

BICYCLE AND PEDESTRIAN SAFETY EDUCATION



CURRICULUM

Bike-Ped Safety Education (K–12)
After-School Bike Clubs and Camps
Bike Rodeos and Bike Field Trips



Spring 2020

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This curriculum is a core training and educational resource provided by the City of Fort Collins Safe Routes to School (SRTS) program. It was developed and written with assistance from instructors at Bike Fort Collins.

Content is also based on the excellent work of many Poudre School District teachers, parents, wellness team members, and community volunteers who have embraced the idea that walking and biking to school can be good for kids and the community at large.

Information about the City's Safe Routes to School program can be found at fcgov.com/saferoutes.

INSTRUCTOR PREPARATION

GENERAL INFORMATION

Whose program is it?: The City of Fort Collins' Safe Routes to School program provides overall coordination as well as funding and equipment to support SRTS programming in Fort Collins schools. Bike Fort Collins and other contractors, such as the UCHHealth Bike Patrol and Overland Mountain Bike Club, work with the City to provide instructors who deliver education and encouragement programming. Individual schools also have their own biking and walking initiatives that may or may not tie directly into SRTS but that help the City work toward its goal of getting 50 percent of local K-12 students biking and walking to school.

PSD registration: You must be registered with Poudre School District to work with children at a school. At least two weeks in advance of teaching, go to the PSD website (psdschools.org), click on "Partnership/ Volunteers" under the "Community" tab, and register as a volunteer.

Dress: Please wear an official SRTS shirt and/or SRTS safety vest when working any SRTS events. If you are a Bike Fort Collins instructor, you may wear a BFC T-shirt with SRTS safety vest. You are representing the City's SRTS program *and* Bike Fort Collins.

Arrival: On the first day, get to school early enough to meet the principal and get to know the PE teacher. Also, give yourself enough time to set up and prepare the gym for the first lesson. One instructor can be outside before the bell to greet students who bike and walk and to present a prize to them (see "Encouragement Efforts").

Supplies:

First week — Indoor teaching kit; class schedule; "Let's Walk" coloring books; "ABC Quick Check" bookmarks. Second week — Rodeo kit; tools, pumps, bike stand (not necessary if school has an SRTS Repair Station); SRTS bike fleet and helmets; "Let's Bike" coloring books; Fort Collins bike maps.

Story books: *For elementary schools; found in the indoor teaching kit.* Ask the school librarian to read the books to students during the weeks SRTS is there. Or check out books to individual classroom teachers.

NCSRTS parent surveys: The City SRTS coordinator will handle distribution of surveys to parents at schools receiving grant funding that requires surveys (primarily CDOT SRTS grants).

Pre- and post-assessments: The SRTS program has a test that can be given to middle-school students before and after the programming at their school. This helps evaluate the effectiveness of the SRTS educational program. The program is also developing a K-5 pre- and post-test.

SRTS banner: The SRTS banner must be hung in a prominent location at the school during SRTS programming. It can be brought down at night and put back up when instruction resumes the next day.

ENCOURAGEMENT EFFORTS

Students: At each school, let the students know that you will be outside before school starts and will give them a prize if they get “caught” walking or biking to school *and* wearing a helmet during the time we are teaching there (the first week only). The City’s SRTS program and Bike Fort Collins may be able to provide some of the prizes.

Staff: Let the PE teacher and school administrator know that Bike Fort Collins and SRTS can follow up the PE classes by supporting the school’s efforts with encouragement campaigns, such as celebrating Walkin’ and Wheelin’ Wednesdays, Bike Month, Bike and Walk to School Days, Bike Swaps, and/or coordinating bike trains and walking school buses. We can also provide all-school assemblies, including a program called “Rolling Into Middle School” for fifth-graders during the spring semester.

BACKGROUND

Vehicular cycling: The foundation of the bicycle curriculum is vehicular cycling, which is the idea that cyclists fair best when they act and are treated as drivers of vehicles. And as drivers, they are subject to the same rights and responsibilities as motorists. Cyclists are required to follow the rules of the road and will be safer if they do so.

Developmental issues: Some of the developmental issues for children that can preclude them from making the same judgments as adults include underdeveloped peripheral vision; inability to judge speed, distance, and timing; evaluating cause and effect; lower perceived sense of danger; identifying the source of sound; being restless, eager, and distracted; belief that adults are always looking out for them. These limitations will vary among children and are not always related to age. For example, some children will have a natural fear of cars and a greater sense of danger than others.

Common causes of crashes for children:

1. Biking against traffic
2. Biking out of driveway or off sidewalk (transition zones)
3. Swerving left without looking
4. Not stopping at stop sign or signal
5. Following lead of sibling or friend without ensuring it’s safe

KEY MESSAGES

Embedded in the curriculum are the MESSAGES that we believe children need to learn in each grade, gleaned from the principles of vehicular cycling, crash data, and our experience walking and biking with children.

Safe Pedestrianism Best Practices:

- Develop smart habits and follow the rules
- Use your eyes and your ears
- Know your edge
- Stop at your edge
- Know where to cross and how

- Use the pedestrian button at traffic signals
- Be aware and cautious; consider yourself invisible
- Make your own choices — don't follow your buddy
- Practice!

Safe Bicycling Best Practices:

- Be defensive (be cautious; consider yourself invisible; communicate)
- Be predictable (follow the rules of the road)
- Be visible (lane positioning; transitioning from sidewalks to streets)
- Be responsible for yourself (make your own decisions)
- Be confident (you have a right to be on the road!)
- Wear a helmet
- Be aware and alert

TEACHING KITS AND TOOLS

The SRTS program has the following kits and supplies available for use in teaching:

Elementary Indoor Kit	SRTS banner, Earth ball, story books (for library), tape, toys, stuffed puppy, laminated traffic signs, safety vest, pant strap, bike helmet
Elementary Rodeo Kit	SRTS banner, domes, halved tennis balls, small cones, chalk, safety vests, first-aid kit, sunblock, caution tape, measuring cord, bike rodeo diagram(s), floor pump
Middle School Indoor Kit	SRTS banner, "Legal or Not" diagrams and lane-positioning posters, chain lube and rags, course diagrams
Middle School Outdoor Kit	SRTS banner, domes, halved tennis balls, small cones, chalk, safety vests, powder chalk
Flat-repair Kit	Wheel sets, hand pumps, floor pump, tubes, patch kits, tire levers, wash basin

Miscellaneous Supplies

Bike toolboxes	Loaner helmets
Bike workstands	Helmets to lend or give away
Bike floor pumps	Uniforms and hats
Literature bins	Ride leader bags
Traffic signs (Crosswalk, Stop, Yield, RR Crossing)	Safety vests
Large cones	BIKE Camp supply kit
Bike fleet (sizes for all ages, including balance bikes for learners)	Handouts (kept in drawers)
Rolling cart	Helmet decorating kit
	Coloring/activity book(s) kit

PE: K–5 Curriculum

KINDERGARTEN AND FIRST-GRADE LESSONS: RULES OF THE STREET, CROSSING SAFELY AND PARKING LOT SAFETY

The goal is for kindergartners and first-graders is to be safe and careful pedestrians. Basic bike safety and helmets can also be introduced, if there is a second class time scheduled.

KEY MESSAGES

Know your edge
Stop at your edge — don't dart out into the street
Always be with an adult when crossing the street
Safe places to cross
Know left from right
Look left/right/left/behind (LRLB)
Places where you become invisible
Ride straight and steady
Use brakes to stop

Location: Indoor gym

OPENING, INTRODUCTIONS:

Total time = 10 minutes (first class time only)

1. **Warm-up activity** (teacher's routine)
2. **Introduce yourself and tell them the plan:**
"Hi. My name is Ms./Mr. _____ and I am from Bike Fort Collins and Safe Routes to School. BFC is a group of people who love bicycling and work to make cycling safe and enjoyable in Fort Collins. SRTS is a program that encourages kids to bike and walk to school and to do it safely."

"Today we are going to talk about being safe pedestrians and also play some games."

LESSON #1: RULES OF THE STREETS, DART-OUTS AND CROSSING STREETS

Objectives: The majority of crashes and fatalities among this age group are due to "dart-outs." Kindergartners and first-graders need to learn about the "edge," moving from safe to unsafe zones, and how to deal with them. These are the beginning steps in learning to safely cross a street.

Materials: Blue tape (or use lines on gym floor) and balls (ask PE teacher). Earth ball for tossing during discussion, stuffed animal.

Total time = 20 minutes

1. Introduction:

- a. How kids get hurt in the streets (darting out)
- b. Ask them: What do kids run into the street for? (toys, balls, the family pet)
- c. How kids become “invisible” — between cars, they are short

2. The Edge: How to avoid darting out. Talk about the edge and how you want them to develop the habit of always stopping at the edge.

- a. What are all the edges? (curb, parked cars, driveways, RR tracks, corner of a building)
- b. What do you do? Stop and think, look LRLB, then slowly enter the street (walk, don’t run).
- c. Children of this age should be encouraged to cross the street only with the help of adults.
- d. Clearly distinguish the safe place (sidewalk, front yard, playground) and the not-safe place (the street or driveway where cars go).

3. Activity — Ball Toss at the Edge: Practices stopping at the edge.

Two instructors demonstrate first a stopping protocol (call it a “habit”): Toss the ball in the pretend street and show how you might run toward it, but then stop at the edge, turn on your thinking brain and look both ways, before slowly walking into the street.

Then divide the children into teams of two to play toss with each other. Find two painted lines on the gym floor (or use blue tape), a good throwing distance apart, with another line on the floor behind you (this would be the edge of the street). If one of them misses the catch, this student must practice the edge protocol at the second line, before entering the imaginary street to retrieve the ball.

This activity requires close supervision and feedback for students to “get” it. It starts out as chaos, then becomes clear. Volunteers are helpful here.

4. Review: Assemble students. Use some of these questions to guide a discussion:

- a. What are some of the edges outside?
- b. What do you do when you get to the edge?
- c. Is it safe to think that grown-ups in cars always see you?
- d. Should kindergartners/first-graders cross streets without the help of an adult?

5. Activity – Pedal Tag, Red Light/Yellow Light/Green Light, or “Simon Says” (focus on left and right body parts, looking LRLB, and stopping at the edge).

LESSON #2: CROSSING SAFELY and PARKING LOTS

Objectives: (a) Actually walking in a crosswalk reviews what was introduced about the edge and looking LRLB in Lesson #1 and, (b) children learn how they become “invisible” in parking lots and between parked cars in the street.

Location: Outside the school at a crosswalk and in the parking lot; or inside by creating a crosswalk.

Preparation: Put up cones to cordon off the section you will be in. Three adults minimum.

Total time = 20 to 25 minutes

1. **Crosswalks:** Discuss the basics of crossing safely and then head outside to practice.
 - a. Where are the best places to cross a street (crosswalks and intersections).
 - b. Get permission from an adult.
 - c. Check your shoes.
 - d. Stop at the edge (reviews the edge lesson); stop at *second* edge (if there is one).
 - e. Look LRL and behind you (over your shoulder).
 - f. Wait if a car is coming; make sure the car is stopping (eye contact or wave from driver).
 - g. Walk, don't run: discuss the dangers of tripping and falling.
 - h. Keep looking LRLB while you walk.

Practice crossing in small groups, holding hands, with one adult in each group.

2. **Parking lot** — How you can become invisible:
Find a safe spot in the parking lot to gather the students. Pick two students to become invisible. Walk with the children behind a car and ask the other students if they can see them. Discuss how drivers will not see a child who is walking alone in a parking lot or between cars. Look for lights on the cars. Emphasize that becoming invisible is NOT a good thing.
3. **Review** — Assemble students. Use some of these questions to guide a discussion:
 - a. Where should kindergartners/first-graders cross the street?
 - b. What is a crosswalk? What does it look like?
 - c. What do you do when you come to the edge?
 - d. Is it safe to think that grown-ups in cars always see you?
 - e. Should kindergartners/first-graders cross the street or walk alone?
4. **Giveaway:** "Let's Walk" coloring books (ask them to read it with their parents).

Note: If doing the bike rodeo, remind them to bring their bikes and helmets next week and give ABC Quick Check bookmarks. Add a statement to address anxiety about not being able to ride a two-wheeled bike yet.

LESSON #3 (DAY #2): BIKE SAFETY

Kindergartners and first-graders are not too young to learn the basics of bike safety and of wearing a helmet. Many children this age are already riding bicycles in Fort Collins and might even be biking on the road with their parents. Ask for a quick show of hands of who can ride a two-wheeled bicycle without training wheels.

Objectives: (a) Students demonstrate riding straight and steady and using brakes to stop (b) students know the importance of wearing a helmet, and (c) students know when they need to have adult supervision.

Location: Outside – (1) Mini bike rodeo course (the square); (2) off to side for balance-bike riders; (3) main rodeo course for more advanced riders.

Total time = 45 to 55 minutes

Getting Ready to Ride: Helmets, “Me Check,” and Safe Cycling Basics

Indoor

1. Helmets

- a. Why wear them? Ask questions such as: What is a helmet protecting? What does your brain do? Give them some examples: “Helps you think; helps you move...”
- b. How to wear them: **The Two-Finger Rule** (simplified — cover forehead; chinstrap)

Note: See “Helmets” section of the Appendix for more details and talking points.

2. **Me Check** – Helmet, pants, shoelaces — and brain ready!
3. **Distribute helmets and fit bikes**

Outdoor

4. Basics of Safe Cycling — Or, How do you show that you are ready to ride?

- a. Ride straight and steady (not squirrely)
- b. Use brakes to stop
- c. Always ride with an adult

5. Activity: On the bikes

- a. Still learning to ride — put them on balance bikes
- b. Riders: Practice straight biking and stopping on the mini course; after doing the mini course, advanced riders can ride main course (instructor should demonstrate first).

6. **Review:** After lining up the students for dismissal, ask them, “What is something you learned today?” or “What will you tell your parents tonight?”
7. **Giveaway:** SRTS Graduation Certificate (ask them to show it to their parents)

SECOND-GRADE LESSONS: SAFE BICYCLING SKILLS

While they should still be accompanied by an adult when walking and biking, second-graders are ready to learn more safe cycling skills in preparation for biking independently in the future. It is also important to review safe pedestrian skills with this age group.

KEY MESSAGES

Check yourself (“Me Check”)

Wear a helmet

Ride straight and steady

Use brakes to stop

Difference between K/1 lesson plan and grade 2: quick review of peds and main focus on bike safety.

Location: Gym

OPENING, INTRODUCTIONS:

Total time = 10 minutes (note: first class time only)

1. Warm-up activity (teacher's routine)

2. Introduce yourself and tell them the plan:

"Hi. My name is Ms./Mr. _____ and I am from Bike Fort Collins and Safe Routes to School. BFC is a group of people who love bicycling and work to make cycling safe and enjoyable in Fort Collins. SRTS is a program that encourages kids to bike and walk to school and to do it safely."

"We are here to teach you about being safe pedestrians and cyclists. We will share some important tips about being safe and also play some games."

LESSON #1: WHY BIKE/WALK, PED SAFETY, AND GETTING READY TO RIDE

Total time = 20 to 25 minutes

Objectives: (a) Students will share safe pedestrian practices, (b) know the importance of wearing a helmet, and (c) show awareness of checking self and bike before riding

1. Discussion: Why is it a good idea to walk or bike (instead of drive)?

Ask the students this question and ask them to list the reasons. Reasons include: it's good for the environment, air quality, traffic, saves gas, kids and parents get exercise, time outside, being active helps you be a better student, it's fun, time with family and friends, get to know your neighborhood, and see more of your surroundings and wildlife.

Using the Earth ball, toss the ball to the students who would like to answer the question.

2. Pedestrian Safety:

- a. Darting out and being "invisible"
- b. Know your edge — stop
- c. How to cross a street safely (best places to cross; looking LRLB; walk, don't run; etc.)
- d. How to cross at a stoplight:
 - i. Push the pedestrian button to activate the signal.
 - ii. It is important to only begin a crossing at the beginning of a signal cycle, that is, the beginning of the walk signal when you get the "white walker" light. Otherwise, you might run out of time (show the "white walker" sign).
 - iii. Don't assume turning cars see you; wait until you see the car stop.

3. **Bicycling – Getting Ready: Helmets and “Me Check”**

a. **Helmets** — Why wear them?

Ask questions such as: What is a helmet protecting? What does your brain do? Can a doctor fix your brain if it gets hurt?

Talk about the functions of the brain: controls your movement, your senses, emotions, memory, speech, and other bodily functions. Ask why you would not wear a helmet. What are some excuses you’ve heard? Emphasize that wearing a helmet is important and you should always wear one.

Note: See “Helmets” section of Appendix for more details and talking points.

b. **Helmets** — How to wear them: **The Two-Finger Rule** (see “Helping Your Child Be a Safe Bicyclist” in Appendix)

c. **Me Check:** Helmet, pants, shoelaces — and brain ready!

4. **Activity:** Colorado triathlon or Red Light/Yellow Light/Green Light

LESSON #2: BIKE SAFETY

Total time = 10 to 20 minutes

Objective: Students will know the basics of safe cycling.

1. **Basics of Safe Cycling:**

- a. Ride straight and steady; use brakes for stopping.
- b. Ride right: ride on the right, with flow of traffic, in the same direction as the cars.
- c. Sidewalks:
 - Yield to pedestrians; call your pass.
 - Stop at the end of sidewalks; slowly enter the street.
 - Watch driveways (cars backing out and turning in).
- d. Driveway ride-outs — common crash for kids; put foot down at end of driveway.
- e. Trail etiquette: ride on the right, yield to pedestrians, call your pass.

2. **Activity** (if time): Pedal tag or Red Light/Yellow Light/Green Light

3. **Reflection:** After lining up the students for dismissal, ask them, “What is something you learned today?” or “What will you tell your parents at dinner tonight?”

4. **Giveaway:** “Let’s Bike” coloring book.

Note: Remind them to bring their bikes and helmets next week for the bike rodeo. Let them know that it is okay if they do not know how to ride a bike yet and that we can teach them.

LESSON #3 (DAY #2): BIKE RODEO

Total time = 45 to 55 minutes

Objective: Students will demonstrate riding straight and steady and using brakes to stop.

Indoor

1. **Getting Ready:**
Review: Helmet fit and “Me Check”
2. **ABC Quick Check** — go through it with the students, focusing primarily on air and brakes.
3. **Distribute helmets and fit bikes**

Outdoor

4. **Demonstrate the course:**
Students walk the course while one instructor rides and the other instructor explains the objectives. Emphasis is put on riding straight and steady and using brakes to stop.
5. **Reflections:** After lining up the students for dismissal, ask them, “What is something you learned today?” or “What will you tell your parents tonight?”
6. **Giveaway:** SRTS Graduation Certificate (ask them to show it to their parents).

THIRD-, FOURTH-, AND FIFTH-GRADE LESSONS: SAFE BICYCLING SKILLS

Many students will be riding on their own without adults. With this increasing independence and in preparation for the greater independence of middle school, this age group needs lots of reinforcement about the importance of wearing helmets, and to use safe bike-handling skills and follow the rules of the road.

KEY MESSAGES

Check yourself (“Me Check”)
Wear a helmet
Why wear a helmet
Ride straight and steady
Use brakes to stop
Know rules of the road
Use hand signals
Power Start proficiency

Note: Difference from second-grade lesson plan to grades 3/4/5: add rules of the road, more in-depth discussion about brain function and brain injury, and practicing hand signals on rodeo course. Perform thorough demonstration of Two Finger Rule.

OPENING, INTRODUCTIONS:

Total time = 10 minutes (first class time only)

1. **Warm-up activity** (teacher's routine)

2. **Introduce yourself and tell them the plan:**

"Hi. My name is Ms./Mr._____ and I am from Bike Fort Collins and Safe Routes to School. BFC is a group of people who love bicycling and work to make cycling safe and enjoyable in Fort Collins. SRTS is a program that encourages kids to bike and walk to school and to do it safely."

"We are here to teach you about being a safe and smart pedestrian and cyclist. We will share some important tips and also play some games."

LESSON #1: WHY BIKE/WALK, PED SAFETY, AND GETTING READY TO RIDE

Total time = 20 to 25 minutes

Objectives: Students will know the key messages about (a) pedestrian safety, (b) wearing a helmet, and (c) being ready to ride.

1. **Discussion: Why is it a good idea to walk or bike (instead of drive)?**

Ask the students this question and ask them to list the reasons. Reasons include: it's good for the environment, air quality, traffic, saves gas, kids and parents get exercise, time outside, being active helps you be a better student, it's fun, time with family and friends, get to know your neighborhood, and see more of your surroundings and wildlife.

Using the Earth ball, toss the ball to the students who would like to answer the question.

2. **Pedestrian Safety:**

a. How to cross a street safely (best places to cross; looking LRLB, walk don't run, etc.)

b. How to cross at a stoplight:

- i. Push the pedestrian button to activate the signal.
- ii. It is important to only begin a crossing at the beginning of a signal cycle, that is, the beginning of the walk signal when you get the "white walker" light. Otherwise, you might run out of time (show the "white walker" sign).
- iii. Don't assume turning cars see you; wait until cars stop for you.

3. **Bicycling — Getting Ready to Ride: Helmets and "Me Check"**

a. **Helmets:** Why wear them?

Talk about brain injury and the functions of the brain: controls your movement, your senses, emotions, memory, speech, and other bodily functions. What are the reasons kids sometimes do

not wear helmets? Ask why you would not wear a helmet. What are some excuses you've heard? Emphasize that wearing a helmet is important and you should always wear one.

Note: See "Helmets" section of Appendix for more details and talking points.

- b. **Helmets** — How to wear them: **The Two-Finger Rule**
- c. **Me Check:** Helmet, pants, and shoelaces — and brain ready! Bright clothing and bike lights.
- 4. **Activity:** Pedal tag, Colorado triathlon, or Red Light/Yellow Light/Green Light.

LESSON #2: RULES OF THE ROAD

Total time = 10 to 20 minutes

Objectives: Students will know (a) the rules of the road for streets and sidewalks and (b) trail etiquette.

- 1. **Rules of the Road:**
 - a. Cyclists must obey the same rules as cars: You are the driver of a vehicle!
 - b. Obey traffic signs and signals (show them the signs).
 - c. Stop at all stoplights and stop signs (call "stopping," put foot down, look LRLB).
 - d. Ride straight and steady; no weaving in and out of cars.
 - e. Ride right: Ride on the right, with the flow of traffic, in the same direction as cars.
 - f. If no sidewalk, walk facing traffic.
 - g. Sidewalks:
 - i. It is legal to ride on the sidewalk in Fort Collins except where you see dismount zones.
 - ii. Yield to pedestrians; call your pass.
 - iii. Stop at the end of sidewalks; slowly enter the street.
 - iv. Watch driveways (cars backing out and turning in).
 - h. Driveway ride-outs — common crash for kids; put foot down at end of driveway.
 - i. Bike lanes (door zone).
 - j. Trail etiquette: Ride on the right, yield to pedestrians, call your pass.
 - k. Hand signals.
 - l. Communicate with cars (make eye contact; watch for wave from driver).
- 2. **Activity** (if time): Pedal tag or Red Light/Yellow Light/Green Light.
- 3. **Reflection:** After lining up the students for dismissal, ask them, "What is something you learned today?" or "What will you tell your parents tonight?"
- 4. **Giveaway:** "ABC Quick Check" bookmark.

Note: Remind them to bring their bikes and helmets next week for the bike rodeo. Let them know that it is okay if they do not know how to ride a bike yet and that we can teach them.

LESSON #3 (DAY #2): BIKE RODEO

Total time = 45 to 55 minutes

Objectives: (a) Students demonstrate riding straight and steady and using brakes to stop; (b) students are able to properly adjust helmets using the “Two-Finger Rule”; (c) students are able to use Power Start; (d) students demonstrate an understanding of the rules of the road; and (e) students show proper use of hand signals.

Indoor

1. **Getting Ready:**
Review: Helmet fit and “Me Check.”
2. **ABC Quick Check** — go through it with them.
3. **Distribute helmets and fit bikes**

Outdoor

4. **Demonstrate the course:**
Students walk the course while one instructor rides and the other instructor explains the objectives.
5. **Reflections:** After lining up the students for dismissal, ask them, “What is something you learned today?” or “What will you tell your parents tonight?”
6. **Giveaway:** SRTS Graduation Certificate (ask them to show it to their parents); FC bike map.

PE: MIDDLE-SCHOOL CURRICULUM

SIXTH-, SEVENTH- and EIGHTH-GRADE LESSONS (PE CLASS): SAFE-CYCLING SKILLS

This curriculum is designed for middle-schoolers' increased independence and ability to more fully grasp traffic law. They are old enough and strong enough to use the bicycle as a way to get around town (a means of transportation) and also for exploration. They are also becoming more interested in maps and bike mechanics.

SESSION #1: ME CHECK, ABC QUICK CHECK, BIKE HANDLING

Class time: 90 minutes (40 min. indoor lesson; 50 min. outdoors on skills course)

Note that before or during this session, trained bike mechanics perform safety checks on students' bikes.

INDOORS:

1. **Introduction** — Mention the City's Safe Routes to School program and Bike Fort Collins (contractor for the educational program in schools). The program consists of three sessions: safety and skills, rules of the road and a long ride. We (SRTS, BFC, PE teachers) believe that anyone can enjoy riding a bike. And if you (students) can convince your parents that you can do it safely, maybe your parents will let you bike alone places, which will give you more independence! Up until now, you may have used your bike primarily as a toy. Starting now, we will help you make the transition to using your bike as a vehicle on the roads and trails.

Time allotted: 5 minutes.

2. **Me Check** — Discuss the need to check yourself to prevent avoidable crashes and injuries — shoelaces tied (closed-toe shoes required), pant legs tucked in or rolled up to keep out of chain, bright-colored clothing, positive attitude, eyes open, ears listening, brain turned on and protect it with a helmet. Think about what you're doing; pay attention to where you are in the group/on the road.
 - a. What does your brain do?
 - b. How thick is your skull?
 - c. Think about what your life would be like if your brain didn't function properly.
 - d. Give examples of excuses for not wearing a helmet.
 - e. End with a commitment to always choosing to wear a helmet — make it cool in middle school!

Time: 10 min.

3. **Helmet Fitting** — Demonstrate proper helmet fit using the two-finger rule. Students will then fit themselves with helmets. Show students photos of cool people who wear helmets.

Time: 15 min.

START INDOORS AND THEN MOVE OUTDOORS:

1. **ABC Quick Check** (extended version) — Discuss mechanical check for bikes.
 - a. **“A” is for Air (tires):** Tires must always be properly inflated. Check the sidewalls for recommended PSI (pounds per square inch). Tires that are not properly inflated will be harder to ride and unsafe (the bike will be harder to control). Underinflated tires could also damage the rim or pinch the tube (pinch-flat).
 - b. **“B” is for Brakes:** Make sure both front and rear brakes are functioning properly. No more than a finger-width gap between engaged brake lever and handlebar. The right brake lever engages the rear brake. Demonstrate. The left brake lever engages the front brake. Demonstrate. Discuss problems when using only front brake. This is a serious issue as most kids will tell you they’ve done it and flipped over the handlebars. Use this opportunity to discuss what happens if anything stops the front wheel suddenly (backpack hung on the handlebars, hitting a front wheel against something, etc.). Finally, make sure both wheels spin freely and are not rubbing against the brake pads and that brake pads align level on rims (for maximum braking surface).
 - c. **“C” is for Chain, Crankset, Cassette/Cluster:** Make sure that the chain drive is clean and that the chain is lubricated. If the chain is orange with rust or in otherwise poor working condition, then the bicycle may not operate properly. Make sure the crankset is not loose and that the cassette (gears on back wheel) are clean. Talk about gears and cross-chaining.
 - d. **“Quick” is for Quick Release:** Check to see if your bike has any quick releases. They’re usually found on the seatpost and wheels. Brakes also may have a quick-release mechanism. Ensure they are engaged properly.
 - e. **“Check” is for Check the Bike All Over Before Riding:** Check that the handlebar stem is tight and that there is no rubbing, rattling, clicking, knocking or other sounds anywhere on the bike that might indicate a problem.
 - f. **“Check” is Also for Check Bike Fit and Seat Height:** Students should be able to comfortably straddle the bike without touching the top tube and with both feet on the ground. As a general rule, the seat should be approximately at mid-hip height when standing next to the bike.

Reminder: Do not hang bags, backpacks, locks or anything that could affect steering on the handlebars.

Time: 10 min.

2. **Demonstrate hand signals** before going outside — show diagrams/photos of proper hand signals.
3. **Skills Course – Bike-handling Practice (45 to 60 min.):**

COURSE I — Power Start and Snail Race (balance and control); add Quick Stop and Rock Dodge (avoiding road hazards). Set up the course on a flat surface. Create at least five lanes 4 feet wide and 50 feet long, if possible. See diagram of “Middle School Bike Skills Course” in Appendix.

COURSE II — Straight-line riding (learning to ride straight and steady), controlled stopping, weaving, scanning and signaling. Add gear shifting and “outside pedal down” when turning. Set up course on flat surface to utilize left turns with straight lane first, then weave on the return and stop at the end. You may set up course to allow students to “take the lane” before turning left. See diagram.

Additional key points: Assess students' bike-handling skills to prepare for rides on the road. This is where we find out who can go on the road and who can't. If there are students who are not comfortable riding on the skills course, then we probably won't want to take them on the road and we'll have to arrange for them to remain on campus to practice riding.

Supplies: Middle-school Rodeo Kit (cones, chalk, domes, tennis balls); 30 loaner helmets; toolbox, workstand, and three floor pumps; table; 12 to 15 bikes; and long cable with lock.

Giveaway: "ABC Quick Check" bookmark.

SESSION #2: TRAFFIC LAWS/RULES OF THE ROAD, GROUP-RIDING RULES, RULES-OF-THE-ROAD RIDE

Class time: 90 minutes (20 min. in class; 70 min. ride)

Note: Ask if anyone wasn't at the first class (and fill them in on what they missed). Ask if anyone brought a bike that didn't already get checked by a mechanic. Explain green ribbon/blue masking tape on bikes (which means they have been checked and okayed by a mechanic). One instructor should train volunteers and hand out safety vests.

Traffic Laws and Rules of the Road

Note: Use "Lane Placement" posters to demonstrate what to expect on the road.

Review rules of the road (ask them what they know first):

1. Cyclists must obey the same rules as cars; obey all signs and signals.
2. Ride on the right, with the flow of traffic.
3. All cyclists are required by law to use hand signals when safe to do so, including stopping.
4. Where to ride: bike lane, multi-use trails, sidewalks, "taking the lane" (claiming the lane so no cars can squeeze in beside you).
5. Right-of-way: "First come, first served," including at three- and four-way stops.
6. Be visible, predictable and defensive. Ride straight and steady. Do not weave between parked cars. Be defensive and alert — keep eyes and ears open. Never enter an intersection before checking to make sure every vehicle has stopped, even if you have the right-of-way. Communicate with drivers — make eye contact if possible, and wave them on if necessary.
7. When walking on the road where there is no sidewalk, always walk against the flow of traffic or on the left side facing traffic.
8. In Fort Collins, it is generally legal to ride on the sidewalk. Should you? Probably not, but sometimes it's the only safe option. Be sure to yield to pedestrians and ride at a slow, controlled speed. Where is it not legal? Old Town, CSU campus, Front Range Community College and anywhere else posted.
9. It is required by law that at least one hand remain on the handlebars at all times.

Group-riding Rules — Ride single file; straight and steady; bike length between each rider; stay between chaperones; no passing; communicate (call out stopping, turning, and road hazards); both hands on handlebars at all times (unless signaling); make your own decisions. Students will pair up at intersections and decide together when it's safe to enter. *DO NOT FOLLOW THE PAIR AHEAD OF YOU UNTIL IT IS SAFE.*

- Have students gather to put on helmets, usually while still in the gym, and get in riding groups. (Also check the adults' helmets.) Groups are divided by eagerness and ability to ride, by discipline issues, or by other concerns as determined by the PE teacher. Once in groups, students do the Me Check on themselves. Once the groups gather outside with bikes, have them do the ABC Quick Check on their bikes with support from leaders, teachers and volunteers.
- Fit them on the properly sized bike with seat height adjusted (mid-hip).
- Make sure they understand gear changing — when, how and why to change gears.
- Have an instructor review the expectations for volunteers with them — see handout.
- Be sure to have phone numbers for all leaders and the school's main office, and ensure that students needing medication are with the teacher's group.

Rules-of-the-Road Ride — Reiterate SAFETY and “One Strike Rule.” Groups of no more than 10 with three adults (two SRTS instructors and one volunteer); keep rides within a reasonable pace, no more than 12 mph; teach them to control speed by feathering brakes on downhills.

Review:

- a. Helmets — make sure they are still fitted properly
- b. Me Check — pants, shoes (no open-toed sandals), laces, brain
- c. ABC Quick Check — students do their own, instructors check
- d. Predictability — steady riding, proper stopping and yielding, correct placement in lane
- e. Straight line — not squirrely
- f. Audible and manual signals — loud audible communication
- g. Scanning — being aware of your surroundings
- h. Hazard avoidance — point to and call out hazards in the road
- i. Lane changing and safe turning — left turns: scan, signal, scan again, take the lane
- j. Door-zone awareness — stay at least 5 feet away from doors of parked cars

On-road Demonstration — Find a neighborhood where leaders will be able to demonstrate the following, at a minimum: stop signs (two-, three-, or four-way), taking the lane to make a left turn, a four-way intersection to demonstrate “Copenhagen Left” turn, traffic light, quiet neighborhood street. If possible, also include: roundabout, different bike-lane markings, difficult crossings near school.

- **Stop Signs:** Obey “first-come, first-served” rules and right-of-way at stop signs. Signal, stop, signal again if necessary, and check that all vehicles have actually stopped. Make eye contact and communicate with drivers if possible. Only enter the intersection when all is clear. Be sure to discuss where to stop at intersections. Demonstrate where to stop at a stop sign (behind it) and that it may be necessary to inch forward to be able to see clearly in both directions to know when it's safe to enter the intersection.
- **Left Turns:** Discuss lane control (“taking the lane”). Begin first scan about 250 feet from intersection. Scan, signal, scan again, take the lane and then pair up at the stop. Hold hand signal out at least 2 seconds, and then place both hands back on the handlebars before turning. Once at the intersection, signal again. Be sure there is no oncoming traffic before making the turn. Do not hesitate or dawdle (use Power Start). Go back to single file after the turn.

- **Neighborhood roads:** Ride to the right of the center line and at least 5 feet from doors of parked cars. Stop and identify door zone, parking lanes, blind driveways, bike lanes, traffic lanes, not weaving between parked cars, and to watch for neighborhood hazards — kids or dogs darting into street, balls rolling into street, blind driveways. Check for cars at intersections even when you have the right of way.
- **Copenhagen Left (alternative left turn):** Also known as a two-stage turn. Demonstrate taking a left as a pedestrian and/or as a vehicle by crossing each intersection on the right side of the road. See diagram.
- **Power Start:** Demonstrate when power-start position is most necessary and what a complete stop looks like (completely off saddle and foot down). Power start position is needed after every stop.
- **Roundabouts:** Demonstrate two ways to navigate roundabouts, one as a vehicle and one as a pedestrian. As a vehicle: scan about 150 feet before roundabout, signal, scan again, take the lane, pair up and yield to vehicles already in the traffic circle; quickly enter and exit as a vehicle; single up after exiting roundabout. As a pedestrian: use the curb cut to move to the sidewalk and follow pedestrian rules (dismount and walk your bikes until you are through the roundabout and back on the roadway).
- **Have fun!** Enjoy being in the fresh air and on a fun bike ride with classmates.
- **Return to School on Time:** Be sure to check the time you leave the school to ensure getting back to school on time. Monitor pace of the ride. Be prepared for short-cut or long-cut options.

Supplies: Ride-leader fanny packs with first-aid kits; safety vests for all adults; cell-phone number exchange; lane-positioning posters; helmets and bikes; toolbox and floor pump (unless school has them); route maps (created on MapMyRide).

Giveaway: CDOT “Rules of the Road” wallet cards.

SESSION #3: PUTTING IT ALL TOGETHER

Class time: 60- to 70-minute bike ride around town.

Note: Ask if anyone wasn't at the first class (and fill them in on what they missed). Ask if anyone brought a bike that didn't already get checked by a mechanic. Explain green ribbon/blue masking tape on bikes (which means they have been checked and okayed by a mechanic). One instructor should train volunteers and hand out safety vests.

Review Group-riding Rules

In the gym, review group-riding rules from the previous ride. Remind students that there is *zero* tolerance for misbehaving on the road. Briefly explain the route. Divide the students into groups. Have students put on their helmets, do the Me Check, and get their bikes. Watch as they do their ABC Quick Check. Have fun!

Trail Etiquette — Expectations on the trail.

- **Communication lingo:** When someone is approaching you, the call is: “rider up, walker up,” etc. Riders should ride straight and steady, over to the right. When passing someone going the same

direction, the leader calls out “passing,” and all riders communicate by ringing a bell or saying “passing on your left” and pulling over to the left to pass when clear.

- **Yellow-line definitions (for trails):** Yellow lines reinforce that there is two-way traffic. Dashed means there is clear visibility and it could be safe to pass. Solid yellow means no clear visibility — *do not pass!*
- **Riders’ location on the trail:** Riders should be in the middle of the right half, but not too close to the right edge. The sharp edges of concrete trails are a hazard for bicyclists who go off and try to correct their steering back onto the trail. This usually results in a crash. If a student goes off the trail, the best thing to do is slow down, stop, and walk the bike back onto the trail.
- **Stopping:** When stopping, move as far to the right as is safely possible; when starting again, check over left shoulder first to make sure it’s clear to return to trail.
- **Speed:** Riders should always be controlling their speed. This is a leisurely ride, not a race. Generally do not go faster than 12 mph. Teach students to feather their brakes on downhill.
- **Other hazards:** Identify blind corners; take extra care in tunnels. Certain times of the year, watch for goatheads, wet leaves and floodwater on trail. If there is a trail closure, follow signed detour.
- **Signage:** Point out wayfinding and mileage signs along the trail.

Supplies: Ride-leader fanny packs with first-aid kits, tool kits, and pumps; safety vests; helmets and bikes; good attitude; cell-phone number exchange; lane-positioning posters; route maps created with MapMyRide.

Giveaway: FC bike map.

OPTIONAL RAIN/SNOW-DAY CLASSES OR ADDITIONAL CLASSES TO EXPAND THE BIKE UNIT

If skills-course day, an option is to set up course in gym. Otherwise, the following are some alternative/additional activities.

Route finding — Look at FC bike map and discuss with students the various aspects of route finding for safer bike riding. Have students break into small groups and show each other which route(s) they take to school by bike. Have students identify routes they can take to school. Ask them where they have ridden (for example, to Old Town or to nearby towns). Also ask them where they would like to ride in the future (for example, Loveland, Windsor, Wellington). Invite students to the front to show a route they have ridden in town. Quiz them on the map aspects: What do the different colors of lines represent? Have them identify trails versus roads. How are underpasses indicated? How do you know where bike fix-it stations are? Et cetera.

Basic Bike Mechanics (include flat tire, brake and derailleur adjustments, seat, handlebars)

- Cleaning a bike — moving parts, lube
- Fixing a flat — tire levers, patch kits, pumps
- Other helpful on-the-road tools (multitool, Schraeder/Presta adapter, electrical tape, small adjustable wrench, pliers, etc.)
- Seat and handlebar adjustments

- Brake adjustments
- ABC Quick Check review

Bike Securement

Mention proper locking technique. Possibly give the school spare locks and cables to lend to students who forget locks.

Bikeology and CDOT SRTS Curriculum

Have students do activities/quizzes from Bikeology or CDOT curriculum. These activities and quizzes can also be used by students who, for any reason, have to stay behind on a ride day.

Watch Bike Safety/Lane Placement Videos

Watch SRTS videos from Colorado Springs or League of American Bicyclists videos.

Legal or Not?

Use “Legal or Not” posters to review rules of the road.

MIDDLE SCHOOL: AFTER-SCHOOL BIKE CLUB

SIXTH-, SEVENTH- AND EIGHTH-GRADE LESSONS (AFTER-SCHOOL CLUB): SAFE BICYCLING SKILLS

This curriculum is designed to be used for an after-school club or a special-focus class, during which we can go a bit more in depth than in PE. Just like in the PE classes for this age group, the goal of this curriculum is to appeal to middle-schoolers' growing sense of independence and adventuresome spirit, and to provide the safe-cycling knowledge and skills that will help them be safe on the roads. The focus is experiential, that is, to get the students out on the road and riding, and doing hands-on activities like route finding and mechanics.

Program length: *Five sessions (designed for 80- to 90-minute sessions); instructors will need to adjust the lesson plan for programs of shorter length or fewer sessions.*

SESSION #1: ROUTE FINDING, RULES OF THE ROAD, LANE POSITIONING

1. **Introduction** — Who am I and who I work for (what is SRTS); the program. You could say, “We believe that anyone can enjoy riding a bicycle. And if you can convince your parents that you can do it safely, maybe they will let you bike alone places, which will give you more independence!” You can also focus on the health and environmental benefits of bicycling.
2. **Route Finding** — Look at the FC bike map and discuss with students the various aspects of route finding for safer bike riding. Have students break into small groups and first identify north to orientate the map correctly. Have them show each other which routes they have biked to school or around town. Have eighth-graders identify routes they can take to high school. Quiz them on the map aspects: What do the red lines represent? What do the green lines mean? Purple and the green/black dash lines? Are you allowed to bike on the grey roads?

Video: Ride with the Flow of Traffic (*sidewalks, vehicularism, ride right*)

bit.ly/2kbLVlg

1. **Rules of the Road** —
 - a. First quiz the students with “Legal or Not” posters; give prizes for correct answers.
 - b. Review rules of the road — Ask them what they know first.
 - i. Cyclists must obey the same rules as cars; under the law, you are a driver of a vehicle.
 - ii. You must obey all signs and signals.
 - iii. Ride on the right, with the flow of traffic.
 - iv. Where to ride (bike lane, trails, sidewalks, in the lane).
 - v. Right-of-way: “First come, first served.”
 - vi. Trail etiquette: ride on the right, yield to peds and call your pass.
 - vii. Be visible, predictable and defensive; communicate with drivers.

Video: Ride Predictably (trails, yielding, signaling, being defensive)

bit.ly/2kbMr2P

2. **Lane Positioning** – Use the posters to discuss. Discuss lane control (“taking the lane”), obeying “first-come, first-served” rule and right-of-way. Demonstrate taking a left as a pedestrian (Copenhagen left).

Video: Share the Road (lane positioning)

bit.ly/2jmQgh4

Supplies: “Legal or Not” posters; lane-positioning posters; FC Bike Maps

Videos: SRTS Pueblo, Colo. (links provided); “True Fans” (when time allows – bike-touring focus)

Giveaways: FC bike map; Bicycling and Scenic Byways map; Colorado Bicycling Manuals; prizes (bells, lights, water bottles).

SESSION #2: BIKE MECHANICS

1. **ABC Quick Check, Extended Version** — Discuss mechanical check for bikes: What to check before your ride (air, brakes and chain) and go into depth about other mechanical aspects, that is, cables (when problematic), the drive train, brakes, etc. Explain how gears work. Work on a student’s bike.
2. **Chain Maintenance** – Demonstrate lubing a chain; let kids have a try.
3. **Fixing a Flat Tire**— Use the flat-repair kit to demonstrate; have the kids work on some wheels.

Supplies: Helmet and bike; bike stand and tools; flat-repair kit; lube and rags.

Giveaway: ABC Quick Check bookmark.

SESSION #3: MECHANICS and BIKE-HANDLING SKILLS

1. **Mechanics** — Finish tire-changing lesson or work on a student’s bike.
2. **Skills Course** — Watch the following videos and then head to course. Practice the Power Start, stopping and Quick Stop, straight-line riding, scanning and signaling, Rock Dodge, turning and shifting.

Video: Handling Skills — Starting and Stopping; Shifting (www.bikeleague.org/ridesmartvideos)

Supplies: Helmets and bikes; rodeo kit

Videos: League of American Bicyclists “safe-cycling” videos

Giveaway: “I Like to Bike Right” bracelet

SESSION #4: BIKE RIDE

The first ride will be a shorter ride with lots of stops for discussion. The focus is on applying what the students learned in class in regards to lane positioning and the rules of the road. The goal is to increase their comfort, confidence and sense of belonging on the road.

1. **Group Riding Rules** — Ride single file; stay between adults; give a bike length of distance between you and the rider in front of you; no passing; communicate (call out “stopping”); make your own decisions (each rider looks for herself at intersections).
2. **Discuss the Route** — Identify the tricky situations, for example, left turns and roundabouts. Review relevant lane positioning; talk how we will do intersections.
3. **Helmet Safety and Fit** — Discuss the importance of wearing a helmet and demonstrate proper helmet fit.
4. **Get Ready** — Put on helmets, divide into trains, students select their bikes. Instructors explain the ABC Quick Check and ask the students to do it; also do the Me Check, check seat height, and make sure everyone can brake properly.

Supplies: SRTS helmets and bikes; tools; safety vests; personal tool kit or SRTS ride leader bag (carry on ride)

SESSION #5: THE BIG BIKE RIDE!

Before getting ready, review the route and any tricky parts. Review lessons learned from last ride, for example, rules of the road that the students struggled with. Gather into bike trains, ask students to do the ABC Quick Check and Me Check, check seat height, and make sure everyone can brake properly.

Other videos (if time):

“Cyclelicious”
bit.ly/2kaQDiF

“Cyclist’s Eye View: Part 1” (YouTube)
bit.ly/2jxJOas

BIKE FIELD TRIPS

BIKE FIELD TRIPS (ELEMENTARY SCHOOLS)

Many PSD schools are running bike field trips, beginning in fourth grade. This is an exciting development in education. While teaching safe-cycling skills, we are also sending a strong message that a bike can be used for transportation and exploration. Many students get the chance to bike on our bike paths for the first time. These events are a big effort, but very rewarding and memorable for the children and their parents. The kids love them!

GENERAL PREPARATION

Indoor lesson: One to two weeks prior to the scheduled field trip, an instructor should lead a bike safety class in PE in conjunction with the PE teacher (lesson plan on following page).

PE teacher preparation: It is highly recommended that the PE teacher take Smart Cycling.

Route: Review the route with the teacher and discuss the best options. Preride if necessary.

Rain date: The PE teacher will probably select a rain date.

Letter to students: Ask teacher to attach a letter to the permission slips with the following: asking if the child will need a loaner bike; if bringing own bike, please bring it in good working condition; ask parents to rate the child's ability or comfort with bicycling (also identify children with special needs and figure out what accommodations can be made).

Parent volunteers: Parent volunteers are great, but they often need to be educated about safe cycling and vehicular cycling. It is ideal if the PE teacher schedules a parent training in advance. The SRTS instructor can review what we are teaching the kids, such as the rules of the road, lane positioning and helmet fit. To explain vehicular cycling, you can show "Cyclist's Eye View" on YouTube. It is also important to impress upon parents that they need to remember that we are teaching the kids and that we want the adults to model safe cycling, for example, that they may need to ride differently than they would if they were out riding alone. They *must* wear helmets.

Bikes and helmets: Ask the PE teacher to identify which students will need loaner bikes and helmets. Let the City's SRTS coordinator know the quantity and sizes of the bikes needed.

Bike inspection: The PE teacher may request that the students bring their bikes in the week before so that the bikes can be looked over by mechanics. If it is a small group, the bikes could be inspected by instructors in the morning before departure.

Supplies (ride):

Bikes and helmets; cable lock

Pumps and tool kit — including flat-repair kits (for on the road)

SRTS safety vests, maps (the route), leader tips (handout); first-aid kit

BIKE FIELD TRIP PREPARATION — LESSON PLAN

1. **Group Riding Rules** — Explain how we will make bike trains and the rules of riding in a group: stay between the leader and caboose, ride single file (except at intersections), give a bike length between you and the rider in front of you, no passing, communicate (call “stopping”), make your own decisions.

2. **Discuss the Route, Lane Positioning and Intersections** — Go over the route and talk about how we will handle the tricky parts: left-hand turns, controlling the lane, bike lanes (door zone), sidewalks, intersections.

Stop signs: Invite students to go in sets of two while reminding them that they need to still make their own decisions. Pairs help us get through the intersections more quickly and avoid holding up traffic. The mid-train adult can help students with taking turns with cars at a four-way stop.

Stoplights: Everyone in your group will bunch up (in sets of three to four side by side) and the mid-train chaperone will push the pedestrian button. Also, when approaching a stoplight, only go if the light will allow entire group (don’t enter the intersection on a yellow or a very short green). If the whole group can’t make it, wait until next full light cycle. Otherwise, without strong adult supervision mid-train, the kids will likely keep following the group and go through a red light. If we are approaching an intersection and the light is already green, the leader might decide to stop the whole group and wait for the next light cycle. After making it through the intersection, we will return to single-file formation.

3. **Rules of the Road** (abbreviated) — Cyclists must obey the same rules of the road as cars; obey all signs and signals; ride on the right; follow the “first come, first served” rule; trail etiquette; communicate with cars.

4. **Helmet Safety and Fit**

5. **Skills Course** – Power Start, stopping, straight-line riding, scanning and signaling, turning right and left.

Supplies:

Rodeo kit

Indoor teaching kit (lane-positioning posters)

Your own bicycle and helmet

Literature (for each student): FC bike map, ABC Quick Check bookmarks, Colorado Bicycling Manual, Bicycling and Scenic Byways map.

BIKE FIELD TRIPS – LEADERSHIP TIPS

(Give a copy to each instructor and parent volunteer. This is a guide of what to remember as a leader the day of the field trip.)

Group up with your students, introduce yourself and do the following:

1. **Me Check, ABC Quick Check, and Seat Height**
2. **Review Group Riding Rules** — Ride single file; group up at intersections (see below); stay between the adults; no passing; bike-length distance between yourself and the biker in front of you; communicate (call out “stopping”); make your own decisions (each person stops and looks for himself before entering an intersection).
3. **Review Trail Etiquette** — Ride on the right; call your pass; yield to pedestrians; pull off trail when stopped; yield at trail mergers and forks.
4. **Review the Rules of the Road and Lane Positioning** — Ride on the right; obey all stop signs and signals; ride straight and steady; take up the lane when no bike lane; door zone in bike lanes; left turns (scan, signal, move into main lane, watch for oncoming traffic).
5. **Review Skills** — Signaling, Power Start and stopping (ask if everyone is comfortable); ask each student to demonstrate braking.
6. **Review the Route** and the tricky parts.

Other tips —

Stop often, in advance of the tricky parts, to remind the kids how you will do it. Stop afterward to discuss how it went. Debrief with students at the destination.

Intersections with stop signs: Invite students to go in sets of two while reminding them that they need to still make their own decisions. Pairs help us get through the intersections more quickly and avoid holding up traffic. The mid-train adult can help students with taking turns with cars at a four-way stop.

Stoplights: Everyone in your group will bunch up (in sets of three to four side by side) and the mid-train chaperone will push the pedestrian button. Also, when approaching a stoplight, only go if the light will allow entire group (don’t enter the intersection on a yellow or a really short green). If the whole group can’t make it, wait until the next full light cycle. Otherwise, without strong adult supervision mid-train, the kids will likely keep following the group and go through a red light. If we are approaching an intersection and the light is already green, the leader might decide to stop the whole group and wait for the next cycle. After making it through the intersection, return to single-file formation.

Supplies (please bring with you): flat-repair kit, hand pump and other tools (will need wrenches for bikes with no quick-releases on wheels); first-aid kit; SRTS safety vest.

BIKE RODEOS

BUILDING A BIKE RODEO – ELEMENTARY SCHOOL OR FAMILY BIKE RODEOS

Getting Organized

In advance: The program coordinator or lead instructor will do a site visit, preview the blacktop and design the course.

Day of the rodeo:

1. Inspect the bicycles (check for air and mechanical issues)
2. Prep the helmets (remove from packaging; organize by size)
3. Get tools ready for seat adjustments and pedal removal

Supplies:

Rodeo Kit (see list of contents in previous section of this manual)

Traffic signs; large cones; crosswalk mat

Bike fleet and helmets (new and loaners)

Bike stand, toolkit and extra pump

Human Resources:

You will need at least four instructors plus the PE teacher for the course. Key positions for observation and feedback are: the start (Power Start), the Crazy 8, the sidewalk exit, the snail race, and the stop box (Quick Stop). Also, scanning and signaling in the straight-away can use an instructor to hold up hands and test the kids. You will also need an instructor for the balance-bike riders. Instructors can move about and try to watch two stations. It is helpful if you can get one or two parent volunteers, each for a half day.

The Skills – The skills that the children will be working on include:

Power Start (proper starting)
Stopping and Quick Stop
Obeying traffic signs/crosswalks (yielding to pedestrians)
Straight-line riding
Weaving (control)
Rock Dodge
Yielding and right-of-way (Crazy 8)
Sidewalks and driveways
Intersections
Riding on the right
RR crossings
Turning

Scanning and signaling
Balance (snail race)
Communication – calling your stop

See Appendix for sample bike rodeo diagram.

TEACHING POINTS

At each section of the rodeo, these are the key points you can address with the students:

1. **The Power Start** – One foot on pedal with pedal position up (at 2:00 if the crank arms were a clock), opposite foot flat on ground, butt off seat, push off strong with both feet, stand up and then sit down. The point of the Power Start is to give you a powerful start when entering an intersection so you can get through quickly. Butt off seat is a more steady waiting position. You can talk to kids about standing over their top tube.
2. **Stopping/Quick Stop** – For most kids, just using their brakes instead of their feet is a huge improvement! You can explain how the hand brakes work: squeeze both equally and gradually; right is the rear brake (“right is rear”).

In the stop box, tell them you want them to do three things when stopping: (1) Call it out in advance (yell “stopping!”), (2) foot down and (3) look LRLB before going.

The Quick Stop is for more advanced riders and those kids who like to skid out. The goal of a quick stop is to *not* skid out while stopping in a defined area. Explain that they should move their butt back (extend their arms), stay low and apply both brakes, all at the same time. And see if they can do it within the stop box.

3. **Straight-line riding** – If a child is having trouble, remind them to look up and ahead. Tell them to use their tummy muscle and that speed helps.
4. **Crazy 8** – This section of the rodeo course is great for learning about yielding when entering a roundabout (the “8” near the entrance has to be clear for the biker to enter) and for practicing right-of-way (first come, first served) at the intersection within the “8.” They can also practice controlled riding as a group: riding tight and together without colliding.
5. **Signaling** – Remind kids that they need to signal before – in advance of – the turn. And have their hands back on the bars before turning.
6. **Sidewalks and driveways** – At the end of a sidewalk or driveway, you need to stop (foot down!), look both ways, and *slowly* enter the street — inch out while looking LRLB.
7. **RR Tracks** – A RR crossing is a good place to learn about crossing cracks or tracks at a perpendicular angle.

8. **Traffic signs** – You can be strict about these. If a student disregards one, ask them to go back and do it again!

BALANCE-BIKE RIDER ZONE

At every bike rodeo, you will want a balance-bike rider (learn-to-ride) zone, blocked off by cones. Have the balance bikes on hand, a pedal wrench and wrenches for removing training wheels, and copies of “Riding without Training Wheels” to give to parents. You will need at least one instructor in the zone to teach the learners. See “Riding Without Training Wheels” for an explanation of the striding method.

Some children become very attached to their training wheels. The first obstacle in teaching these children how to ride will be getting them to agree to take off the training wheels. You can say, “I bet you I can teach you how to ride a bike today. But first we have to take the training wheels off. Should we try it?”

OFF-ROAD SKILLS COURSE

At a Family Bike Rodeo, you might consider setting up an additional course, such as an off-road skills course for the more advanced riders. Components could include: riding through sand and grass, switchbacks, small ramps over logs, and a speed loop where you can time them. For the very energetic riders, this will help them burn off some steam! *Word of caution:* Be sure to check for goatheads in the grassy areas before setting up an off-road course. If goatheads are prevalent, then it is not worth doing because of the flat tires that will ensue.

BUILDING A BIKE-HANDLING SKILLS COURSE – MIDDLE SCHOOL

A middle-school skills course pulls from the elementary bike rodeo but does not involve as many components, since much of their learning can happen on the road. You can set up the Smart Cycling oval (see Appendix for diagram) or a mini course of the following: straight-line riding, start line and stop box, and weave course.

The skills to focus on for this age group are: the Power Start, proper stopping and the Quick Stop, straight-line riding, weaving, scanning, signaling and turning, and the Rock Dodge. The same teaching points mentioned for elementary-aged kids apply to middle school. You will be surprised how many children in this age group still lack basic bike-handling skills, such as riding straight and steady or knowing how to brake effectively.

ADVENTURE PE: HIGH-SCHOOL CURRICULUM

SAFE-CYCLING SKILLS

This curriculum is designed for high-schoolers' complete independence and ability to fully grasp traffic law as newly licensed drivers. The focus is to create skilled cyclists on the road and conscientious drivers who understand the importance of sharing the road with all users. Working with high-school students can be challenging, especially seniors. Some are very attentive and engaged, while others are not. Some in class may be eager to share their opinions of “hating cyclists on the road.” Hopefully our experiences on the road give them a new (cycling) perspective. This, in combination with the Bicycle Friendly Driver Program, should help develop courteous drivers and safe cyclists.

The high-school curriculum comprises at least two sessions: (1) safety and skills and (2) rules of the road which incorporates a long ride; we believe that anyone can enjoy riding a bike, even if they hold a driver's license.

SESSION #1: BIKE SAFETY AND SKILLS

Class time: 90 minutes (30 min. in-class lesson; 60 min. on skills course)

INDOORS

1. Me Check — Discuss the need to check yourself – your shoes (closed-toe shoes required), shoestrings, pant legs, bright-colored clothing, attitude, brain turned on and protect it with a helmet.

- a. How thick is your skull?
- b. Think about what your life would be like if your brain didn't function properly.
- c. Give examples of excuses for not wearing a helmet.
- d. End with a commitment to always choose to wear a helmet – make it cool in high school! Consider it just one more sport that requires a helmet.

Time allotted: 10 min.

2. Helmet Fitting – Demonstrate proper helmet fit using the two-finger rule. Students will then fit themselves with helmets.

Time: 10 min.

3. ABC Quick Check (extended version) - Discuss mechanical check for bikes.

Time allotted: 10 min.

A. Air (tires) — Tires should always be properly inflated. Check the sidewalls for maximum PSI for the tire. Tires that are not properly inflated will be: harder to ride, could ruin the rim or pinch the tube, and make the bike harder to control.

B. Brakes — Always make sure both front and rear brakes are functioning properly. Right hand lever engages rear brake. Demonstrate. Left hand engages front brake. Demonstrate. Discuss problems when using only front brake. This is a serious issue as most kids will tell you they've done it and gone over the handle bars. Use this opportunity to discuss what happens if anything stops the front wheel suddenly (back pack hung on the handlebars, hitting a front wheel against something, etc) Finally, make sure both wheels spin freely and are not rubbing against the brake pads.

C. Chain, Crank, Cassette — Make sure that the chain drive is clean and that the chain is lubricated. If the chain is orange with rust or otherwise in poor working condition, then the bicycle may not operate properly. Make sure the crankset is not loose and that the cassette (gears on back wheel) are clean. Talk about gears and cross-chaining.

Quick. Quick release — Check to see if your bike has any quick releases. They're usually found on the seat post and wheels.

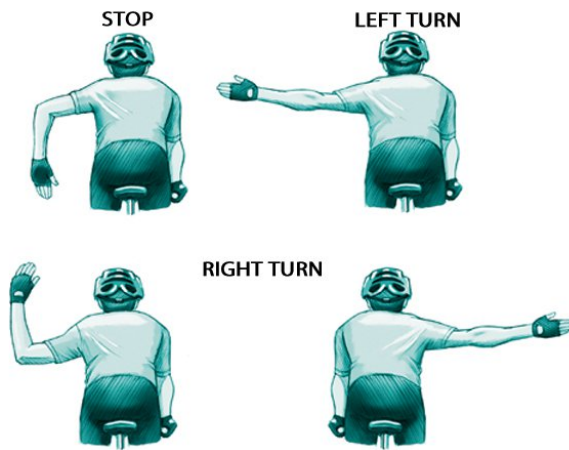
Check. Check all over — Check that the handlebars are tight, bottom bracket and pedals are tight, and nothing is rattling, clicking, rubbing or squeaking when starting to ride bike.

Also: Check saddle height (bike fit) — A general rule is that the saddle should be approximately at mid-hip height. Students should have a bit of space between them and the top tube when straddling the bike.



Note: Do not hang bags, backpacks, locks or anything else from the handlebars!

4. Demonstrate hand signals before going outside (include pictures) — hold hand signals for a minimum of 2 seconds, and then grab handlebars before making your turn.



5. Rules of the Road — Use lane-placement posters to demonstrate what to expect on the road and “Legal or Not” posters to discuss specific car/bike situations on the road. (See “Legal or Not” explanation handout.)

Review rules of the road — Ask students what they know first.

- Cyclists must obey the same rules as cars; obey all signs and signals.
- Ride on the right, with the flow of traffic in the furthest right lane.
- All cyclists are required by law to use hand signals when safe to do so, including stopping.
- Where to ride (bike lane, multi-use trails, sidewalks, taking the lane).
- Right-of-way: “First come, first served.” At 3- or 4-way stop signs.
- Be visible — wear bright-colored clothing and bike in the proper part of the roadway. Be predictable — ride straight and steady, do not weave between parked cars, and be defensive. Be alert, keep eyes and ears open, and never enter an intersection before you check to make sure every vehicle has stopped even if you have the right of way. Communicate with drivers — make eye contact if possible; wave them on if necessary.
- When walking on the road where there is no sidewalk, always walk against the flow of traffic or on the left side facing traffic.
- In Fort Collins, it is legal to ride on the sidewalk. Should you? Probably not, but sometimes it’s the only safe option. Be sure to yield to pedestrians and ride in a slow, controlled speed. Where is it not legal? Old town, CSU campus.
- It is required by law that at least one hand remain on the handlebars at all times, including when signaling.
- Go through “Legal or Not” posters to demonstrate confusing car-bike encounters (see handout explanations).

OUTDOORS

4. Skills Course – Bike-handling Practice (45 to 60 mins.):

COURSE I — Power Start, Snail Race for balance and control; add Quick Stop and Rock Dodge (avoiding road hazards). Set up the course on a flat surface. Create at least five lanes four feet wide and 50 feet long, if possible. (See diagram in Appendix.)

COURSE II — Straight-line Riding (learning to ride straight and steady), controlled stopping, weaving, scanning and signaling; add gear shifting, and outside pedal down when turning. Set up course on flat surface to utilize left turns with straight lane first, then weave on the return and stop at the end. (See diagram.)

Additional Key Points

Assess students' bike-handling skills to prepare for rides on the road. This is where we find out who can go on the road and who can't. If there are students who are not comfortable riding on the skills course, then we probably won't want to take them on the road and we'll have to make arrangements for them to remain on campus to practice riding.

Supplies: Rodeo Kit (cones, chalk, domes, tennis balls); 30 loaner helmets; toolbox, stand and three floor pumps (unless school already has these supplies); table; 12 to 15 loaner bikes; and cable with lock.

Giveaway: ABC Quick Check bookmarks

SESSION #1: BIKE SAFETY AND SKILLS

Class time: 90 minutes (10 min. in class; 80 min. ride)

1. Review Rules of the Road briefly

2. Group Riding Rules:

- Predictability — straight and steady.
- Straight line — not squirrely.
- Single file — no passing.
- Bike length between riders — Why? Time to react. If a front wheel hits a rear wheel, the rider whose front wheel hits is the one who goes down.
- Audible and manual signals — loud, audible communication: stopping, turning.
- Hazard avoidance — call out hazards in the road; point to hazards.
- Both hands on handlebars AT ALL TIMES, unless signaling.
- Scanning — being aware of your surroundings at all times.

- Students will pair up at all intersections and decide together when it's safe to enter and must agree before entering intersection. DO NOT FOLLOW THE PAIR AHEAD OF YOU WITHOUT FIRST ASSESSING WHETHER IT'S SAFE FOR YOU TO GO!

3. Trail Etiquette — expectations on the trail:

- Communication lingo. When someone is approaching you, the call is: “rider up,” “walker up,” etc. Riders should ride straight and steady, over to the right. When passing someone going the same direction, the leader calls out “passing” and all riders communicate by ringing a bell or saying “passing on your left” and pulling out to the left to pass when clear.
- Yellow-line definitions (yellow means two-way traffic, dotted means there is clear visibility and it could be safe to pass, solid yellow means no clear visibility — DO NOT PASS).
- Location on the trail should be middle of right half, not along the right edge.
- When stopping, move as far to the right as is safely possible; when starting again check over left shoulder.
- Controlled speed (less than 12 mph); learn to “feather” brakes on downhills.
- Identify blind corners; take extra care in tunnels.
- Point out signage — mileage, etc.
- Certain times of the year, watch for: goatheads, wet leaves and floodwater on trail.

Have students gather to put on helmets, usually while still in the gym, and line up in riding groups. Groups are divided by eagerness and ability to ride, by discipline issues, or by other concerns which are determined by the PE teacher.

Once in groups, students do the Me Check on themselves. Once the groups gather outside with bikes, have them do the ABC Quick Check on their bikes with support from leaders, teachers and volunteers. Fit them on the properly sized bike with seat height adjusted properly (mid-hip).

Have an instructor go over the expectations for volunteers with them — see handout.

Be sure to have phone numbers for all leaders and the school number and that students needing medication are with the teacher's group.

Reiterate SAFETY and “One Strike Rule” (groups of no more than 10 students with three adults; keep rides within a reasonable pace, no more than 12 to 15 mph).

4. On-road Demonstration — Find a neighborhood where leaders will be able to demonstrate at the minimum: Stop signs (2-, 3- or 4-way), taking the lane to make a left turn, a four-way intersection to demonstrate Copenhagen left turn, traffic light, quiet neighborhood street. If possible, include: roundabout, different bike-lane markings, difficult crossings near school or best place to cross busy roadways.

- Stop Signs: Obey “first-come, first-served” rules and right-of-way at stop signs. Signal, stop, signal again if necessary, check that all vehicles have actually stopped. Make eye contact and communicate with drivers, if possible. Only enter the intersection when all is clear. Be sure to discuss where to stop at

intersections. Demonstrate where to stop at a stop sign (behind it) and that it may be necessary to inch forward to be able to see clearly in both directions to know when it's safe to enter the intersection.

- Left Turns: Discuss lane control ("taking the lane"). Begin first scan about 150 feet from intersection. Scan, signal, scan again, take the lane and pair up. Hold hand signal out at least 2 seconds, and then grab the handlebars with both hands before turning. Once at the intersection, signal again. Be sure there is no oncoming traffic before making the turn. Do not hesitate or dawdle. Single up after the turn.
- Neighborhood Roads: Ride to the right of the center line and at least 5 feet from parked-car "door zone." Stop and identify door zone, parking lanes, blind driveways, bike lanes, traffic lanes, not weaving between parked cars, and to watch for neighborhood hazards such as kids, dogs, balls rolling into the street, blind driveways.
- Copenhagen Left (Alternative Left Turn, Two-stage Turn): Demonstrate taking a left as a pedestrian and/or as a vehicle by crossing each intersection on the right side of the road. See diagram.
- Power Start: Demonstrate when Power Start position is most necessary and what a complete stop looks like — foot down and completely off saddle.
- Roundabouts: Demonstrate two ways to navigate roundabouts, one as a vehicle and one as a pedestrian. As a vehicle — scan, signal, scan, take the lane, pair up and yield to vehicles already in the traffic circle. Quickly enter and exit as a vehicle, and single up after exiting roundabout. As a pedestrian — use the curb cut to move to the sidewalk and follow pedestrian rules before entering back onto roadway after roundabout has been negotiated.
- Enjoy a fun ride!
- Be sure to check the time you leave the school to ensure getting back to school on time. Monitor pace of the ride. Be prepared with short-cut or long-cut options.

Supplies: Ride-leader fanny packs with first-aid kits; safety vests for all adults; cell-phone number exchange; lane-positioning posters; "Legal or Not" posters; helmets and bikes; toolbox and floor pump (unless school has them); route maps (created on MapMyRide).

Giveaways: CDOT Rules of the Road wallet cards, FC bike maps, FC Bikes "Ride Smart, Drive Smart" brochure

Optional Additional Classes

Route finding — Look at FC bike map and discuss with students the various aspects of route finding for safer bike riding. Have students break into small groups and show each other which route(s) they take to school by bike. Ask them where they have ridden (for example, to Old Town or to nearby towns). Also ask them where they would like to ride in the future (for example, Loveland, Windsor, Wellington). Invite students to the front to show a route they have ridden in town. Quiz them on the map aspects: What do the red lines represent? What do the green lines mean? Purple and the green/black dash lines. Are you allowed to bike on roads that are grey?

Basic Bike Mechanics (include flat tire, brake and derailleur adjustments, seat, handlebars)

- Cleaning a bike: moving parts, lube
- Fixing a flat: tire tools, patch kits, pumps

- Other helpful on-the-road tools (multitool, Schrader/Presta adapter, electrical tape, small adjustable wrench, pliers, etc.)
- Seat and handlebar adjustments
- Brake adjustments
- ABC Quick Check review

Bicycle Friendly Driver

This Bicycle Ambassador Program course takes 60 to 90 minutes and gives drivers an overview of how to drive safely in the vicinity of bicyclists (and pedestrians). The course includes a test, certificate and car decal for successful participants. This can be a very valuable addition to any high-school bike-ped safety program to give new drivers a proactive view of safety on our roadways from a bicyclist (and pedestrian) perspective.

Bike Securement

Mention proper locking technique. Possibly give the school spare locks and cables to lend to students who forget locks.

Safety videos or trick rider Danny MacAskill videos.

APPENDIX

DISCIPLINE

Ask the PE teacher to help you with classroom management. This allows you to focus on teaching. You can also ask him/her what the school's method is for getting students to be quiet or pay attention (some schools make the peace sign held over your head, others having a clapping pattern or a special saying).

While talking to the students, you can also ask them how their teacher gets their attention.

A good technique that you can use while talking is to walk toward the child that is not paying attention. S/he will notice you, and you can smile at the student and keep on talking.

Your co-instructors can help as well. While you are talking, they can be helping get the students to pay attention by moving around the room, sitting next to children or touching them on the shoulder.

Also, if you are losing their attention, this could be your cue that it is time for a physical activity.

When outside, you can say, "If you can hear me, tap on your helmet," or "If you can hear me, stand on one leg." Gradually, the kids start to hear you and do what you asked.

HELMETS

When having the conversation about helmets, make sure you have a strong statement with which to leave the students about wearing helmets. As instructors, we should have the last word in this discussion.

For example, if you ask the students, "What are some reasons that you might *not* wear a helmet?," you need to end this conversation with a firm statement about why you want them to *always* wear one. You could respond by saying, "Wearing a helmet is like wearing a seat belt. You are going to wear a seat belt every time you are in a car for your whole life and you might never get into a car accident. At the end of your life, are you going to say, 'Gee, why did I bother to wear a seat belt?' No, you are going to be glad you were prepared to save your life if you got in an accident."

You could ask the whole class to take a pledge that they will wear a helmet. Ask the class to repeat after you, "I pledge to always wear a helmet when bicycling, rollerblading, riding a scooter or skateboarding."

Also, point out (and model) that a serious cyclist like you always wears a helmet. We can model an ease and comfort with wearing a helmet and of how to wear one properly.

Children assume that once they learn how to ride a bicycle that they will not fall off and hit their heads. Unfortunately, adults who don't wear helmets reinforce this opinion! Tell them, "I want you to wear a helmet every time you ride a bicycle even if you think you are never going to fall off and hit your head."

Do some online research to learn more about helmet safety, brain function and brain injury. Start with www.helmets.org for some good materials. Also refer to "Helping Your Child Be a Safe Bicyclist" in the Appendix.

PHYSICAL ACTIVITIES – ELEMENTARY SCHOOL

Because this is a PE class, we want to make sure that the students get to move as much as possible. Physical activity is interspersed throughout the class time in the lesson plans.

Following are some ideas for physical activity. First consult with the PE teacher to learn what s/he normally uses to warm up in the classes. We can modify their activities to make them bike- and ped-related, for example, tag becomes "pedal tag."

Colorado triathlon	Crab walk (instead of walking, as a way to get somewhere)
Pedal tag	Balancing positions (eyes open, eyes closed, yoga airplane)
Relay	Simon says (for K-1, focus on right and left)
Running laps	"Dart out" ball game (K-1)

DEVELOPMENTAL STAGES – ELEMENTARY AGES

Understanding each developmental stage can help you in working with kids and in formulating your argument about helmets.

Kindergartners (5- to 6-year-olds): While children of this age are gaining more control of themselves physically and emotionally, kindergarten is all about practice, mastery of skills, and learning the rules and how to follow directions. They are eager but also easily distracted. In school, they are learning to sit still and follow simple directions.

Helmets: Allowing them to "practice" wearing a helmet will get them excited.

First- and second-graders (7- to 8-year-olds): These students are entering the stage of developmental integration, allowing them to accomplish increasingly complex tasks. They have a better understanding of cause and effect. This age group can be rule-oriented and driven by the need to do things right (very law-abiding).

Helmets: Stating that it is a rule should influence them. Appeal to cause and effect: if you hit your head, you could get a brain injury.

Third-graders (8- to 9-year-olds): This age group begins to focus on their sense of independence and making their own decisions. They are also more focused on what others think, and forming moral opinions of what is right and wrong. They might like becoming a "know-it-all."

Helmets: Stating that it is a rule should influence them. Focus on information that allows them to be experts on helmets and brain injury.

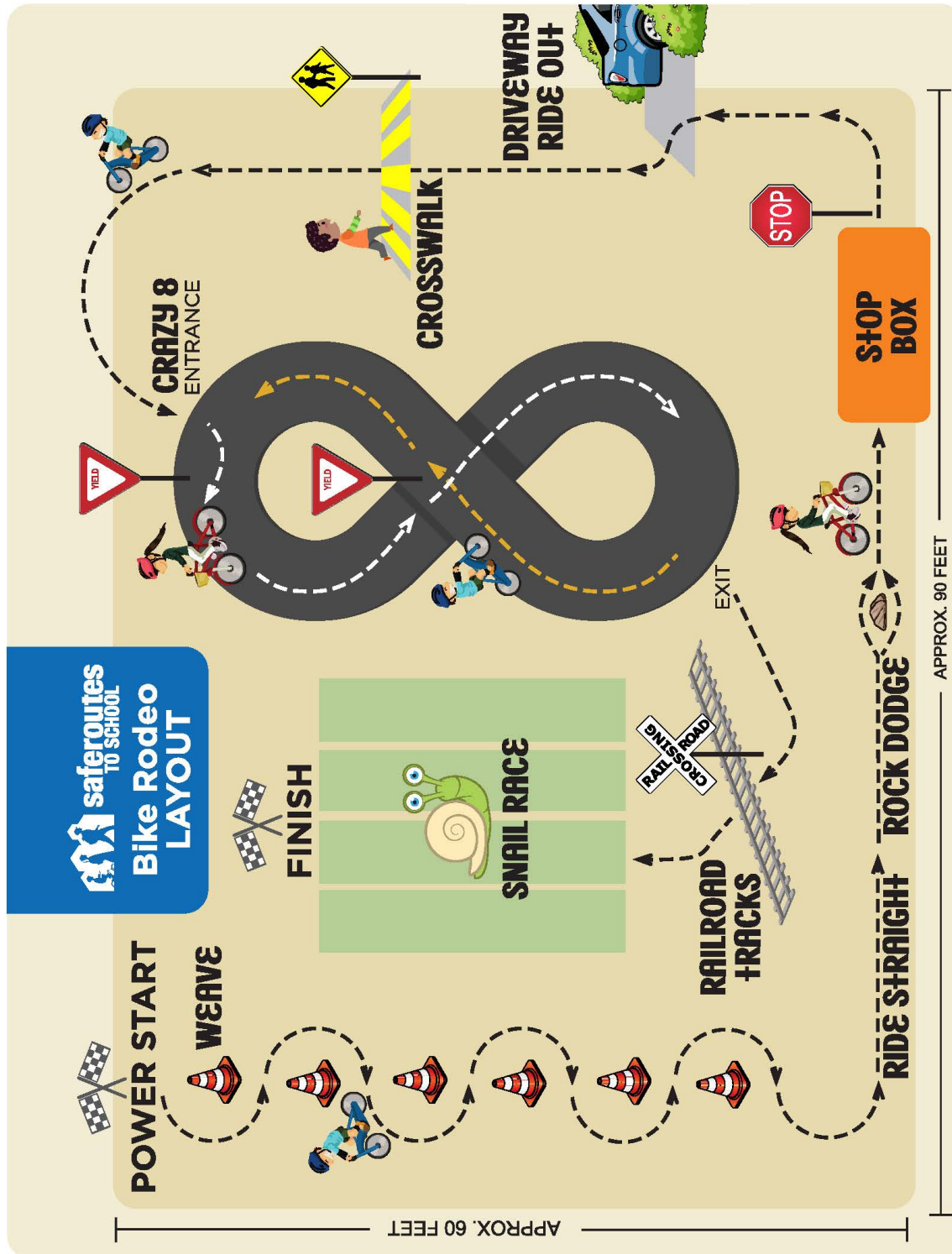
Fourth- and fifth-graders (10- to 11-year-olds): This age group will often be attentive learners and eager to participate. Peer pressure and being accepted are becoming important.

Helmets: With fifth-graders, this is our chance to send them away to middle school with a commitment to wearing a helmet, when it might be perceived as not cool.

You can appeal to their growing sense of reason with a good argument. You can acknowledge that, yes, helmets are a little goofy-looking, but it is a good choice to make for your body.

This age group should be influenced by positive modeling from professional athletes. List the pro athletes that you know of and the sports that they are participating in (football, hockey, skate-boarding, BMX, ski racing, etc.) and note that they all wear helmets. Point out that they do this because they are smart and know that they would not be able to do their sport any more if they got a head injury. The SRTS program has large laminated photos of some of these athletes.

SAMPLE BIKE RODEO COURSE LAYOUT



Middle School Drill Layout

Drill Layout

SET UP:

The Cycling Skills/Adult drills are designed to allow a neophyte cyclist to practice basic bike handling drills in a non-threatening environment.

The layout is 120 x 20 feet. It is this size for a reason and you should be hesitant to change it. Most states require turn signals beginning at 100 feet before a turn. This layout allows riders to visualize that distance and practice scanning, signaling and turning in that distance.

The 20 foot width is designed to give cyclists a chance to practice turning in tight conditions. It makes them comfortable leaning their bike to turn which gives them better control.

RIDER CONTROL:

Have riders line up two by two straddling their bicycles in the "Parking Lot."

Instruct them not to go until they are clear what the exercise looks like and you touch their handlebars.

Instruct them that they are to return to the parking lot each time they complete three repetitions of the exercise.

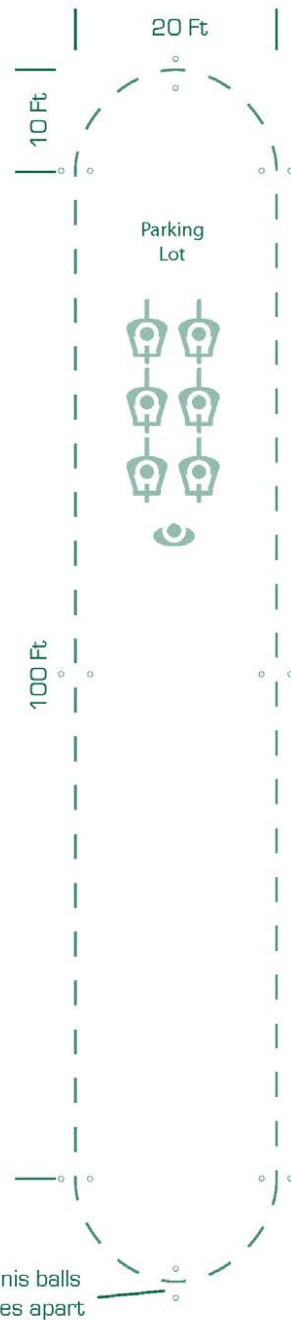
MOUNTING AND DISMOUNTING:

Many riders will be uncomfortable mounting by throwing a leg over the seat. There are numerous other ways to mount and dismount a bicycle, even one with a top bar.

If someone has a problem mounting or dismounting it is always appropriate to suggest a bicycle with a low step through height. Many cruiser, comfort or town bikes have low or non-existent top bars.

The easiest way to mount a standard frame bicycle is to reach across and grab the far handlebar, and with the other hand on the seat, lean the bike towards you. You can either step directly over the top bar or swing your leg in an arc behind the seat.

Dismounting involves a similar movement.



LEARN TO RIDE

The following information provides guidance for teaching a rider how to ride a bike from the ground up. The first part is focused on balance-bike riding, and the second section is an introduction to pedal-bike riding. This is not an exhaustive list of skills needed to ride a bike, but it does provide a stable foundation from which to teach. For more information from Bike Colorado, find an associated handout at the end of this document (available in English and Spanish).

Considerations before starting: Have a skill progression in mind. People will learn at very different paces, and it is important to have a skill ready for riders who are progressing more quickly, or for the ones who are not getting it right away.

Balance-bike riding:

Total Time= 40 minutes

1. Setup:

- a. Get riders on balance bikes, or remove the pedals from their own bikes for familiarity and enthusiasm.
- b. Lower the seats so that their feet are flat on the ground and knees slightly bent.
- c. Make sure helmets are on properly.

2. Introduction:

- a. If bikes have hand brakes, check for understanding of how to use them.
- b. Have students sit on a balance bike and let go of handlebars (hands in the air) so they experience balance.
- c. Put the group in a line and talk about keeping their heads up, looking forward, and find something in the distance to walk toward.

3. Skill Progression:

- a. Begin to walk at a relaxed pace on the balance bike, making sure they stay seated on the saddle.
- b. Depending on the size of the group, and the space available, you can walk backward and have the group of kids follow while focusing on your chest. *Continue to remind them to keep their heads up.*
- c. Increase speed of walking, or introduce “step, step, glide.”
- d. As the riders get more comfortable, challenge them to push five times then pick up their feet.
- e. Once they can coast, have them roll with feet pulled into the midline of the bike. (This gets them used to balancing with feet at the pedals.)

- f. If they are coasting for at least 10 seconds (have them practice counting the seconds while they coast, until they reach 10):
 - i. Have them glide and turn with feet still up.
 - ii. Then glide and use brakes.
- g. If you have a slight hill, have the kids start at the top and use gravity to coast to a spot and make a turn around it. This skill also helps to reinforce the use of brakes to come to a stop after the turn.
- h. If they are getting these skills comfortably, put them on a pedal bike. Have them power start and bring the second foot up to the pedal. You can provide some support on the shoulders to keep them upright.

Note: Continue to remind them about looking up.

Stay at any one of these skills if the rider is not ready to progress onto the next. Be patient and congratulate them on everything they do. This can be a frustrating experience, so positive reinforcement is key.

Key tips if they are struggling:

- 1. If they have a hard time staying seated, suggest they use two feet at a time to push. Introduce this to everyone to increase their speed.
- 2. Have them keep one foot at the middle of the bike and push off one foot.
- 3. Hold something in the air for them to look at if they are not focusing on you. A teddy bear could be used, for example.
- 4. Count out loud for them and really guide them on when to step and when to pick their feet up.

Games:

- 1. Walk backward in front of a rider and tell him or her to try to catch you. The instructor can move while the rider's feet are on the ground, and must stand still when the rider is gliding.
- 2. If there are several kids, you can introduce a race. This can help them focus on something else if they are struggling with the pushing/balance.
- 3. Distance challenge. Push for a specified distance and pick feet up for a certain amount of time. (For example, push for half the length of a basketball court on the playground, and see how far they can roll without putting feet on the ground.)
- 4. Introduce cones for them to weave around; make a short course so they can practice turning. Keep it interesting and reasonably challenging for them.
- 5. Play "Red light, Green Light."

Pedal-bike riding:

1. Setup:

- a. Fit the riders with bikes on which they can comfortably reach the hand brakes (if equipped) and firmly plant their feet on the ground.
- b. At first, the seat can be in a lower setting to facilitate the progression to pedaling.
- c. Get the riders to a space that has enough room for them to ride in a straight line for at least 10 seconds.

2. Introduction:

- a. Review with the rider of the types of brakes that the bike has (coaster, hand, or both).
- b. Two options for getting the rider pedaling are:
 - i. Have the riders push as if they were on balance bikes. When at speed, have them bring their feet to the pedals and start rotating the pedals.
 - ii. Introduce the Power Start. One foot in a high forward position, and the other on the ground. They give one big push, and, once moving they bring the second foot to the pedal.

3. Skill Progression:

- a. Have the rider practice starting and pedaling.
- b. Make sure they can stop themselves with the brakes (not their feet).
- c. Ride in a circle one direction.
- d. After a few laps, change direction.
- e. Incorporate a weave with cones to develop the turning skills and balance.
- f. If the bikes have gears, introduce shifting. Teach upshifting while picking up speed and downshifting before stopping.



Bicycle and Pedestrian Safety Education at PSD Schools

Dear Parents:

Your student's school is participating in a Safe Routes to School (SRTS) program offered by the City of Fort Collins in partnership with Poudre School District (PSD) and Bike Fort Collins. The principal and PE teacher(s) at your school have endorsed this program as part of the regular PE curriculum for physical fitness and as a way to promote safe bicycling and walking by students at your school for lifelong wellness.

The SRTS instructional team for this program includes lead instructors who are certified by the League of American Bicyclists as "League Cycling Instructors" and have completed supplemental training from the City of Fort Collins on how to teach bicycle and pedestrian safety to K-12 students. Assistant instructors have also received special training, and all instructors and volunteers helping with this program are registered with and have passed background checks by the PSD Volunteer Center.

Every aspect of this program focuses on safety, and all students participating in bicycling activities are required to wear a helmet and have their bicycle checked by a professional mechanic for safety. Any students who are unable to bring a bike or helmet to school can borrow bikes and helmets from our program. In addition, any students who do not yet know how to ride a bike will be given special lessons by trained instructors who are experts at teaching students how to ride.

Please note that middle-school students will be taking practice bike rides on multi-use trails and City streets to get firsthand experience with how to bike safely in Fort Collins. On these rides, every precaution is taken to ensure a safe and enjoyable journey. This includes having two to three teachers or SRTS instructors per each group of 10 students and strict adherence to safe-cycling techniques and traffic laws. Students will become more knowledgeable about both rules of the road and proper trail etiquette to help keep them safe and comfortable when traveling by bike throughout our City.

This program is completely free of charge, including the professional bike checks. Several local bike shops assist in checking bikes for safety and proper functioning. Please watch for additional information from the PE teacher on how to do a quick safety check on your student's bike before he or she brings it to school; this will help speed up the checks by mechanics at school.

Thanks so much, and we hope your student enjoys this opportunity to experience Fort Collins in a new way through "active transportation." For more program information, visit fcgov.com/saferoutes.



Notice to Parents Regarding Preparation for Bike Rodeo

Dear Parents:

Your student's school is participating in a Safe Routes to School program offered by the City of Fort Collins. As part of this program, your student will be learning new skills that will enable him or her to walk and bike more safely in your neighborhood and in the vicinity of your school.

Your child will be practicing skills on a "Bike Rodeo" course set up on the school grounds.

If your student *does not* have a bicycle or helmet, then the program will lend him or her a bicycle and a helmet. If your student *does* have a bicycle and helmet, then we encourage you to bring the bike and helmet to school for the Bike Rodeo.

To ensure that your student's bicycle is in safe working condition, please perform an **"ABC Quick Check"** on the bicycle:

- **"A is for Air"** — Check that the bicycle tires are in good condition, with adequate tread and no visible defects. Inflate the tires to the proper pressure as indicated on the sidewalls.
- **"B is for Brakes"** — Check that all brakes on the bicycle work well enough so that your child can come to a complete stop using the brakes.
- **"C is for Chain/Crankset/Cassette"** — Make sure that the chain drive is clean and that the chain is lubricated. If the chain is orange with rust or otherwise in poor working condition, then the bicycle may not operate properly. Make sure the crankset is not loose and that the cassette (gears on back wheel) are clean.
- **"Quick is for Quick Release"** — Make sure that any quick-release levers on the wheels, brakes or saddle of the bicycle are properly engaged and not loose.
- **"Check is for Checking the Whole Bicycle"** — Have your child ride the bicycle to ensure that nothing is loose, rubbing or rattling. If anything does not work correctly, please fix it before your child brings the bicycle to school. If necessary, take the bicycle to a bike shop for repair.

Our Safe Routes to School mechanics also will check your student's bike and make minor adjustments as necessary. If you prefer that we not check/adjust your student's bicycle, please tell the teacher.

Thanks so much, and we hope your student enjoys this Safe Routes to School program (fcgov.com/saferoutes).





Aviso a los padres sobre la preparación para el rodeo de bicicleta («Bike Rodeo»)

Queridos padres:

La escuela de su estudiante está participando en el programa ofrecido por la Ciudad de Fort Collins: «Rutas Seguras a la Escuela.» Como parte de este programa, su estudiante va a aprender nuevas habilidades que le permitirán caminar y andar en bicicleta de forma más segura en su vecindario y cerca de su escuela.

Su hijo/a practicará sus habilidades en un curso llamado «Bike Rodeo», el cual será en la escuela.

Si su estudiante no tiene bicicleta o casco, el programa le prestará una bicicleta y un casco. Si su estudiante tiene una bicicleta y casco, lo animamos a traer su bicicleta y casco a la escuela para el «Bike Rodeo».

Para asegurar que la bicicleta de su estudiante está en buena condición, favor de revisar la bicicleta usando los métodos «ABC Quick Check» (ABC Chequeo Rápido):

- **A is for Air** — «Aire». Verifique que los neumáticos de la bicicleta estén en buena condición, con banda de rodadura adecuada y sin defectos visibles. Infle los neumáticos a la presión adecuada indicada en las paredes laterales.
- **B is for Brakes** — «Frenos». Verifique que todos los frenos de la bicicleta trabajan lo suficientemente bien para que su hijo/a pueda frenar completamente hasta parar usando los frenos.
- **C is for Chain/Crankset/Cassette** — «Cadena, el cigüeñal, piñón». Asegúrese que la cadena de transmisión esté limpia y que la cadena esté lubricada. Si la cadena está anaranjada, óxidada, o en malas condiciones, la bicicleta no puede funcionar correctamente. Asegúrese que el cigüeñal (la estrella central de la bicicleta) no esté suelta y que el piñón (los engranajes en la rueda trasera) estén limpios.
- **Quick is for Quick Release** — Asegúrese que cualquier «palanca de liberación rápida» en las ruedas, en los frenos, o en el sillín/asiento de la bicicleta estén correctamente aseguradas.
- **Check is for Checking the Whole Bicycle** — «Revisar toda la bicicleta». Haga que su hijo/a monte la bicicleta para asegurar que nada esté suelto, rozando, o traqueteando. Si algo no funciona correctamente, favor de arreglarlo antes de que su hijo/a lleve la bicicleta a la escuela. Si es necesario, lleve la bicicleta a una taller para ser reparada.

Nuestros mecánicos de «rutas seguras» también revisarán la bicicleta de su hijo/hija y harán pequeños ajustes según sea necesario. Si usted prefiere que no revisemos/ajustemos la bicicleta de su hijo/a, por favor déjele saber al maestro.

Muchas gracias, y esperamos que su estudiante disfrute este programa de «Rutas Seguras a la Escuela» (fcgov.com/saferoutes).





ABC Quick Check Report

Student name: _____

Please check your bike with your parent:

- If the item looks okay, put a ✓ under “Works great!”
- If something needs adjustment or repair, put a ✓ under “Needs help.”
- Explain what repair is needed under “Explanation.”

[Return completed form to your teacher.](#)

	<i>Works great!</i>	<i>Needs help</i>	<i>Explanation</i>
<i>“A” is for air</i>			
<i>“B” is for brakes</i>			
<i>“C” is for chain/crankset/cassette</i>			
<i>“Q” is for quick release</i>			
<i>“Check” is for checking the whole bike</i>			
<i>Anything else?</i>			

Legal or Not Cheat Sheet

1. Not Legal. Always ride WITH traffic, not against it, even in a designated bike lane or on sidewalks. (yes, it is legal to ride on sidewalks unless it is designated a no riding zone)

66% (in FC and nationwide) of all bike car crashes result from cyclists riding the wrong way/going against the normal flow of traffic even on the sidewalk.

Also...her helmet is not fitted properly and would not protect her forehead in a crash. Make sure your helmet fits right!

2. Legal. You may ride two abreast in a designated bicycle lane. These “sharrows” designate the lane for cyclists as well as motor vehicles. Courtesy would warrant that the cyclists ride single file to allow for motorists to pass, especially if the cyclists are moseying. Sometimes it’s more important to be courteous to generate good will towards cyclists than to be legal and righteous.

3. The cyclists **ARE legal** because they are riding single file and as far to the right as they feel is safe and is practicable. Cyclists determine how far to the right they will ride and still feel safe. It is a very vague definition but it’s all we’ve got.

The trucks are **also legal** crossing the double yellow line in order to pass the cyclists safely. Motor vehicles should allow 3 feet between their vehicle and the cyclist.

4. Legal. You may ride two abreast if you are not impeding the normal flow of traffic. HOWEVER – the perception to motorists can be a negative one. It is just plain courteous to single up if possible and let vehicles pass easily.

5. Legal for the cyclists. They are riding as far to the right as they feel safe & is practicable. You may not see it well in the photo but there is gravel and debris on the roadway and cyclists are not expected to ride through hazards. HOWEVER – the motorist’s perception may be that the cyclists are hogging the road and should ALWAYS use the shoulder. That’s why we are here today – to help everyone learn the proper rules.

NOT Legal for the car. Motor vehicles should allow at least 3 feet between the vehicle and the bicycle (from handle bar to side mirror) to avoid blowing the bicyclist off the road. This is a safety issue first and foremost. Cyclists can be pulled into the slipstream of a truck very easily or the cyclist (or motorist for that matter) may swerve to miss something which could cause a collision.

6. It is **legal** to take the lane in a traffic circle. You may also ride on the sidewalk. The perception of three people riding side by side in a traffic circle may be that the cyclists are being obnoxious but it is actually safer and quicker. Safer because cars won’t even consider trying to pass and quicker because three cyclists riding single file just take longer to get through the circle.