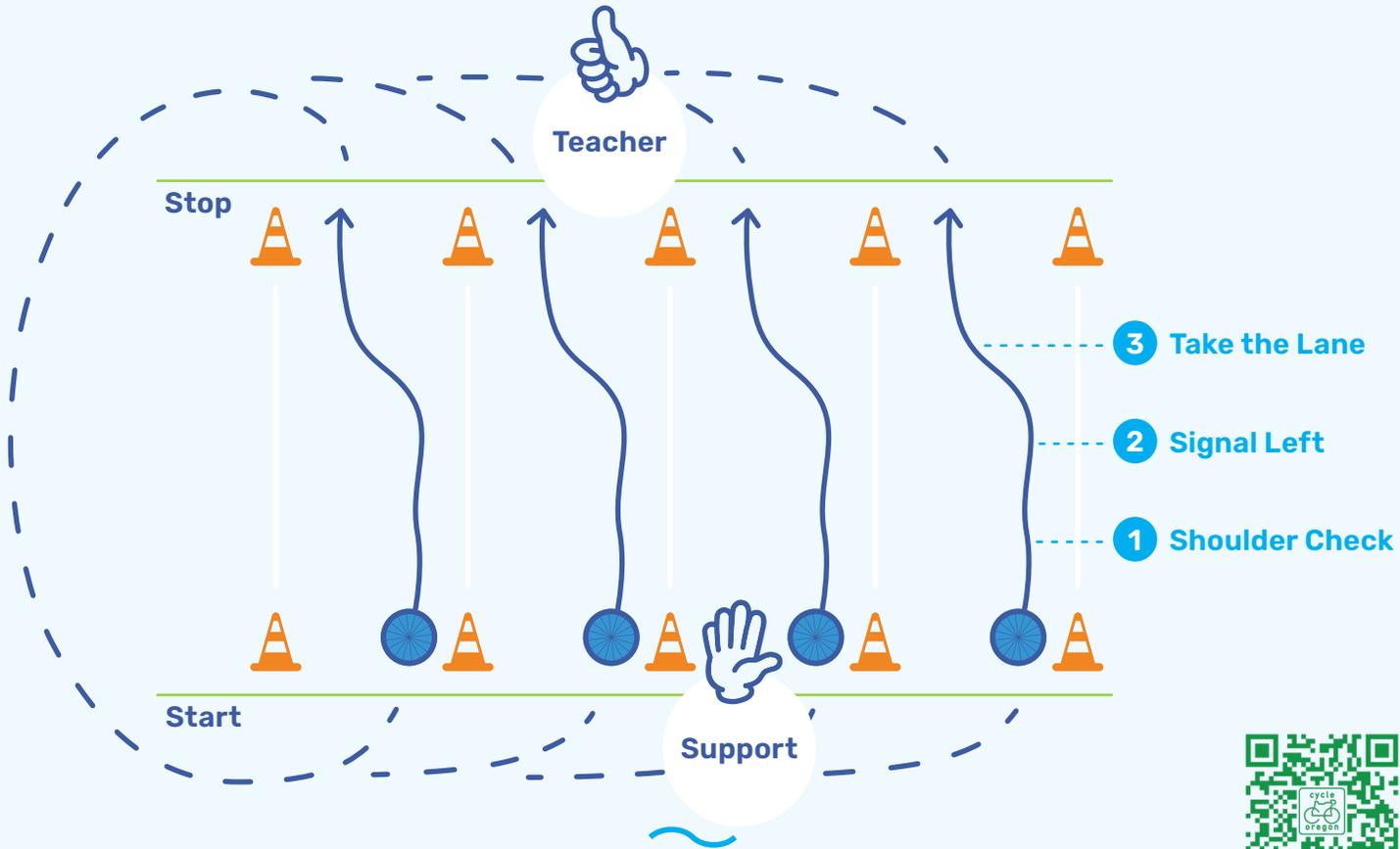
- ◆ Place cones at start and stop lines.
- ◆ Chalk or tape start and stop lines, at least 25 yards apart.
- ◆ Use chalk to create travel lanes.

ACTIVITY

- ◆ Students form two to four lines with bikes behind the start line.
- ◆ As the students proceed, have them shoulder check, signal left, and then position themselves in the center of the "lane".
- ◆ Students brake at the stop line.
- ◆ Student return back to the start on the outside of the course.
- ◆ When the students are biking back to the line, invite the next students to proceed.

TIPS

- ◆ Have students vocalize the three steps (shoulder check, signal left, take the lane) as they're doing them.



DRILL SET UP | TAKING THE LANE



LESSON 9 NAVIGATING INTERSECTIONS (RIGHT TURNS)

MATERIALS

- ◆ Cones
- ◆ Chalk or tape (If using blacktop, optional if conducted on the street)
- ◆ Bikes
- ◆ Helmets
- ◆ **Optional** Cone topper or sandwich board that says "Caution: Children at Play"
- ◆ Signed field trip forms to go off campus
- ◆ Instructor tool kit

TIME

- ◆ 10 minutes

LOCATION

- ◆ Nearby intersection or blacktop

PREPARATION

- ◆ Place cones along route and stop signs at stop lines, as shown in diagram on page 23. The intersection should be approximately 25-30 feet wide.
- ◆ **Optional** Chalk or tape stop lines if preferred instead of stop signs.

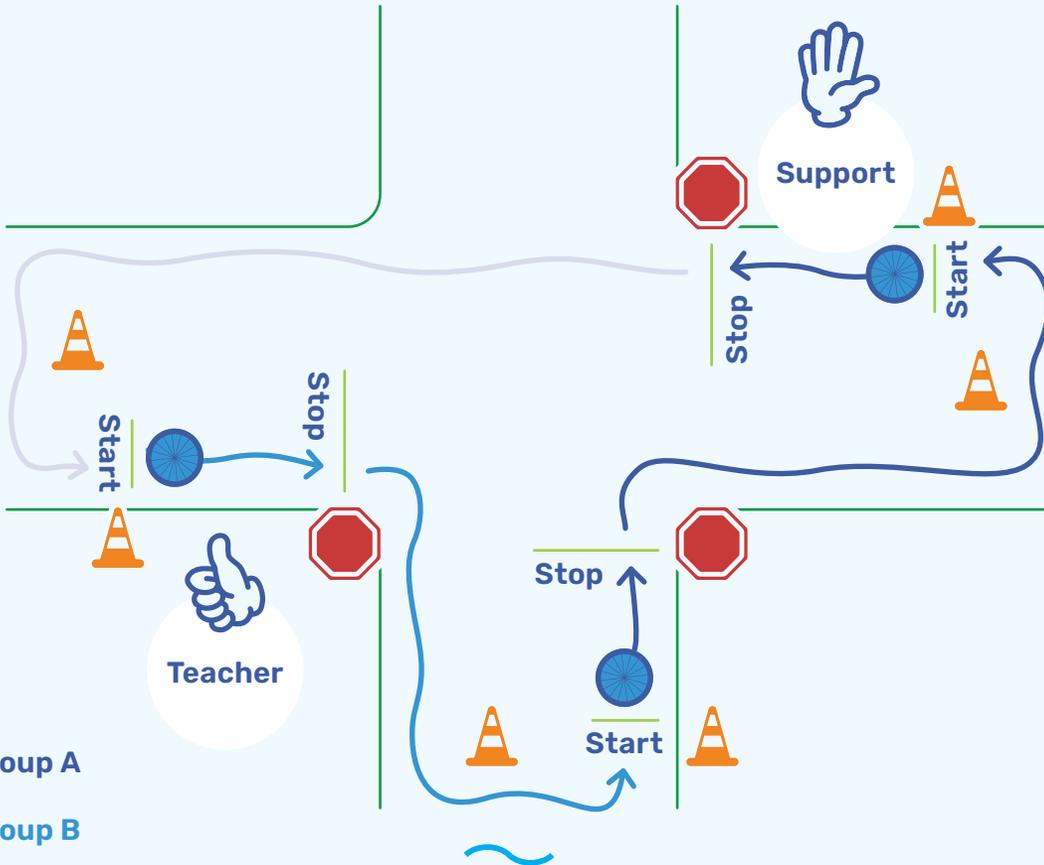
ACTIVITY

- ◆ Split students into Group A and Group B (optional Group C and Group D) and line up with their bikes behind the start line.
- ◆ Each group will practice turning right at their intersection, one student at a time, and practicing hand signals.
- ◆ After proceeding through the intersection, students will shoulder check, signal left, and complete a u-turn after the turn-around cone before lining up again at the next start line.
- ◆ When the student has traveled through the intersection, the next student in each line should proceed.

TIPS

- ◆ Remind students to signal before stopping at the intersection.
- ◆ Be sure your start line and turn around-cone are pulled back far enough to allow students time and space to ride before maneuvering.

-  → Group A
-  → Group B



DRILL SET UP | NAVIGATING INTERSECTIONS

LESSON 10 NAVIGATING INTERSECTIONS (LEFT TURNS)

MATERIALS

- ◆ Cones
- ◆ Chalk or tape (If using blacktop, optional if conducted on the street)
- ◆ Bikes
- ◆ Helmets
- ◆ Instructor tool kit

TIME

- ◆ 10 minutes

TIPS

- ◆ If students are apprehensive, encourage them to walk their bike through the drill first.
- ◆ Remind students to signal before stopping at the intersection.
- ◆ Encourage students to say 'shoulder check', 'signal left', and 'take the lane' out loud as they practice them.
- ◆ When working with a large class, add two extra left turns to keep lines shorter.

LOCATION

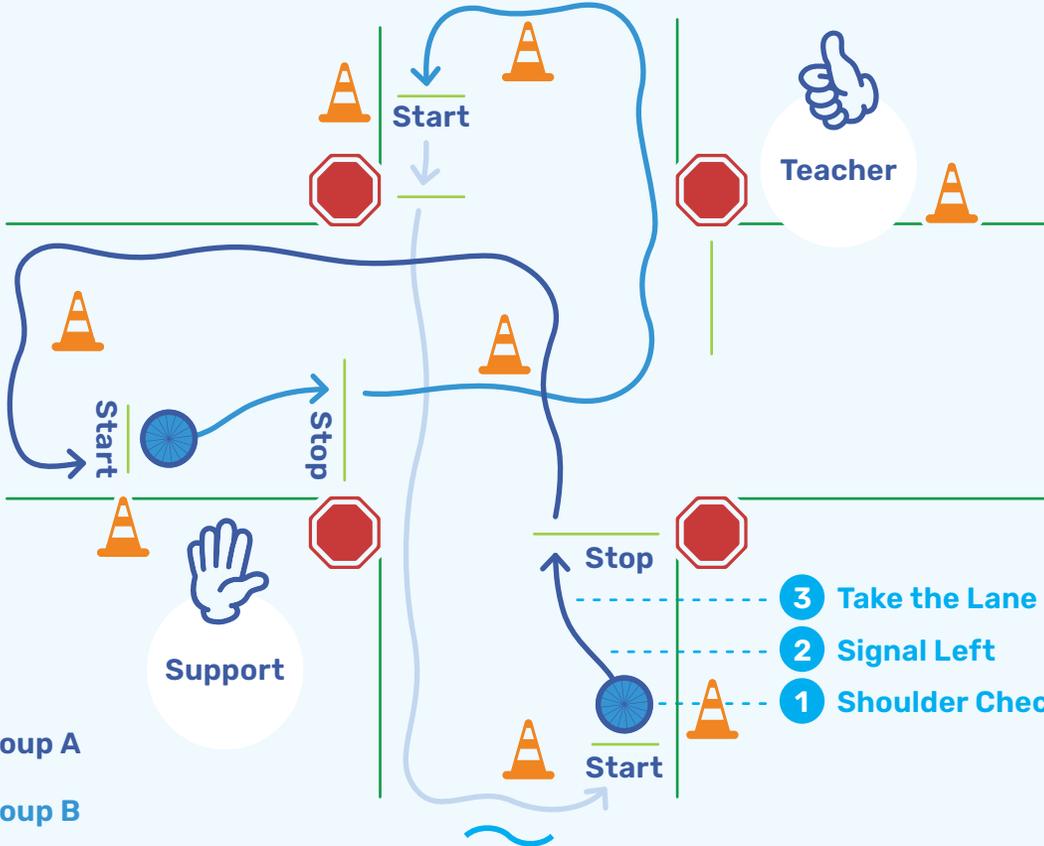
- ◆ Nearby intersection or blacktop

PREPARATION

- ◆ Place cones along route and stop signs at stop lines, as shown in diagram on page 25. The intersection should be approximately 25-30 feet wide.
- ◆ **Optional** Chalk or tape stop lines if preferred.

ACTIVITY

- ◆ Split students into Group A and Group B (optional Group C and Group D) and line up with their bikes behind the start line.
- ◆ Each group will practice turning left at their intersection, one student at a time, and practicing shoulder check, signaling left, and taking the lane.
- ◆ After proceeding through the intersection, students will shoulder check, signal left, and complete a u-turn after the turn-around cone before lining up again at the next start line.
- ◆ When the student has traveled through the intersection, the next student in each line should proceed.



- 3 Take the Lane
- 2 Signal Left
- 1 Shoulder Check



LESSON 11 NAVIGATING INTERSECTIONS (RIGHT OF WAY)

MATERIALS

- Cones
- Chalk or tape (If using blacktop, optional if conducted on the street)
- Bikes
- Helmets
- Instructor tool kit

TIME

- 10 minutes

LOCATION

- Nearby intersection or blacktop

PREPARATION

- Place cones along route and stop signs at stop lines, as shown in diagram on page 27. The intersection should be approximately 25-30 feet wide.
- **Optional** Chalk or tape stop lines if preferred.
- Remind students of the 4-way stop rules:
 - » The person who gets to the intersection first goes first.
 - » If two people reach the intersection simultaneously, the person on the left must yield the right-of-way to the person on the right.

ACTIVITY

- Split students into Group A and Group B (optional Group C and Group D) and line up with bikes behind the start line.
- Up to four students may start at the same time. They will pay attention to who gets to the STOP line first and respond accordingly.
- Students can choose to go straight, left, or right with appropriate signaling and lane position.

TIPS

- Students should be looking at the other intersections before they arrive at their own STOP line.
- Verbal communications are okay and encouraged.
- Volunteers or students can be deployed as pedestrians to emphasize right-of-way.
- Remind students to signal and be in the appropriate lane positions before stopping at the intersection.

RULES

1. **Don't get hit!** If a student is unsure when to go, they can refuse to do so until comfortable
2. **Pedestrians always have the right of way**
3. **First goes first:** First vehicle to reach the intersection goes first
4. **Right goes first:** When two vehicles reach an intersection at the same time, the vehicle furthest right goes first
5. **Left goes last:** If two vehicles reach an intersection at the same time, and they are across from each other, the left turning vehicle must yield

LESSON 12

SLOW RACE (OPTIONAL)

MATERIALS

- ◆ Cones
- ◆ Chalk or tape (If using blacktop, optional if conducted on the street)
- ◆ Bikes
- ◆ Helmets
- ◆ Instructor tool kit

TIME

- ◆ 5 minutes

LOCATION

- ◆ Gym or blacktop (preferred)

PREPARATION

- ◆ Place cones at start and stop lines.

ACTIVITY

- ◆ Students line up with bikes behind the start line
- ◆ All students begin riding upon instructor's command
- ◆ All students attempt to ride as slow as possible with the winner being the last student crossing the stop line.
- ◆ Students who put their foot down should stop where they are and wait until the race is over to return to the start line

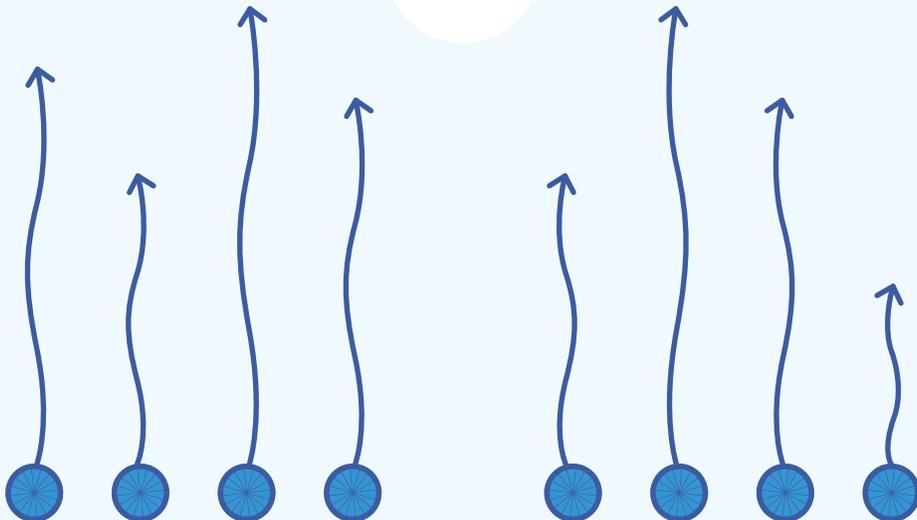
TIPS

- ◆ This drill can be a great drill to start the day with to get students comfortable on their bikes.



Teacher

Stop



Support

Start



DRILL SET UP | SLOW RACE

Oregon Department of Transportation
Safe Routes to School



ALTA - COMMUTE OPTIONS - CYCLE OREGON - THE STREET TRUST

**Jump
Start**
Oregon Walk
and Roll Training

