Oregon Safe Routes to School

Jump Start Learn-to-Ride Guide

Last Updated March 2025







Acknowledgments

This curriculum was developed with inspiration from existing guides and curricula, including:

- Minnesota *Walk! Bike! Fun!* Curriculum 2022
- League of American Bicyclists Youth Learn to Ride Manual
- Kinder/1st Learn to Ride Lessons from Eugene School District 4J

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Introduction

The Learn-to-Ride Guide is intended for elementary students starting in kindergarten and can be adapted for riders of all ages. This guide is meant as a precursor and supplement to the Jump Start Curriculum, which focuses on intersection safety for grades 3 through 5.

The Balance Bike Method

This guide will prepare educators to teach students to ride a bike using the balance bike method. In this method, the rider learns to balance and maneuver a bike before pedaling no training wheels! Educators have found the balance bike method to be the most effective approach, resulting in the fastest transition to independent pedaling. According to a 2022 study published in the *British Journal of Developmental Psychology*, "Children who had practised with a balance bicycle started practising at a younger age, had shorter practice duration, and were able to cycle independently at a younger age in comparison to children who had practised with a bicycle with training wheels."¹

Balance bikes (often called "Striders"—also the name of a particular brand of balance bike—or "scoot bikes") have no pedals or drivetrain; instead of pedaling, students push with their feet until they can glide confidently. Cycle Oregon's fleet of 14-inch balance bikes—sized for kindergarteners—are equipped with hand brakes and a foot platform.



Photograph of 14-inch Woom bike with brakes and foot platform.

Teaching students to use hand brakes (as opposed to a coaster brake, where the rider must pedal backwards to stop) from the start allows for an easy transition to riding adult bikes. All bikes in the Cycle Oregon fleet use hand brakes, so students learn foundational skills that can be consistently applied as they grow. Other features that are consistent throughout the Cycle Oregon fleet include pneumatic tires, kickstands, and quick-release seat posts; students will become familiar with using these features as they progress to larger bikes and into adulthood.

Students of all ages who are learning to ride for the first time can begin with the same methods. A bike of any size can become a balance bike by removing the pedals and lowering the seat so that the rider can touch both feet to the ground. Removing the pedals allows riders to focus on balancing without hurting themselves on the pedals. Instructions for removing and replacing pedals can be found in <u>Appendix B</u>. Video instructions can be found in the <u>Oregon Safe Routes YouTube channel</u>.



Students balancing on bikes with pedals removed. Photo by Jennifer Morgan.

Curriculum Overview

The Learn-to-Ride process is divided into eight lessons. Depending on class size, grade level, the length of each class and frequency (ideally twice per week), allow two to four weeks for your Learn-to-Ride unit. Students may need to repeat some lessons until mastery is achieved. While the pacing is slow enough for kindergarteners to feel successful in each lesson, the first two lessons may be combined for an accelerated program. Lesson pacing may need to be adjusted based on the age of your students, group size, and the number of adult volunteers available to help.

For early elementary, the learning goals are about getting comfortable on a bike, balancing, braking, learning basic bike safety practices, and having fun. The first six lessons can be taught on balance bikes or on pedal bikes with the pedals removed. Lessons 7 and 8 focus on progressing to pedaling.

A simple assessment tool is provided in <u>Appendix G</u>: Skills Checklist.

Lesson tips and graphics showing the setup for each drill can be found in the *Learn to Ride Drill Guide*. The drill guide is available digitally and in print. If a projector and screen are available, you may display graphics to the class at the start of each lesson.

Lesson Plans Include:

- Purpose
- Learning Objectives
- Materials List
- Classroom Management Tips
- Accommodations
- Preparation
- Lesson Step-by-Step
- Tips for Fun and Engagement
- Classroom Integration

LE	SSON	LEARNING OBJECTIVES
1.	Helmet Fitting and Personal Safety Check	 Identify the four places (forehead, ears, chin, back of head) to check for proper fit of their helmet Understand how to adjust a bike helmet for proper fit Describe how to check and prepare clothing to safely ride a bike
2.	Simon Says: Mounting, Dismounting, and Using Kickstand	 Identify bike parts and purpose: tires, brakes, seat, and kickstand Practice using a kickstand, walking, mounting, and dismounting a bike Practice using hand brakes
3.	Balance Practice with Rowing and Walking	 Practice balancing, moving forward, handling, and braking Understand that increasing speed makes it easier to balance on a bike
4.	Follow the Leader: Turning and Braking	 Practice turning and braking Explain the difference between braking to stop and braking to slow down Understand the importance of leaving space between riders
5.	Red Light, Green Light: Gliding & Stopping	 Demonstrate mastery of handling, slowing, and stopping Recognize and obey basic traffic signals
6.	Obstacle Course: Integrating All Skills	 Demonstrate mastery of previously practiced skills: balancing, turning, slowing, and stopping Practice stopping and looking for other users at intersections Demonstrate balance mastery by gliding a targeted distance
7.	Gliding to Pedaling	 Learn how the pedals and chain work together to propel the bike forward Transition from rowing/walking to pedaling
8.	Pedaling Challenges	 Apply turning and maneuvering skills to riding with pedals Demonstrate pedaling mastery by riding uphill

State Education Standards

The table below shows the Oregon State learning standards applicable to each lesson.

PHYSICAL E	DUCATION ¹									
STANDARD	DESCRIPTION		APPLICABLE LESSON							
STANDARD	DESCRIPTION	1	2	3	4	5	6	7	8	
1	The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.		х	х	x	х	x	х	х	
2	The physically literate individual applies knowledge of concepts, principles, strategies and tactics related to movement and performance.XX		x	х						
3The physically literate individual demonstrates the knowledge and skills to achieve and maintain a health- enhancing level of physical activity and fitness.XXXX		x	х							
4	The physically literate individual exhibits responsible personal and social behavior that respects self and others.	x	х	х	x	x	х	х	х	
5	The physically literate individual recognizes the value of physical activity for health, enjoyment, challenge, self-expression and/or social interaction.		х	х	x	x	х	х	х	
HEALTH ²										
STANDARD DESCRIPTION		APPLICABLE LESSON					ON			
	DESCRIPTION						.00			
		1	2	3	4	5	6	7	8	
1	Students comprehend functional health knowledge to enhance health.	1 X	2	з Х	4			7	8	
1		1 X X	2		4	5	6	7	8	
	enhance health. Students analyze the influence of family, peers, culture, social media, technology, and other determinants on health		2 		4	5 X	6 X	7 7 X	8 X	
2	enhance health. Students analyze the influence of family, peers, culture, social media, technology, and other determinants on health behaviors. Students demonstrate health literacy by accessing valid and reliable health information, products, and services to	x x		x		5 X X X	6 X X X	7	x	
2	enhance health.Students analyze the influence of family, peers, culture, social media, technology, and other determinants on health behaviors.Students demonstrate health literacy by accessing valid and reliable health information, products, and services to enhance health.Students demonstrate effective interpersonal	x x		x		5 X X X	6 X X X	7 X	x	

¹ SHAPE America. (2013). <u>Grade-level outcomes for K-12 physical education</u>. Reston, VA: Author. Adopted by Oregon Department of Education as part of the Core State Standards for Learning.

² National Consensus for Health Education. (2022). <u>National health education standards: Model guidance for</u> <u>curriculum and instruction (3rd ed.)</u>. Adopted by the Oregon State Department of Education as part of the Core Standards for Learning.

7	Students demonstrate observable health and safety practices.		х	х	х	х	х	х	x	
8	Students advocate for behaviors that support personal, family, peer, school, and community health.					х	х			
SCIENCE ³										
STANDARD	STANDARD DESCRIPTION		APPLICABLE LESSON							
STANDARD			2	3	4	5	6	7	8	
K-PS2-1	Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.		х		х				x	
K-PS2-2	Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.		х		x				x	

Preparation

Location

Learn-to-ride instruction can take place in a gymnasium or outdoors on a smooth surface such as a paved play area, basketball court, bus loop, track, or any area that is free of obstacles. A gentle slope can help students get started and gain the speed necessary to hold their balance.

Tools and Materials Needed

Bike education equipment--including bikes, helmets, tools and instructional materials--is available to Oregon public schools at no cost through Jump Start. Email info@oregonsaferoutes.org to get started.

BIKE TOOLS	OTHER SUPPLIES	OPTIONAL EQUIPMENT
Provided with Jump Start	Provided with Jump Start	Not Provided
 Bicycles Helmets and extra pads Multitool Tire pump All-purpose bike grease tube 	 Painter's or automotive tape Cones Cone-topper stop signs Poly spots Sidewalk chalk 	 Bluetooth speaker Voice amplifier Seat post handle attachment Laptop, projector, and screen Floor tape for marking lines in gym

³ National Consensus for Health Education. (2022). <u>National health education standards: Model guidance for</u> <u>curriculum and instruction (3rd ed.)</u>. Adopted by the Oregon State Department of Education as part of the Core Standards for Learning.

•	Pedal wrench or 15 m m	٠	Graphics for drills, helmet
	wrench		fitting, and safety check
			(available in the Drill Guide)

Managing Equipment

Teaching students to ride requires managing dozens of bikes and possibly hundreds of helmets. Consider storage space, instructional space, and how many volunteers are available when setting up your program. If using a variety of bike sizes, line them up small to large, and ask students to remember what size (or number) bike they are riding.

If classes are held outside, be sure to secure bikes between classes using a cable lock, or have students roll them into a secure area. Instructors are encouraged to bring their own bike and helmet for the unit, as students will benefit from watching physical demonstrations.

Once helmets have been fitted properly (Lesson 1), keep them grouped by class. To simplify helmet redistribution each day, group students into "teams" of 10, and keep each team's helmets bagged together.

Gather Volunteers

Enlisting adult volunteers for your Learn-to-Ride unit is essential for success. Early elementary requires more adults on hand, as small children will likely need one-on-one help for helmet fitting and adjusting their seat height. Consider dividing students into smaller groups based on ability.

Set expectations for your volunteers, and if possible, share goals and lessons in advance. Remind volunteers that these strategies may differ from how they learned to ride a bike, and to leave room for students to progress at their own pace without unnecessary interference.

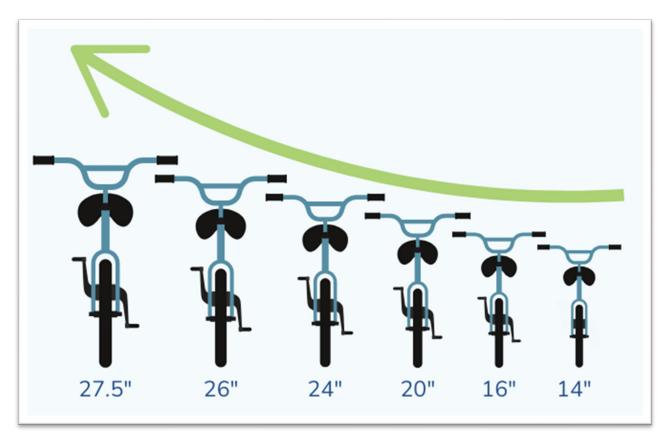
GUIDELINES FOR ADULT VOLUNTEERS							
Do:	Don't:						
 Encourage all students to keep going with praise, stickers, etc. Celebrate each success, however small ("You buckled your helmet all by yourself today!"). Assist with setup and managing equipment (sorting and labeling helmets, airing tires, etc.). Assist on the course with traffic flow. 	 Hold handlebars or any part of the bike. This prevents the student from learning to balance independently. Touch students without consent. Use tips or strategies that deviate from what is being taught. Students will benefit from consistent language, 						

• Use consistent language to remind riders to keep eyes up and use the skills being taught.

repeated practice, and researchbased instruction.

Bike Sizing and Fit

Kids' bike sizes are commonly described by their wheel size. So, a "20-inch bike" has wheels that are 20 inches in diameter.



Full range of bikes in Cycle Oregon fleet with wheel sizes noted: 14, 16, 20, 24, 26, 27.5.

Cycle Oregon offers a range of bicycle sizes for students of all ages. The balance bikes are 14 inches and fit children who are 37 to 43 inches tall—typically kindergarteners and first graders. Larger bikes with the pedals removed can be included in the fleet for taller students who are learning to ride. If you're working with a variety of bike sizes, you may need to budget more time at the start of the unit to fit bikes to individual students. Students in grade 2 and up should learn to adjust seat height and operate a quick release lever on their own. Student-centered bike sizing is covered in Lesson 3 of the Jump Start Curriculum. For young children learning to ride for the first time, it's best to have adult help to adjust seat height.

See <u>Appendix A</u> for more details on bike fitting and safe seat heights.

Inclusivity

Plan your Learn-to-Ride unit with inclusivity and equitable support for all students. Sending out a notice to families before you begin teaching can help address specific needs and plan for modifications in advance. See <u>Appendix C</u> for a sample letter.

Before beginning the Learn-to-Ride unit, reference any Individual Education Plans (IEPs) on record for your students. Include the student, their parent/guardians and paraeducators in preparing to ride, and ask what support or additional preparation they may need. See the Jump Start Adaptive Guide* for a more comprehensive and detailed approach to including students with disabilities.

Consider the various religious or cultural dress and hairstyles that may be represented among your students, and prepare for how they may be accommodated. Ideas for modifications are included in each lesson.

Lessons

Lesson 1: Helmet Fitting and Personal Safety Check

	o a personal safety check.		
Learning Objectives: Materials:			
 Students will: Identify the four places (forehead, ears, chin, back of head) to check for proper fit of their helmet Understand how to adjust a bike helmet for proper fit Describe how to check and prepare clothing to safely ride a bike 	 Painter's tape or automotive tape, Sharpies (or printed name labels) Helmets for all (plus 5 to 10 extra), provided with fleet Helmet fitting graphic (Appendix D) Personal safety check graphic (Appendix E) Optional: rubber bands, clips Optional: surgical caps, painter's caps, or other barriers Optional: extra helmet pads Optional: laptop and projector 		
Classroom Management Tips:			
will likely need individual help Plan an activity to occupy students b	d fitting helmets. Kindergarteners and first graders fastening and unfastening buckles. efore and after their helmet has been fitted. An adult e instructor works with small groups of students to		
adjusting to new experiences, weeks in advance. They can p	ents, or anyone with extra sensitivities or difficulty offer to send home a helmet with the student a few ractice wearing their helmet and slowly work up to ne lesson. Sharing images and videos of the bikes		

Preparation:

- Display helmet fitting graphic and personal safety check graphic as a printed poster, or on a projector.
- Make sure helmets are organized by size in advance.
- For grades K–2, get class lists and prepare name tags on painter's tape in advance. Older students may write their own names.
- If possible, teachers and adult helpers can bring their own helmets to demonstrate fitting. Set a good example by wearing your helmet whenever demonstrating on a bike.

Intro:

- 1. Ask students if they know what we should do to prepare to ride a bicycle. *Wear a helmet!* What does a helmet do for us? *It protects our brains!* For grades 3 and up, you can share that wearing a helmet is the law in Oregon for kids under age 16.
- 2. Stress the importance of handling helmets carefully; throwing or dropping can damage the helmet, so it won't protect heads anymore.
- 3. Demonstrate fitting the helmet, and show the four places to check fit:
 - Forehead: Helmet should be two finger widths from eyebrows to helmet.
 - Ears: Straps should make a Y right beneath earlobes.
 - **Chin**: When buckled, one finger width should fit between chin and strap. Demonstrate fastening the buckle and pulling the strap end to tighten.
 - **Back of head**: Turn the dial to tighten or loosen fit. Wiggle your head (you can make it a fun dance)—the helmet should stay in place if properly adjusted.
- 4. Demonstrate a personal safety check, and have students check themselves at each prompt:
 - **Shoes:** Comfortable gym shoes; make sure shoes are tied.
 - **Clothing**: Should be comfortable and easy to move in, but we don't want anything too loose that could get caught in the wheels.

Main Activity:

- 5. Ask students to repeat the four places to check for helmet fit.
- 6. Line students up by height and distribute helmets accordingly. Have the students check helmets for cracks on the inside of the helmet. Remind them to never drop, kick, or throw their helmet.
- 7. Have students put on their helmets and adjust in four places.
- 8. Have students partner up to check another student's helmet fit. (For kindergartners, you may want to skip this step and have an adult check fit for each student). Remind students (and adults!) to ask for consent before touching others or their helmets.
- 9. When the helmet fits properly, place a piece of painter's tape on the helmet with the student's name. They will use the same helmet over the course of the program.
- 10. For kindergarteners and first graders, adults will need to assist with identifying and adjusting clothing hazards. Second graders and up can do this themselves.

Closing:

- 11. Review the four fit points as a group, and remind students that we will check helmet fit each day before riding bikes.
- 12. Ask individual students to share what steps they took to get ready to ride (tucked in shoelaces, etc.).

Tips for Fun and Engagement: If time remains, have a dance party or play a game that involves movement while students are wearing their helmets. This helps students get comfortable wearing them, and allows adults to see if they need to be adjusted further after some movement.

A Note on Head Lice: Surgical caps can be used as a protective barrier against the spread of head lice, but are not necessary if there are enough helmets for all students. Per the Centers for Disease Control and Prevention, the spread of lice through inanimate objects is rare.

Classroom Integration – Health, Safety, and First Aid: Helmet fitting could be done in a classroom and with further exploration of how helmets keep us safe.

Lesson 2: Simon Says—Mounting, Dismounting, and Using Kickstand

Purpose: Lesson 2 introduces students to basic bike vocabulary and allows them to get familiar with their bike. They will practice walking, parking, mounting, and dismounting a bike.

Learning Objectives:	Materials:
Students will:	Bikes and helmets for all students
 Identify bike parts and purpose: 	Helmet fitting graphic
tires, brakes, seat, and kickstand	Instructor tool kit
 Practice using a kickstand, walking, 	Optional: graphic with bike
mounting, and dismounting a bike	vocabulary, printed or shared on
 Practice using hand brakes 	projector (<u>Appendix F</u>)
	Optional: laptop and projector

Classroom Management Tips:

- For K–2 students, enlist adult help for distributing helmets and bikes and for adjusting seat height. Small children will need individualized help to open and close quick-release levers. If sharing bikes across classes, seats will likely need to be adjusted at the start of each lesson.
- Adults should ensure the seat post is not extended beyond the minimum insertion line. See "Bike Fit and Seat Adjustment" in <u>Appendix A</u>.
- For grades 3 and up, teach students to adjust their own seat height. Studentcentered bike sizing is covered in Lesson 3 of the Jump Start Curriculum.
- Set expectations for what students should be doing with their bodies (sitting on gym floor, hands folded, etc.) while listening to instructions. Give instructions *before* distributing bikes or helmets.
- Remove pedals from all bikes before beginning the lesson (this step is not necessary if using only balance bikes).

Accommodations:

- When giving verbal directions for Simon Says, keep a bike near you and act out the prompts to provide a visual for students.
- If using adaptive bikes, plan ahead for what "parking" the bike may look like. If a student is unable to mount/dismount the bike independently, be sure to have an alternative way for the student to demonstrate these skills. This may be engaging a parking brake or otherwise performing a "ready to listen" posture. Plan ahead for students who will need an adult to help them in/out of an adaptive bike.
- Some neurodivergent students may benefit from extra time to explore the bike's features. Arrange time outside of class for students to squeeze tires and levers, spin wheels, and get comfortable with trying a bike for the first time.

Preparation:

- Have labeled helmets organized by group or size, ready to redistribute.
- Display Bike Vocabulary graphic on a printed poster or with a projector.

Intro:

- 1. Review helmet fit and personal safety check. Distribute helmets and have students perform personal safety checks with a partner.
- 2. Demonstrate mounting the bike:
 - Stand with the bike to your **right** side (may need to review left/right). This is important because the kickstand is on this side of the bike. Hold the handlebars with both hands.
 - Point out the **kickstand**. *The kickstand is how we "park" the bike; it keeps the bike from falling over when we're not using it.* Use your foot (no hands!) to push the kickstand up and toward the back of the bike (ready to ride). Demonstrate using your foot to push the kickstand back down to park the bike.
 - With the kickstand up, step over the bike and sit on the seat. Leaning the bike toward your body a little can make it easier to step over. Then demonstrate dismounting and ask, *how do I get the bike to stand up when I'm not riding it?* Demonstrate walking the bike a few steps and parking it with the kickstand.

Main Activity:

- 3. Distribute bikes. Assist students with adjusting their seat height.
- 4. Go through bike parking and mount/dismount practice with students, having them walk their bikes a short distance in between. Point out key bike vocabulary and have students touch each part of their bike: *tire, kickstand, brakes, seat*. Have students practice squeezing the brakes while rolling the bike, and notice how the bike slows.
- 5. Once students have practiced walking the bike, mounting/dismounting, and parking with the kickstand, check for comprehension by playing Simon Says. Students must follow the commands preceded with, "Simon Says..." If a command is given without "Simon Says," students should remain still.
- 6. Sample commands for Simon Says: squeeze your brakes, raise your right hand, walk your bike three steps forward, park your bike, sit on your seat.

Notes: "Park your bikes!" can be a great way to stop activity and ready students for instruction. When students hear this phrase, they dismount, kickstand, and sit or stand next to their bike demonstrating they are ready to listen.

Tips for Fun and Engagement: To incorporate more movement in this lesson, add some non-bike commands: *do five jumping jacks, dance in place, touch your toes, run in a circle around your bike,* etc. Simon Says can be repeated at the start of each lesson to review bike vocabulary and skills.

Lesson 3: Balance Practice with Rowing and Walking

Purpose: The purpose of Lesson 3 i	s to begin balancing and handling on the bike while
practicing all the beginner safety sk	
 Learning Objectives: Students will: Practice balancing, moving fead handling, and braking on the Understand that increasing smakes it easier to balance or 	 ir bikes Instructor tool kit Cones or sidewalk chalk for marking course
Classroom Management Tips:	Optional poly spots
• For K–2 students, enlist adult adjusting seat height.	t help for distributing helmets and bikes and for
Accommodations:	
 space in a lane for the bike to pedaling is required, use ped	with visuals. space to move and turn. Be sure to leave enough o maneuver. If using a trike or other equipment where daling rather than rowing or walking. Is lesson with reminders to students to practice nother. Students will come with different levels of ed may look different for each student, but we're all full students. Any student who opts out of bicycle se, act as course monitors, and help set up or move
 ready to redistribute. Set up a rectangular course i Course length should be at le start, stop, and edges of the 	e. Have labeled helmets organized by group or size, in an area large enough to accommodate the group. east 20 yards from start to stop. Use cones to mark course. Use tape or chalk to mark lanes if desired— n riders. If practicing outside, an area with a gentle s to start gliding more easily.
Intro:	
1. Review helmet fitting and vocab	d have students perform helmet checks and personal
	wing and maying forward on the billor

4. Demonstrate methods for balancing and moving forward on the bike:

- Push kickstand up, step over the bike, and sit on the seat with both hands on the handlebars and both feet on the ground.
- **Rowing**: Push off with both feet at once. This can be called *rowing* for older students, or *bunny/kangaroo hopping* to engage early elementary students. For older students, rowing a boat (using both arms/oars at the same time) may be a helpful analogy.
- Walking: Push off with one foot at a time—*turtle walking* for younger kids.
- Students may use either method, whichever feels more natural to them. In either method, encourage students to take their feet completely off the ground—no shuffling! Notice that when you're going faster, it is easier to keep your balance.
- Remember to keep eyes up and hands on the handlebars, ready to brake.

Main Activity:

- 5. Space students along starting line. Depending on the size of the group and the space available, students may be grouped in waves at the start. Have students row or walk down the lane to a finish line, then return to the start.
- 6. After a few rotations, add some variety to how students move down the lanes:
 - Take little baby mouse steps
 - Take big, long giant steps
 - Take slow steps like a turtle
 - See how far you can roll without touching feet to the ground
 - Fly like an eagle (both legs outstretched, off the ground)
- 7. For an "eyes up" challenge, the instructor can hold up numbers (fingers) or colors (poly spots) while students travel toward them. Riders will call out the number or color displayed. This will encourage riders to look forward while rowing/walking.

Tips for Fun and Engagement: Movement and lots of practice are key at this stage, but slow starts and falls can be common and frustrating for students. Build in breaks and lots of encouragement with stickers, high-fives, and a "shake it off" dance to help students reset after a fall.

Lesson 4: Follow the Leader—Turning and Braking

Purpose: Lesson 4 builds on the skills in Lesson 3, introducing turning and a greater focus on braking. Once students have practiced Follow the Leader, the game can be repeated at the start of each class as a warm-up activity.

the start of each class as a warm-up activity	ty.		
Learning Objectives:	Materials:		
 Students will: Practice balancing, moving forward, turning, and braking their bikes Explain the difference between braking to stop and braking to stop and braking to slow down Understand the importance of leaving a "ghost rider" space between riders 	 Bikes and helmets for all students Helmet fitting graphic Instructor tool kit Cones or sidewalk chalk for marking course Optional: signs with arrows to indicate turn direction Optional: laptop/projector for sharing drill graphic and ghost rider spacing graphic (Appendix H) 		
Classroom Management Tips:	βιαριιο (<u>Φροιαίχτι</u>)		
 For K-2 students, enlist adult help for distributing helmets and bikes and for adjusting seat height. At this stage, it may be clear which students have prior experience riding and which do not. If possible, split students into ability groups and focus each group on the skills that most need to be practiced. 			
Accommodations:			
 Support verbal instructions with visuals. Helpers should be positioned at turns along the course, and use signage or their arms to point and verbally direct students. Showing the drill animation or graphic in advance can help students with comprehension, and alleviate the anxiety of trying a new activity. Riders who have difficulty keeping their eyes forward (not on their feet) may benefit from visual incentives. Adult helpers along the course can direct and encourage riders with sparkly pompoms, a preferred toy, or a graphic of a character they love. Music is a fun addition to this lesson, but can be overstimulating for some students. A bell tone or verbal command may be preferred to get students to switch directions. 			
Preparation:			
	e labeled helmets organized by group or size,		

• Setup an oval/circular course in an area large enough to accommodate the group—a bus loop or track work well. Use cones to mark start/stop and turns in the course. Make sure there's room along the course for students to move out of the flow to take breaks.

• Optional: If showing drill video, have laptop or projector equipment ready.

Intro:

- 1. Review rowing and walking methods from Lesson 3.
- 2. Distribute helmets and bikes and have students perform helmet checks and personal safety checks with a partner. Have students park their bikes for instruction.
- 3. Review braking; ask students if there is a difference when you squeeze the levers fast, slow, soft, or hard. At this point, they will likely have experienced that when you squeeze hard, you stop very quickly.
 - Use BOTH brake levers at the same time. Squeeze gently to slow down, squeeze harder to stop quickly, and put your feet down to catch yourself.
 - Demonstrate squeezing the brake levers gently, just halfway. Braking this way slows you down a little without completely stopping. Ask students to practice what slow-down braking looks like while their bikes remain parked.
 - You need to slow down a little bit to get ready to turn on your bike.
- 4. Demonstrate turning on the bike:
 - Row or walk to get rolling. When you get close to the turn, slow down by braking gently.
 - Look where you *want* to go.
 - Lean your body and turn the handlebars just a little bit.
 - Keep your eyes up and watch where you are going.

Main Activity:

- 5. Show the Follow the Leader drill graphic and ghost rider spacing graphic on a projector, if possible. You may also demonstrate with volunteer students.
- 6. Line up students at a starting line for a circular course. Choose a leader—could be an instructor or a confident student.
- 7. Ghost rider spacing: *Imagine there's an invisible person between you and the next rider*. This will allow enough room to stop without crashing into others. Line up a few volunteer students to demonstrate what ghost rider spacing looks like or share the graphic on a screen.
- 8. Have the leader start the line, with waves of students following. Continue the loop, using music or signals to indicate when to stop. Alternate who gets to be the leader.

Tips for Fun and Engagement: For an extra challenge, have riders occasionally change directions so that they practice turning both left and right. Play music while students are riding; when the music stops, everyone stops and changes directions. You can also mix in Simon Says at stops for extra practice with braking, walking, parking, etc.

Lesson 5: Red Light, Green Light

Purpo	se: Lesson 5 builds on balancing	and braking skills, while encouraging students to					
-	ase speed and control. Basic traffic						
	ing Objectives: nts will: Practice balancing, moving forward, handling, and braking on their bikes Demonstrate mastery of braking skills (stopping vs. slowing) Recognize and obey basic traffic signals	 Materials: Bikes and helmets for all students Helmet fitting graphic Instructor tool kit Cones or sidewalk chalk for marking course Signage or colored paper or poly spots (red, green, optional yellow) Cone-topper stop signs Optional: traffic light graphic (Appendix I) 					
Class •	room Management Tips: For K–2 students, enlist adult hel adjusting seat height.	p for distributing helmets and bikes and for					
Accor	nmodations: Support verbal instructions with	visuals and demonstrations.					
Prepa	iration:						
•	Arrange bikes by size, in a line. Have labeled helmets organized by group or size, ready to redistribute. Setup a rectangular course in an area large enough to accommodate the group. Use cones to mark start, stop, and edges of the course. Use tape or chalk to mark lanes if desired. Set up stop signs on cones at the start and finish lines. This will introduce students to looking for signage and obeying traffic signs.						
Intro:							
1.	personal safety checks with a partner. Have students park their bikes for instruction.						
2.	Review braking and turning methods from Lesson 6. Ask students how braking to stop is different from braking to slow down.						
Main	Activity:						
	Line up at the starting line for Rec the finish line facing students. Sh it means when you see the red or	d Light, Green Light. The instructor should stand at now students the traffic light graphic and ask what green light. Optional: <i>What about yellow?</i> (Slow ling on the size of the group, you may need to split					

- 4. Explain that riders must stop for a red light, go for a green light, and slow down for a yellow light (a red light should always follow a yellow light). We also want to stop at all stop signs, and wait our turn at the starting line. Instructor holds up the sign or colored poly spot as well as calling out the command. The winner is the first one to the finish line. Riders return to the start and repeat.
- 5. As rider speed and handling improve, allow more time for "green light" intervals. The goal is for students to begin gliding for longer periods while maintaining control.

Tips for Fun and Engagement:

- If riders are struggling to stop immediately for a red light, use the "yellow light" command beforehand to encourage slow-braking.
- Spice up your green light intervals by calling out "hot lava!" This means the floor is lava, and students have to keep their feet off the ground (by gliding) until instructor calls "safe."

Lesson 6: Obstacle Course—Integrating All Skills

Purpose: Lesson 6 integrates all previously practiced skills and introduces intersection navigation. If using only balance bikes, this is the final lesson; subsequent lessons focus on transitioning to pedaling. Students are ready for pedals when they are able to glide at least 30 feet without touching their feet to the ground.

Learning Objectives:	Materials:						
 Students will: Demonstrate mastery of previously practiced skills: balancing, turning, slowing, and stopping on a bike Practice stopping and looking for other users at intersections Demonstrate balance mastery by gliding a distance of 20 to 30 feet without touching feet to the ground 	 Bikes and helmets for all students Helmet fitting graphic Instructor tool kit Cones, poly spots, and sidewalk chalk for marking course Cone-topper stop signs Optional: laptop/projector or white board for showing course map Optional: stickers or other incentives for reaching gliding goals 						
Classroom Management Tips:							

- For K–2 students, enlist adult help for distributing helmets and bikes and for adjusting seat height.
- Adult helpers can serve as monitors throughout the course, especially at intersections.

Accommodations:

- Support verbal instructions with visuals and demonstrations.
- Be sure there's enough room for adaptive bikes to maneuver on the course.
- Students who opt out of riding can help set up the cones, act as course monitors, or be "pedestrians" near the stop signs.

Preparation:

- Arrange bikes by size, in a line. Have labeled helmets organized by group or size, ready to redistribute.
- Set up a riding course using cones, poly spots, and chalk line to follow. Layout may vary, but be sure to include at least one stop sign, several turns, and a long straight stretch (20 to 30 feet) where riders can practice gliding. The course should be a continuous loop, and can be set up on a playground around real-life obstacles. See the Learn-to-Ride Drill Guide for sample course setup. You may also draw a diagram of your course to show to students before they begin riding.

Intro:

1. Distribute helmets and bikes and have students perform helmet checks and personal safety checks with a partner. Then have students park their bikes for instruction.

- 2. Review braking and turning methods from Lessons 4 and 5. Ask students what you do to get ready to turn (slow down, look where you want to go). Review stop signs.
- 3. Show the map or graphic of the course if desired.
- 4. Demonstrate following the course using all previously practiced skills—mounting the bike and rowing/walking/gliding along the course with eyes up and hands on brakes.
 - **Gliding Challenge**: The long, straight stretch is the Gliding Challenge. On this part of the course, students should try to glide as far as they can without touching their feet to the ground. Demonstrate "soaring like an eagle" with legs outstretched on this section. Or color the sidewalk red and call this the "hot lava" area.
- 5. Demonstrate intersection procedure:
 - When you see a stop sign, slow down, and brake to stop at the sign. Put your feet down to stop completely.
 - Look left, look right, look left again for other riders coming through the intersection. If someone is already coming through the intersection, wait for them to pass. Have students repeat and move their heads: *look left, right, left*.
- 6. Continue through the course with reminders on slowing before a turn, maneuvering around cones and obstacles, stopping and looking at stop signs, and maintaining ghost rider spacing. Demonstrate looping back to the start.
 - Optional: show a diagram of the course and point out turns, stops, and the Gliding Challenge.

Main Activity:

- 7. Line up students at the start and allow one or more students (depending on size of the group and width of the course) to begin. You can also create multiple starting points throughout the course and split the class into groups. Remind students to maintain ghost rider spacing.
- 8. Students continue flowing through the course.

Tips for Fun and Engagement:

- Mark the end of the Gliding Challenge with special cones, flags, balloons, etc. to encourage reaching the goal of gliding 30 feet. If more gliding practice is needed, mark 5- or 10-foot increments. Celebrate and reward reaching each mark, and challenge students to strive for the next mark.
- Rearrange the course and repeat for multiple class days. As rider skills improve, you can enlarge the course or add complexity with more intersections, or add sections where riders must dismount and walk their bikes.

Notes: Intersections can be a little chaotic, but it's important to introduce young students to the ideas of intersection safety, obeying traffic signs, and awareness of other users in the "roadway." Intersection safety is explored more deeply in the <u>Jump Start Curriculum</u>.

Classroom Integration – Social Sciences: After riding the obstacle course, give students the opportunity to design their own bike course. Paper map-style drawings can integrate with mapping units.

Lesson 7: Gliding to Pedaling

Purpose: Lesson 7 introduces pedaling to riders who have mastered balancing, braking maneuvering, and gliding a distance of 30 feet or more.

Note: This lesson centers on bikes with a free hub and hand brakes (this includes all Cycle Oregon fleet bikes).

Learning Objectives:	Materials:					
Students will:	 Bikes and helmets for all students 					
Learn how the pedals and	Helmet fitting graphic					
chain work together to propel	Instructor tool kit					
the bike forward	• Cones, poly spots, and sidewalk chalk for					
Transition from rowing/walking	marking course					
to pedaling	Optional seat post handle attachment					
Classica em Managamant Tingi						

Classroom Management Tips:

- Installing pedals can be time consuming; enlist volunteers or budget time before class to install pedals on bikes.
- In transitioning from balancing, students will need to raise their seats slightly (about 0.5 to 1 inch) to make pedaling more comfortable. Budget extra time and adult help at the start of class for students to find a new comfortable seat height.

Accommodations:

- Support verbal instructions with visuals and demonstrations.
- Budget time and extra adult help to assist riders with getting in and out of adaptive bikes.
- Pedals (and drive train) present a new set of curious mechanisms for neurodivergent students. Arrange time (possibly outside of class) for students to spin the cranks and pedals and adjust to changes that may make the bike feel different than in previous lessons.
- Riders who have difficulty keeping their eyes forward (not on their feet) may benefit from visual incentives. Adult helpers along the course can direct and encourage riders with sparkly pompoms, a preferred toy, or a graphic of a character they love.
- For students who need extra help with balance, consider attaching a handle to the seat post and assigning a spotter.

Preparation:

- Arrange bikes by size, in a line. Have labeled helmets organized by group or size, ready to redistribute.
- Set up a course with a start and finish line, as in Lessons 3 and 5. If practicing outside, a slight downhill will help students get started in pedaling.

Intro:

- 1. Distribute helmets and bikes and have students perform helmet checks and personal safety checks with a partner.
- 2. Have students raise their seat height; it should be one to two finger widths taller than the balancing position. When sitting on the seat, they will need to rest on their toes to touch the ground. Have students park their bikes for instruction.
- 3. Getting to know the drive train:
 - Point out the addition of pedals on the bike.
 - Demonstrate lifting the seat a little so the rear tire is off the ground (keep the kickstand down). Ask a student volunteer to rotate the pedal backwards, and note that the wheel does not spin. Continue rotating to demonstrate the kickstand getting in the way of pedaling. Push kickstand up and have the student rotate the pedal forward to show the action of the pedals, chain, and rear wheel. Instruct students not to touch the chain, as it's greasy and dirty.
 - Review and emphasize the need for the steps in the Personal Safety Check so that shoelaces and pant legs don't get caught in these moving parts.
 - In partners, have students take turns lifting the bike while the other spins the crank forward and backward. Ask students what they learned about pedaling:
 - The bike won't power forward if you spin the pedals backward.
 - The kickstand has to be up when pedaling.
 - Then have students park their bikes for instruction.
- 4. Demonstrate rowing/walking to pedaling:
 - Make sure the kickstand is up. Mount the bike and hold the handlebars with both hands.
 - Get started by walking/rowing, as before. Keep your legs out and be aware of the pedals, but keep eyes up. When you're gliding, try to get your feet on the pedals without looking at your feet. Continue pedaling!

Main Activity:

- 5. Line up students at the starting line, ideally facing a slight downhill. Have them row/walk to get started, then practice getting the feet on the pedals at the same time to continue spinning.
- 6. Pedal toward the finish line. Remind students to keep their eyes up and their hands ready to brake.
- 7. Return to the starting line and repeat for more practice.
- 8. Optional bonus game: Musical Spots. Use chalk (blacktop) or painter's tape (gym) to mark 6-foot circles or squares throughout the practice area. Students practice riding in whichever direction they choose as music plays. When the music stops, students must rush to land on a spot.

Tips for Fun and Engagement: Depending on how quickly the group adjusts to pedaling, you can play games practiced in earlier lessons (Red Light/Green Light, Follow the Leader, Hot Lava).

Classroom Integration – Science: Pedals, chain, gears, and a rider moving a bicycle forward are all great demonstrations of mechanics and push and pull forces.

Lesson 8: Pedaling Challenges

	ng confidently, this final lesson builds on those skills						
by introducing the challenges prese							
Learning Objectives:	Materials:						
Students will:	 Bikes and helmets for all students 						
 Apply turning and 	Helmet fitting graphic						
maneuvering skills to riding	Instructor tool kit						
with pedals	Cones, poly spots, and sidewalk chalk for						
 Demonstrate mastery of 	marking course						
pedaling by starting to	Cone-topper stop signs						
pedal on an uphill	 Optional: laptop/projector or white board for showing course map 						
	 Optional: stickers or other incentives for reaching goals 						
Classroom Management Tips:							
 If needed, create ability groups that allow extra practice for students who are still practicing pedaling. Set up a second course or practice area for students who are still working toward pedaling confidently. Enlist adult help to work with different ability groups and act as monitors throughout the course. 							
Accommodations:							
 Support verbal instructions w 	vith visuals and demonstrations.						
• Be sure there's enough room	for adaptive bikes to maneuver on the course.						
Preparation:							
 Arrange bikes by size, in a line ready to redistribute. 	e. Have labeled helmets organized by group or size,						
 Set up a riding course using cones, poly spots, and chalk line to follow. Layout may vary, but be sure to include at least one stop sign, several turns, and an incline. The course should be a continuous loop, and can be set up on a playground around real-life obstacles. You may want to draw a diagram of your course on a white board to preview with students. 							
Intro:							
	Distribute helmets and bikes and have students perform helmet checks and personal						
safety checks with a partner. Have students park their bikes for instruction.							
. Ask students to review what they learned about turning (Lesson 4):							

- When you get close to the turn, slow down by braking gently.
- Look where you *want* to go.
- Lean your body and turn the handlebars just a little bit.
- 3. Explain and demonstrate additional skills for turning with pedals:
 - Slow down and glide (pause pedaling) when you approach the turn.
 - Start pedaling as you come out of the turn.
- 4. Ask students to review what to do at stop signs and intersections: *stop, look left, right, left, wait for others to pass.*
- 5. Show the course diagram if desired.
- 6. Demonstrate following the course using all previously practiced skills rowing/walking to glide, pedaling the course with eyes up and hands on brakes, stopping and looking at intersections, slowing through turns, and ghost rider spacing.
 - Optional: show a diagram of the course and point out turns, stops, and challenging areas such as inclines.

Main Activity:

- 7. Line up students at the start and allow one or more riders (depending on size of the group and width of the course) to begin. You can also create multiple starting points throughout the course and split the class into groups. Remind students to maintain ghost rider spacing.
- 8. Students continue flowing through the course.

Tips for Fun and Engagement: Add splits to this course where students may choose to take a more or less challenging route. At this stage of learning, skill sets may vary; providing variations will allow students to practice their skills without becoming frustrated. Add inclines or more obstacles to make a more challenging path for skilled riders.

References

¹Blommenstein, B. & Van der Kamp, J. (2022, March 9). Mastering balance: The use of balance bicycles promotes the development of independent cycling. *British Journal of Developmental Psychology*.

https://pmc.ncbi.nlm.nih.gov/articles/PMC9310799/#bjdp12409-sec-0002

Appendices

Appendix A: Bike Fit and Seat Adjustment

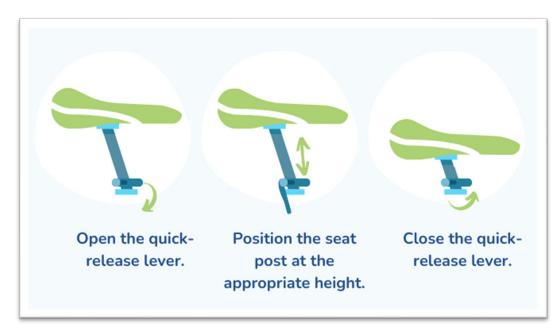
A properly fitting bike should allow the rider to straddle the bike with feet flat on the ground, with 1 to 3 inches between their body and the top tube:



For new riders, a bike that's a bit too small is always preferable to a bike that's too big. Without 1- to 3-inch clearance, injury can occur when stopping abruptly.

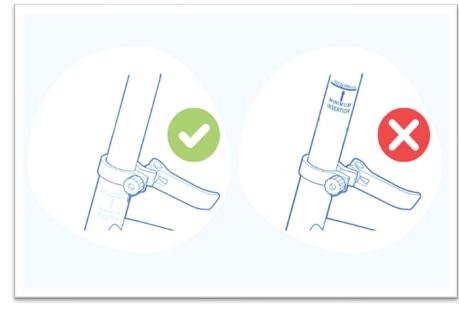
How to Adjust Seat Height:

To adjust seat height, open the quick-release lever and move the seat up or down as needed. The seat should be about level with the rider's hip bone when standing straight. For those learning to ride, the seat can be a bit lower—they should be able to place both feet on the ground when seated on the bike.



Note that seat posts have a "minimum insertion" line; it may be printed or etched on the post. This line must be inserted fully and should not be visible when clamped in place. If

the minimum insertion line is visible, the bike is not safe to ride, and the rider should choose a larger bike.

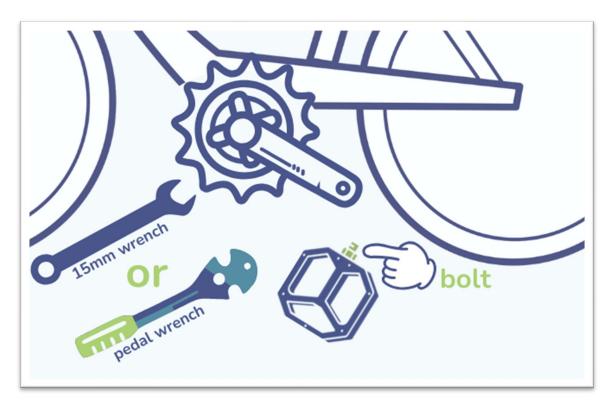


Seat and post with minimum insertion line marked. If the line is visible, the seat is too high and unsafe to ride.

Appendix B: Removing and Replacing Pedals

Any size bike can be transformed into a balance bike by:

- 1. Removing the pedals.
- 2. Lowering the seat so that the rider can touch both feet flat on the ground while seated on the bike.



Pedal wrench or 15 mm wrench may be used.

Removing Pedals:

- With the bike upright (held by the rider, or in a work stand), insert pedal wrench or 15 mm wrench so tool is flush with the bolt.
- 2. Hold the opposite crank arm with your non-dominant hand.
- 3. Loosen the bolt (this may take some elbow grease!).
 - For the RIGHT pedal, turn COUNTERCLOCKWISE to loosen.
 - For the LEFT pedal, turn CLOCKWISE to loosen.

The LEFT pedal is always counter-threaded

4. Once loosened, continue to unthread. Keep the pair together with a rubber band or in a bag.

Replacing Pedals:

1. Identify the left and right pedals. Most pedals will have an R or L on the end of the bolt. Some pedals have engraved lines on the bolt to indicate the *left* pedal; the right pedal will have a smooth bolt.



Be sure to identify the left and right pedals. Lines engraved on the bolt indicate the left pedal.

2. Add a tiny spot of grease to the threads of each pedal. Thread right pedal onto right crank CLOCKWISE until finger tight. Thread left pedal opposite, COUNTERCLOCKWISE until finger tight. Insert your wrench until it is flush with the bolt, and tighten each pedal. Just like when you removed the pedals, hold the opposite crank arm to give resistance for the final tightening.

Video instructions for pedal removal and replacement can be found in the <u>Oregon Safe</u> <u>Routes YouTube channel</u>.

Appendix C: Letter to Parents and Guardians

Send this letter home with students the week before the learn-to-ride unit.

Dear Families,

Oregon Safe Routes is coming to your child's school from (insert date) to (insert date)!

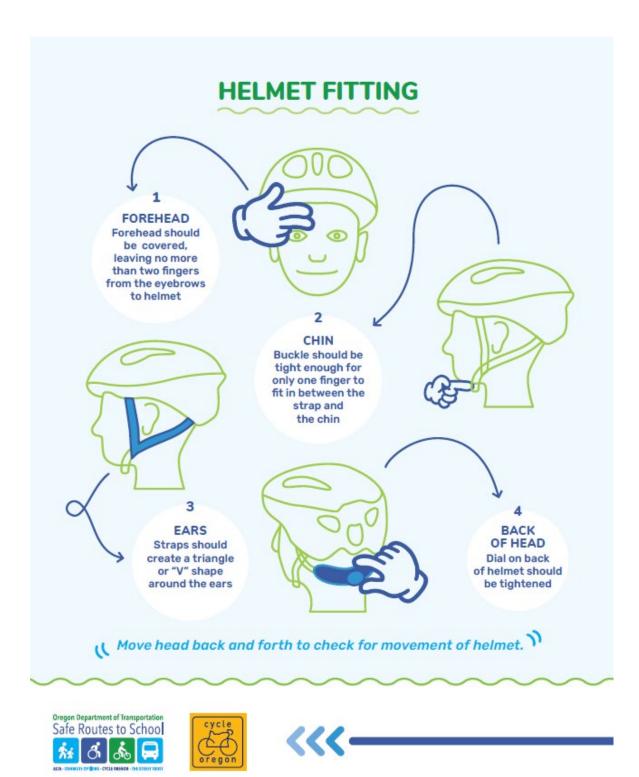
(Insert name of school) is working with us to improve safety for your kids when they walk, roll, and bike to school. We teach pedestrian and bicycle skills so students can walk, roll, and bike more safely during the school year and beyond. During the upcoming Learn-to-Ride unit, we will be working with students on beginning bike skills, using our fleet of balance bikes. These lessons will take place during physical education classes, and all equipment will be provided.

Below are a few tips to make sure this experience is great for your child:

- (Remove this bullet point if lessons are taught in the gym.) Children should wear close toed shoes and weather appropriate outdoor clothing on these days. Extra layers and gloves will be helpful as we will be outside!
- During these lessons, your student will need to wear a bike helmet. If possible, avoid hairstyles that may get in the way of helmet fitting during our visit.
- After the lessons, ask your student what they learned! Go for a bike ride or walk around your neighborhood so they have a chance to practice what they have learned.
- If your student is not comfortable on a bike, encourage them to try it out, but tell them to be clear about boundaries around what they are comfortable with. It is great if every student tries, but we also want to ensure they have a positive experience.
- Please let us know if there are additional considerations we should know for your child to be comfortable.
- There may be opportunities to volunteer to help during these classes. Reach out to (insert PE teacher contact here) to learn more.
- If you have questions or concerns about your child being on a bike, please contact your (insert PE teacher contact here), so we can do some extra work to help them get comfortable.

We appreciate your collaboration! (sender's name)

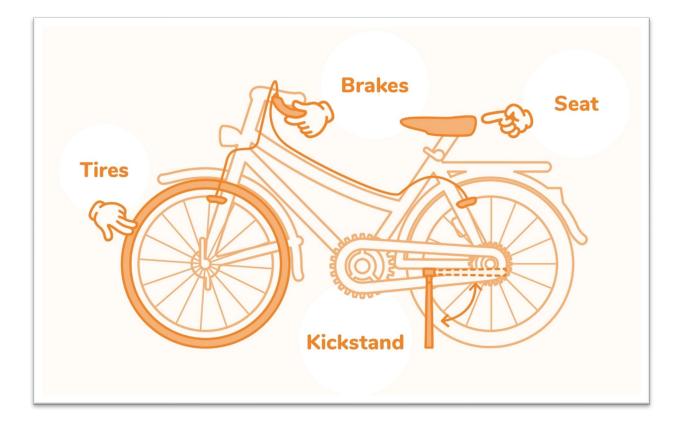
Appendix D: Helmet Fitting



Appendix E: Personal Safety Check



Appendix F: Bike Vocabulary



Appendix G: Skills Checklist

LEARN TO RIDE SKILLS CHECKLIST

Use the table below to assess students' skill acquisition for each lesson.

Grade Level:	Teacher:						
	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	
	Understands how to adjust a bike helmet for proper fit ¹	ldentifies bike parts and their purpose (tires, brakes, seat, kickstand) ²	Understands that increasing speed makes it easier to balance on a bike ³	Shows control in handling & turning, leaves safe distance between riders ⁴	Shows mastery of braking skills (stopping vs. slowing) ⁵	Glides 20-30 feet without touching feet to the ground ⁶	
Student Name							
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Appendix H: Ghost Rider Spacing



Appendix I: Traffic Light Graphic

