

VISION ZERØ

CITY OF PHILADELPHIA

ZERO TRAFFIC DEATHS BY 2030

ELEMENTARY TRAFFIC SAFETY LESSON

PURPOSE

The purpose of this lesson is to introduce students to the basic concepts of traffic safety and life lessons for using our streets, whether while walking, biking, or riding in a car. This lesson is provided by the City of Philadelphia's Managing Director's Office of Transportation, Infrastructure, & Sustainability in support of its Safe Routes Philly and Vision Zero programs.

Questions? Contact Safe Routes Philly at **SafeRoutesPhilly@phila.gov**. For more information on Vision Zero, please visit **www.visionzerophl.com**.

OBJECTIVES

To gain a brief introduction of traffic safety through understanding the importance of:

- Slowing down and safe vehicle speeds,
- Engaging in safe street behaviors as a pedestrian and practicing bicycle safety.

By introducing students to various topics of vehicle speed, biking, and walking, this lesson is helping students understand the basic concept of traffic safety as they continue to use our streets.

SET-UP

This lesson is set up by stations, each of a different topic focused on traffic safety. The lesson may be completed using one, some, or all station activities. Please note that Station 4 (Bike Safety) includes multiple activity options.

MATERIALS

- Station 1: Attachment 1: Copies of unsafe street picture (or one large picture) and unsafe street answer key
- Station 2: Chalk, string, masking tape or cones (optional)
- Station 3: Attachment 2: Blind spot diagram handout (double-sided)
- Station 4.1.a: 2 eggs, 1 Styrofoam cup, 2 sandwich bags, and paper towels
- Station 4.1.b:
 - Bicycle helmet
 - Attachments 3 - 5
- Station 4.2: Attachment 6: Copy of bicycle diagram (or one large diagram) (optional)
- Station 4.3a: Attachment 7: Signal your intent handout
- Station 4.3.b: Parchment paper

ANTICIPATION

- Begin the lesson by asking students how they travel to school.
 - What do you notice when you are being driven/walking/biking to school?
 - What is something you do to be sure you get to school safely?
- Explain to students that they will be learning all about how to be safe on the street, whether they are walking, biking, or in a car.

MAIN LEARNING ACTIVITY

- Students will learn about street safety through a series of interactive stations.
- Each station reviews basic concepts of traffic, driver, truck, and bike safety.
- Choose one, multiple, or all of the stations below to review with students.

STATION 1: TRAFFIC SAFETY - How safe is the street?

- Ask students: What's something you should do to be safe when you walk to school? Bike to school? Drive with a grownup to school?
 - **Walk:** Hold hands with a grownup crossing the street, cross at the crosswalk, walk at the sidewalk, look both ways, obey crossing guard, be visible.
 - **Bike:** Wear a helmet, bike with a grownup, ride with traffic, check your bike to make sure it's ok to ride, be visible.
 - **Drive:** Watch for people walk/biking, go slowly in case there are things in the street, obey stop signs and traffic lights, be visible to drivers.
- Explain to students that now, we will be identifying unsafe behaviors on the street.
- Distribute the unsafe street picture (Attachment 1) for students to look at or have one big poster for students to view as a group. Have students identify (11) unsafe behaviors on the sheet. The primary goal of this activity is for students to recognize unsafe behaviors and how to correct those behaviors.
 - Instructional note: If using a larger picture/poster to do as a large group activity, use check marks and X's for students to pin on the poster to indicate safe and unsafe behaviors.
- Review picture with students and be sure to correct any mistakes. Students should identify all (11) unsafe behaviors. Use the Answer Key (Revise side of Attachment 1) for reference.
- At the end of this activity, students should understand that:
 - Distracted drivers may not see people walking and may not stop for people crossing the street.
 - People traveling in cars should always wear their seat belts.
 - When walking, you should look up to be sure drivers see you and are stopping for you.
 - When walking, you should cross with the green light and check that drivers are stopping for you.
 - When walking, you should make eye contact with the driver to make sure that the driver sees you.
 - If you are over 12 and biking, you should ride on the road with traffic and follow the rules of the road.

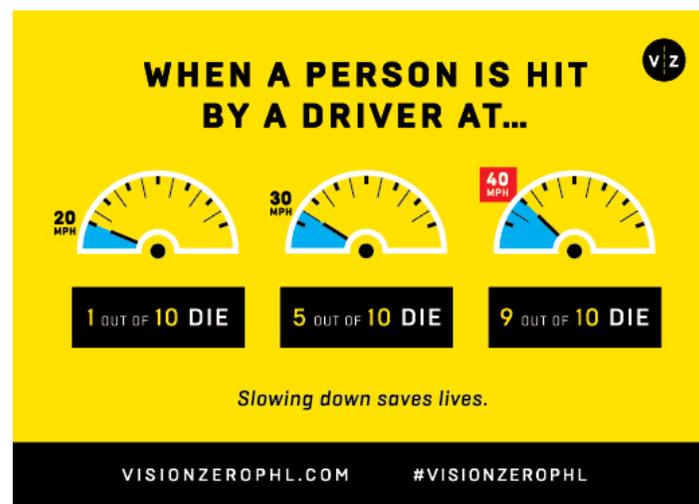
STATION 2: DRIVER SAFETY - Understanding speeding

- Ask students: If a car is being driven down a Philadelphia street (not a highway/freeway), should it be driven fast or slowly? What should the driver look for on the street? (People walking, animals, other cars, etc.)
- Explain to students that, now, we are going to understand how important it is not to drive fast when you're in a car.
- Line students up at a starting point, and draw or form a line that they will be able to walk, run, and sprint to. (You may have one line and have students walk back each time, or you may have 3 - 4 separate lines.)
- Ask students to walk until you say stop. Ask them how easy it was for them to stop walking when you asked.
- Repeat this twice, once with slow jogging and once with sprinting.
- After each task, reflect with students to see how hard it is for them to stop (the faster they are going, the harder it should be for them to stop).
- At the end of this activity, students should understand that:
 - It is much harder to stop a car when it is being driven fast.
 - They should never trust a driver to stop if they are going too fast.
 - Cross streets with caution.



DID YOU KNOW?

Driver speeds also relate to crash survival. As humans, we can only withstand so much impact. Want to share this graphic with your colleagues and parent community? Email us at SafeRoutesPhilly@phila.gov.



STATION 3: TRUCK SAFETY - Can truck drivers see you?

- Ask students: How many of you have seen a truck on a Philadelphia street? How are trucks different than the cars on the road? (Students will likely answer with the truck's size).
- Explain to students that, sometimes, you cannot always be seen by drivers when you are on the street. Drivers of trucks, big vehicles, and even cars cannot see some places when they look out of their window. These places are called **blind spots**. Distribute and review the blind spot handout (Attachment 3).
- Ask students: How can you make sure the driver can see you?
 - Make eye contact with the driver.
 - Always stand to make sure you can see the driver. If you cannot see them, they cannot see you.
- Explain to students that, when trucks turn, they should be sure to stand back from the curb even if they are standing on the sidewalk. Turning a large vehicle can be tricky and, sometimes, their wheels will come up on the sidewalk!
- Optional: Use a toy truck and Lego set as an example of how to navigate blind spots.

STATION 4: BIKE SAFETY

- Ask students: Who rides a bike? Where do you ride it? Who wants to learn how to ride a bike? What do you like about riding your bike?
- Explain to students that biking can be a fun, healthy way to get around. When we bike, it's important to know how to be safe using our streets.
- Review the basics of biking with the students. Choose **one or more** of the five bike safety activities below.

4.1 HELMET SAFETY

To demonstrate helmet safety, you may choose to demonstrate a helmet fitting with a helmet if you have one. Students should understand that helmets protect your head and brain from getting hurt in case you get hit or fall and the proper way to fit a bike helmet.

- **Activity 4.1.a:** Demonstrate how helmets help protect your head and brain during a fall.
 - Place 2 eggs in two separate zip lock bags. Wrap one of the bags with the egg in a paper towel and place in a Styrofoam cup. Drop the bag (or have a student drop a bag) with just the egg and allow students to observe what happened.
 - Repeat with the egg in the Styrofoam cup, and allow students to observe.
 - Call on students to draw their conclusions from the activity and explain that helmets are made from Styrofoam and prevent serious physical damage to our brains and heads. If students point out that the egg still cracked with the protection, make sure they understand that the Styrofoam and paper towel minimized the damage.
 - Explain to students that they should not use a cracked or broken helmet, because it will not protect their heads. If a helmet is cracked, it should be discarded and a new helmet should be purchased. [Optional: Use Attachment 5 for reference.]
- **Activity 4.1.b:** Review the proper way to fit a helmet with students. Use Attachments 3-5 for visual references.
 - Eyes: Can you see the front edge of your helmet with your eyes?
 - Ears: The straps of the helmet should make a “V” around your ears. If it’s too short, the straps will fall over your ears, and if the straps are too long, they’ll fall underneath your chin.
 - Mouth: When you strap your helmet on, you should be able to fit 1 or 2 fingers in the space between the strap and your chin.
 - Explain to students that they should not use a cracked or broken helmet, because it will not protect their heads. If a helmet is cracked, it should be discarded and a new helmet should be purchased.

4.2 BICYCLE BASICS

- Tell students that, before they ride, they should conduct a basic bike ABC check to make sure the bike is safe to ride. It only takes a few seconds!

For this lesson, use the bicycle diagram (Attachment 6) to have students indicate where the chain, brakes, and tires are.

- Instructional note: This lesson may also be demonstrated with a bike for students to get a hands-on experience on how to check their bike.
- Review the ABCs of biking:
 - **A stands for Air!** Your tires must be full for your bike to ride smoothly. To check the air in your tires, pinch the tops of your tires. If they're soft, you need air.
 - **B stands for Brakes!** Most bicycles have brakes on the handle bars, pedals, or both. To make sure your pedal brakes work, lift your back tire and pedal the bike forward with your hands and hit the brake. If it stops the wheel, the brakes are good! To check the handlebar brakes, roll your bike backwards and squeeze the brake on the handlebar. If the bike stops, the brakes are good!
 - **C stands for Chain!** The chain keeps the bike moving, just like engine keeps a car running. To check your chain, pedal your bike forward. If the chain is moving, the bike is good to ride!
- At the end of this activity, students should understand where the tires, brakes, and chain are on their bike and they should know how to properly check their bike before riding.

4.3 BIKING SAFELY & VISIBLY

Discuss being visible as a rider with your students by discussing signaling, where to ride, and what to wear.

- **Activity 4.3.a:** Teach students how to signal on their bicycle when they are riding in traffic.
 - Use the information below and Attachment 7 for reference on signaling.
 - Left Turn: Put your left arm out to your left side and point left.
 - Right Turn: Put your right arm out to your side and point right.
 - Stop: Hold your left hand out to your side and bend your elbow down.
 - Once students have mastered signaling, play a “Simon Says” or similar game to review.
 - At the end of this activity, students should understand how to properly signal on their bike.
- **Activity 4.3.b:** Review where students should ride if they are under 12 years old (sidewalk). Discuss how to best be seen on the road by wearing bright clothing and stickers with reflective material and using bike lights.
 - To show how rain, fog, and other weather events may affect visibility have students look through small pieces of wax paper. Explain that people driving, walking, and biking cannot see as well in bad weather.
 - Ask students what they can see through the wax paper (bright colors, lights, etc.).
 - At the end of this activity, students should understand how bad weather may affect a driver, cyclist, and pedestrians’ visibility.

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HOW SAFE IS *the* STREET?





Unsafe behaviors

1 - Driver:

- A driver's focus should be on the road, watching and listening for other cars, pedestrians, and bicyclists.
- Drivers should not drive distracted and should not use the phone while driving.
- Drivers and passengers should always wear seat belts.

2 - Taxi driver:

- Drivers should never park or stop in a bike lane.

3 - Driver:

- Drivers and passengers should always wear seat belts.

4 - Driver:

- Drivers and passengers should always wear seat belts.
- Rear passenger should be facing forward and wearing a seatbelt.

5 - Bicyclist:

- Bicyclists should follow the rules of the road, including biking with the flow of traffic.
- While not required by law, bicyclists should wear

helmets to protect their heads.

6 - Bicyclist:

- Bicyclists over the age of 12 should ride on the road or in a bike lane, not on the sidewalk.
- While not required by law, bicyclists should wear helmets to protect their heads.

7 - Pedestrian:

- When walking, you should wait for the green light to cross.
- You should look up and make sure drivers are stopping for you.

8 - Pedestrian:

- When playing and a ball or toy falls into the street, do not dart into the street. Drivers may not have enough time to stop for you.
- Wait until the street is clear of cars.
- If an adult is near, ask them for help.

9 - Pedestrian:

- Even when walking across the street on a green light, you should look up and make sure drivers are stopping for you.

10 - Pedestrian:

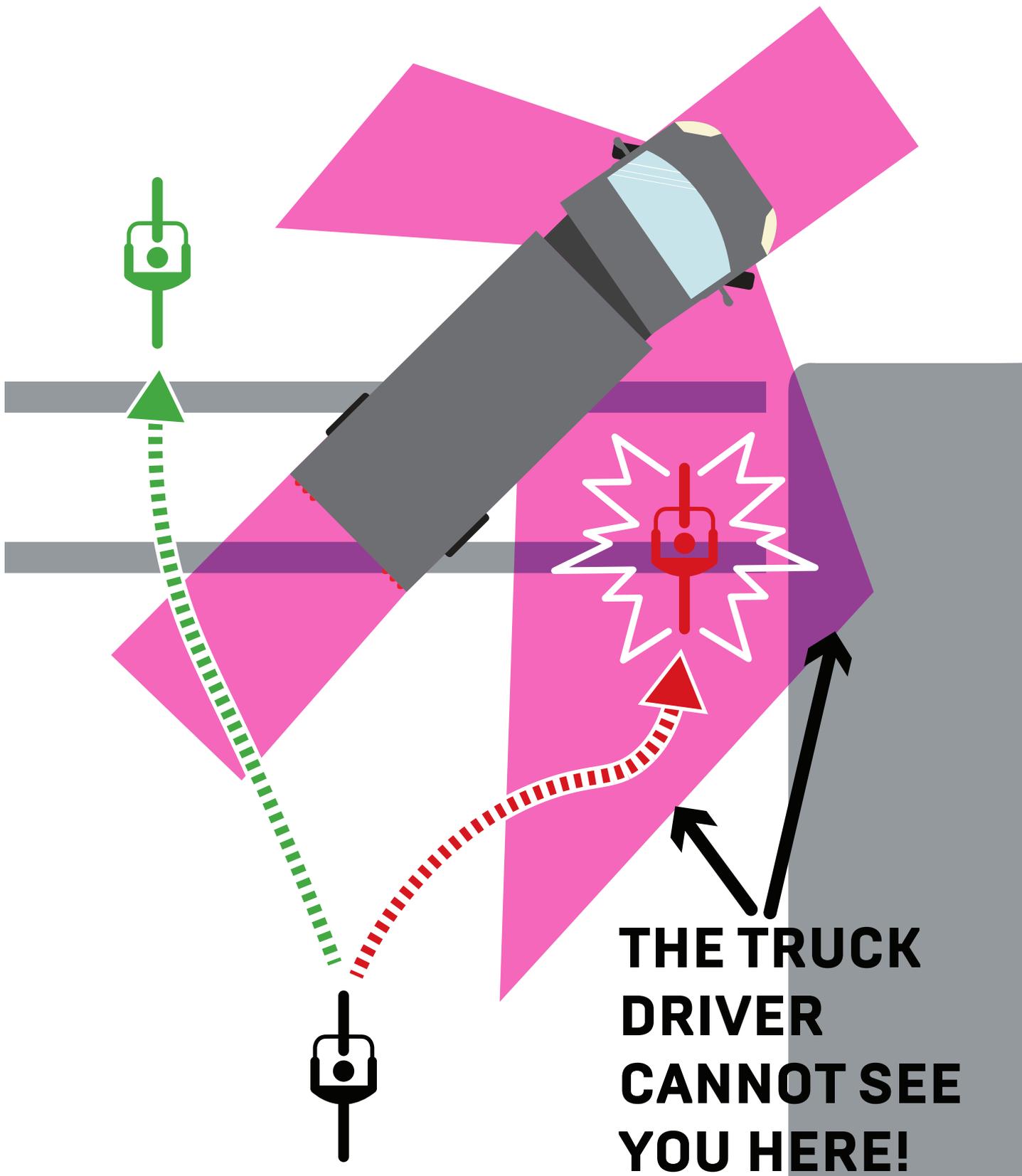
- Always hold hands with a grown up when crossing the street.

11 - Scooter:

- While not required by law, you should wear a helmet to protect your head when riding a scooter.

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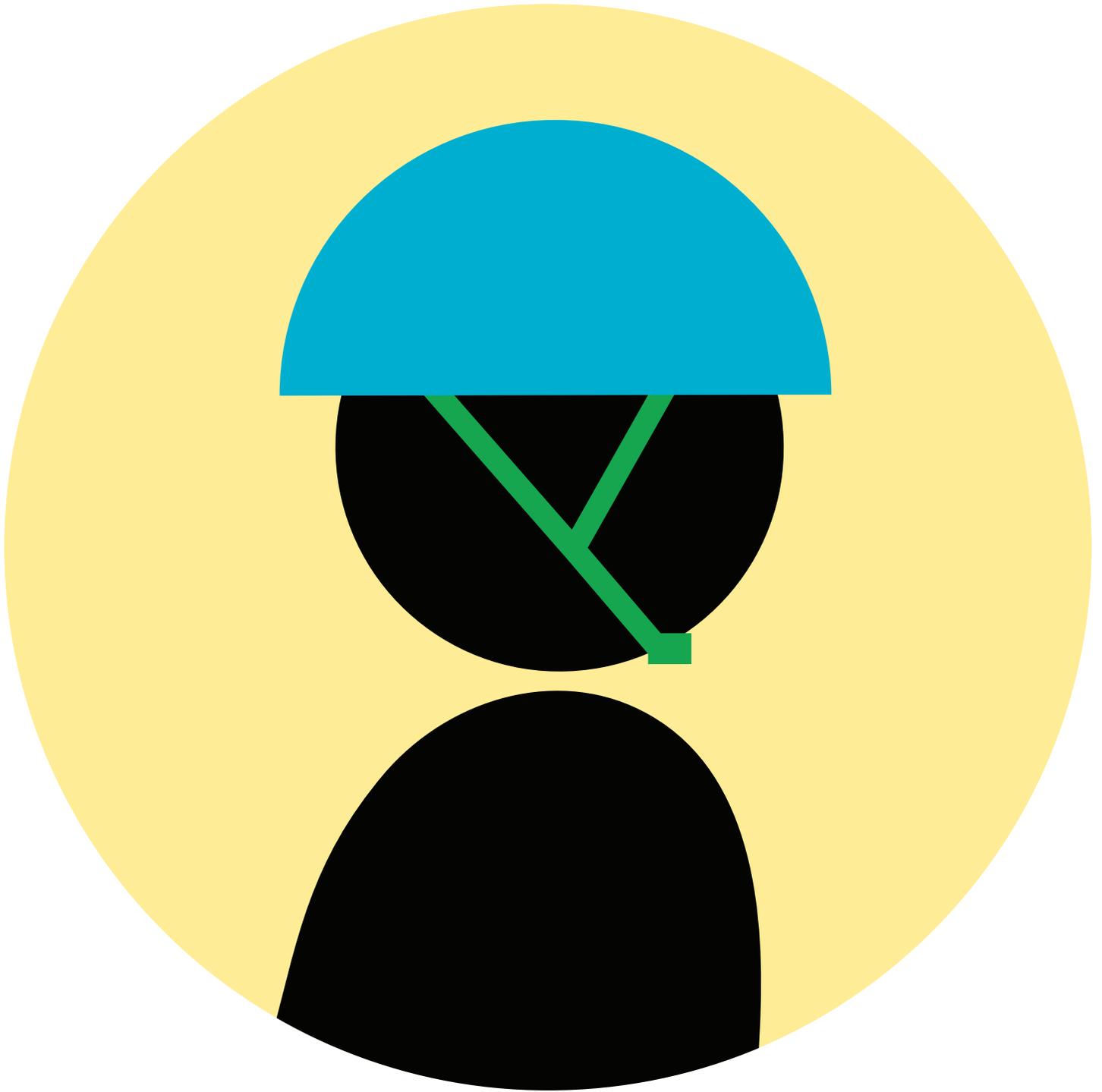




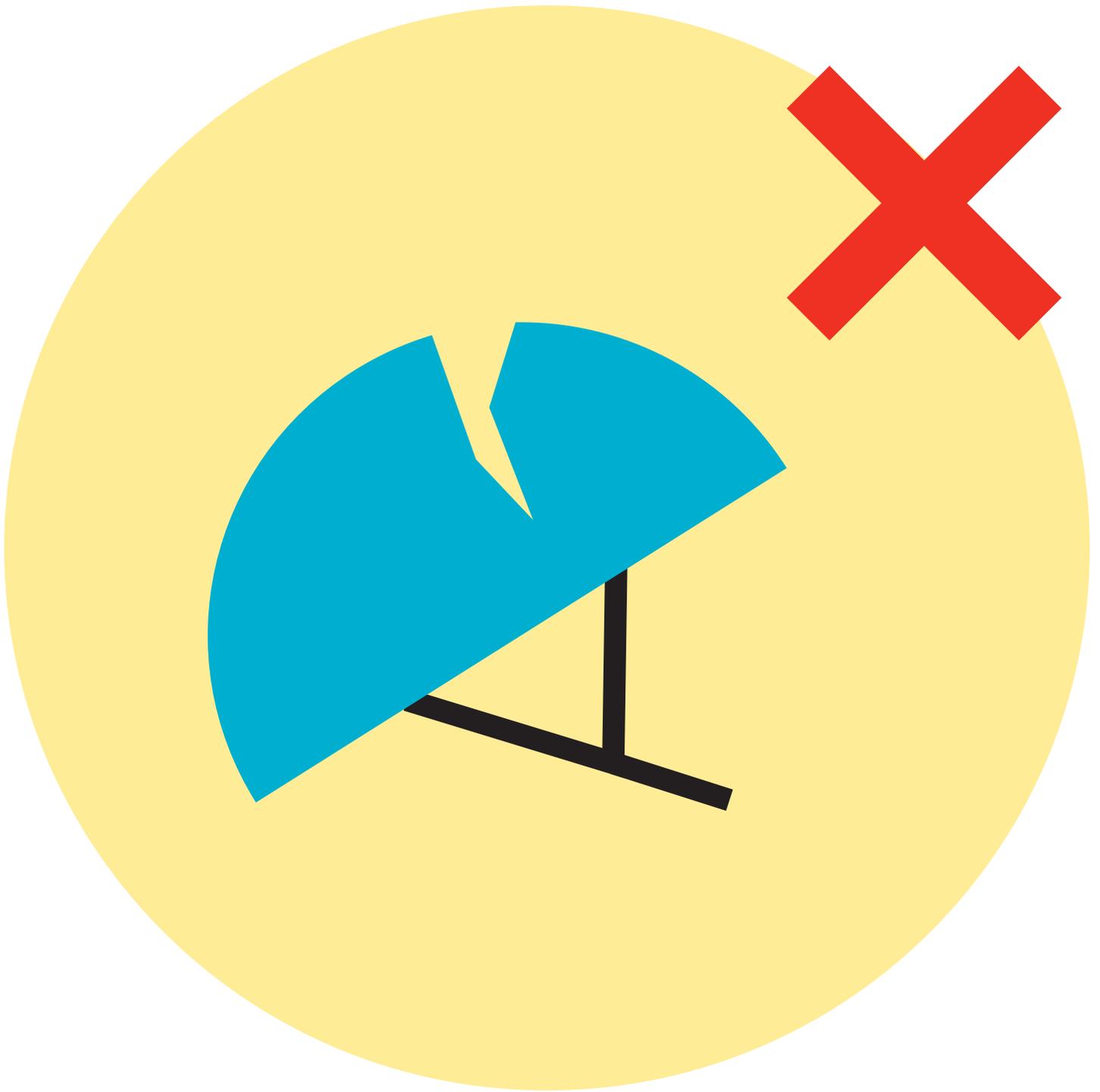
**THE TRUCK
DRIVER
CANNOT SEE
YOU HERE!**



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Bike ABCs

Identify what A, B, and C stand for in the Bike ABCs. Then, write WHY it is important to check each part before your ride.



A is for _____

I check my _____ because . . . _____

B is for _____

I check my _____ because . . . _____

C is for _____

I check my _____ because . . . _____

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SIGNAL YOUR INTENT

Shown from rear:

LEFT



RIGHT



STOP



WHEN PASSING VEHICLES:

- 1 Look over your shoulder for vehicles.
- 2 Signal before making a turn or changing lanes.
- 3 Look again to make sure it is safe.
- 4 Make your move.

WHEN PASSING OTHER CYCLISTS:

- 1 Look over your shoulder for vehicles or bikes.
- 2 Signal before making a turn or changing lanes.
- 3 Announce your intention to pass by saying "On your left" or "On your right" loudly.
- 4 Make your move.