SAFE ROUTES TO SCHOOLS
CURRICULUM
MARA COUNTY

BICYCLE SAFETY UNIT
LESSON 3 OF 3: BIKE RODEO
BICYCLE SAFETY UNIT
LESSON 3 OF 3:

BIKE RODEO

4th Grade. 45-60 minutes, requires four basketball courts of space on the blacktop/playground.

Our Bike Rodeo is designed to accommodate up to 60 students at a time. Before riding, bikes are checked and helmets are adjusted. Small groups rotate through 4-5 stations. Each station emphasizes a different biking skill.

Skill focus at stations by increasing difficulty:
- Red Light Green Light – stopping and starting
- Obstacle Course – riding over obstacles
- Cycling Circles – traffic awareness
- Rules of the Road – obeying traffic laws
- +/- Mechanics L.A.B. – using quick-release

OBJECTIVE

1. Red Light Green Light: Correctly start and stop.
2. Obstacle Course: Ride over obstacles with the front wheel aligned perpendicular.
3. Cycling Circles: Ride with “heads-up” and a “bubble” around their bike.
4. Rules of the Road: Obey basic traffic laws.

BIKE RODEO

Rodeo Rules (2 min)
Bike and Helmet Check (8 min)
Station Rotation (30-45 min)
+/- Mechanic L.A.B. (6 – 8 min)
Conclusion (5 min)

LESSON PROCEDURE

KEY POINTS TO RODEO SETUP:
- Trailer arrives one hour before start, other instructors 30–40 minutes before start.
- Driving onto the playground, gates must be unlocked and route free of students.
- Decide the layout for stations on the playground.
- Use Google-Maps “satellite” view to see the school playground before arriving.
- Separate sign-boards (start points) to minimize distractions from neighboring stations.
- Designate routes between stations to minimize cross-traffic during rotation.
- Identify site hazards (gravel/grates, poles) and benefits (extra space, painted lines).
- Always leave the teeter-totter upside-down when not in use.

• Gather instructors to review the main objectives at each station.
• Assign instructors to either a station or a group of students (1-4) to rotate with.
• As the students arrive, instructors immediately begin checking helmets and tires.

LESSON INTRODUCTION

Gather the students in an open area with their bikes and helmets. Consider using a megaphone.

Please do not ride your bike yet, we will get started momentarily!

Direct students without bikes or helmets to find one of ours that fits. One instructor should be distributing helmets and helping students find bikes. If many students need to borrow a bike, pair two similar sized students per bike.

When almost all the students have gathered, begin the introduction.

1. Welcome students to the 4th grade Safe Routes to Schools Bike Rodeo!
2. Briefly introduce each instructor.
3. Overview the day’s events:
   • Check the bikes and helmets.
   • Rules for the rodeo.
   • Rotate through the stations and return back at the end.
MATERIALS

Miscellaneous:
- 16 bicycles with 20”-24” wheels
- 25 youth helmets
- 2 megaphones w/siren
- Two floor pumps

Bike tools:
- allen/hex wrenches,
- adjustable (crescent) wrench
- chain lube and rag
- duct tape
- 4 hand-trucks, 1 dolly
- cans of spray chalk, rolling spray chalk line guide
- Safe Routes to Schools banner
- First aid band-aids / snack bars
- instructions for the station instructors
- copies of the Letter Home to the parents

MATERIALS PER STATION

<table>
<thead>
<tr>
<th>Red Light Green Light</th>
<th>Obstacle Course</th>
<th>Cycling Circles</th>
<th>Rules of the Road</th>
</tr>
</thead>
<tbody>
<tr>
<td>Station sign-board</td>
<td>Station sign-board</td>
<td>Station name sign-board</td>
<td>Station name sign-board</td>
</tr>
<tr>
<td>Hand-held stop sign</td>
<td>Rail-road track segment</td>
<td>12 low and flexible cones</td>
<td>1 yield sign</td>
</tr>
<tr>
<td>12 traffic cones</td>
<td>Railroad crossing sign</td>
<td>1 yield sign</td>
<td>20 traffic cones</td>
</tr>
<tr>
<td></td>
<td>8 rubber bases (1” thick)</td>
<td>8 traffic cones</td>
<td>100 ft nylon strap</td>
</tr>
<tr>
<td></td>
<td>2 traffic tubes (bollard)</td>
<td></td>
<td>Prop car with driver door</td>
</tr>
<tr>
<td></td>
<td>6 traffic cones</td>
<td></td>
<td>Prop fences</td>
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<tr>
<td></td>
<td>8 small cones</td>
<td></td>
<td>2 crosswalk signs</td>
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<tr>
<td></td>
<td>Pedestrian crossing sign</td>
<td></td>
<td>3 stop signs</td>
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<tr>
<td></td>
<td>2 teeter-totters</td>
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</tbody>
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Extra 5th Station: Mechanics L.A.B. (Learn About Bikes)

Demonstration bicycle with front wheel quick-release
Bag of 15 working quick-release models (PVC pipe and washers for hub)
**ACTIVITY:**
**BIKE AND HELMET CHECK**

Main Objective: Each student must pass the bike and helmet safety check before riding.

Instructors circulate to help students as they check their bikes and helmets.

Procedure: 5 minutes.

1. **Before you ride, you should always check the bike and the helmet.**
2. **If you need help, raise your hand and an instructor will help you.**
3. **Let’s start at the top, there are three adjustments to fit a helmet.**
   i. **The chin-strap must be buckled and snug.**
      No more than 2 fingers should fit between the chin and strap.
      Take a few moments to check chin-straps.
      Consider demonstrating the adjustment (push, then pull strap through the buckle).
   ii. **The helmet must be level on your head.**
      Helmet should start two fingers above your eyebrows.
   iii. **Final decision. Shake your head to see if the helmet moves. Thumbs up/down?**
      Any loose helmets must be fixed before riding.
4. **Now that the helmet is adjusted. There are three things to check for the “ABC” bike check.**
   - **“A” is for air. Squeeze your tires front and rear.**
     Raise your hand if you need air from our pump.
   - **“B” is for brakes. Test brakes by squeezing the levers and pushing your bike.**
     Raise your hand if you need help with your brakes.
   - **“C” is for check. Look and listen to the bike. Make a decision, thumbs up/down?**
     Raise your hand if you have a problem with your bike.
ACTIVITY: RODEO RULES

Main Objective: Set three clear rules for behavior.

Before the rodeo begins, make sure everyone understands the purpose and expectations.

Procedure: 2 minutes.

1. Set Purpose

Our goal is for you to be a better bike rider at the end of the rodeo.

Each station focuses on a different skill.

Point out the location of the stations.

You will rotate to all the stations.

Describe the pattern of rotation.

If you are a talented bike rider, today might be easy for you. You can still have fun and improve your riding if you focus on the skills at the stations.

2. Set Rules

The main rule for the day is be careful around other bikers!

If you ride too fast or dangerously, you will lose the privilege of riding.

Consider using hand gestures for each rule.

i. HEADS-UP
   - keep your head up, pay attention, watch-out for other people

ii. LEAVE A BUBBLE
    - keep a space around your bike, don’t ride close to anyone

iii. LISTEN FOR INSTRUCTIONS
     (cup hands around ears)
     - wait at the sign-board for instructions from the instructors

3. Restate the three rules (heads-up, bubble, and listen) and consequence (no more riding).
**ACTIVITY: BREAKING INTO GROUPS**

Main Objective: Create groups with roughly equal numbers.

Instructors check that the students are ready to ride.

Each station accommodates 6-12 students at a time. Usually a 4-station rotation, two to five stations can be run simultaneously. The number of stations we use in rotation depends on the total number of students.

We describe a random grouping and a grouping organized around self-reported ability. Often classes already have assigned numbers or teams that can be used to divide them.

Although grouping by ability takes more time, it works well with smaller groups.

- Instructors can teach to the ability level, assign extra staff to the novice group.
- Allowing novices to begin at easiest stations.
- Students may be less self conscious with other novice riders.
- The advanced riding group can be challenged, courses modified.

Procedure: 5 minutes.

1. *Now that we are ready to ride, you will be split into (two to five) groups.*

2. Stand the instructors widely spaced in front of the students. Designate a space for the lead instructor's group.

3. Divide into groups.

   **RANDOM:**
   a. You will now be assigned to an instructor.
   b. Go directly to your assigned instructor.
   c. Begin directing students to their instructor.

   **ABILITY:**
   a. Designate the instructors by skill level.
      - I don’t ride very often. Beginners.
      - I know how to ride a bike, but I rarely ride. Still shaky.
      - I feel confident on my bike and I ride sometimes.
      - I am very good at riding a bike and I do it often.
   b. Tell the students to go to the instructor that best describes their ability.

3. While the students are staging with their instructor, watch for:
   - ill-fitting bikes and loose helmets
   - struggling riders that are not ready for the course (they may ride off-course with their teacher or a volunteer)

4. Once groups are established, wait for the lead instructors to quickly check for equal group size.

5. Lead instructors dismisses each instructor one-at-a-time to go to their station.
**ACTIVITY: STATION ROTATION**

Main Objectives: Rotate all the groups through the stations with 6-8 minutes per rotation.

The lead instructor keeps time.

When it is time to rotate, hit the siren on the megaphone.

Procedure: 6 – 8 minutes. 30 – 45 minutes total.

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**ACTIVITY: STATION ROTATION**

**RED LIGHT GREEN LIGHT**

Main Objectives:

i. Proper seat-height usually means using a pedal to get on or off the saddle.

ii. Start with Pedal Power Position.

iii. Stop using both brakes, keeping weight back and low.

Students line up side by side with an empty space in front of them.

Procedure: 6-8 minutes.

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1. Welcome students to “Red Light Green Light” (RLGL) and line them up side by side.

2. **RLGL is about starting and stopping. There are many ways to start and stop, this method is the best.**

3. **Remember how hard it was to run in a squat?**  
   *Bike Fit, Lesson 1. Demonstrate that proper seat height often means that feet cannot safely reach the ground while seated.*  
   
   There are a few exceptions like BMX, recumbent, or low-rider cruiser bikes.

   To get on or off the saddle, step on a pedal.

4. **Demonstrate how to best start a bicycle.**
   
   i. Begin by straddling the bike.

   ii. Establish “Pedal Power Position” Using your foot, push one pedal forward till it is straight forward (parallel with ground) or a little higher.

   iii. To begin, firmly grasp the handlebars and simply stand on the raised pedal.

   iv. Using momentum to keep the bike upright, sit on the saddle and push the opposite pedal.

5. **After demonstrating, get the students into Pedal Power position and remind them to leave a bubble.**

   i. Check that each students has a pedal in correct position.

   ii. Encourage students to start without being seated.

6. **Instruct students to stop at the mid-way point. Begin with, Push that pedal!**

7. **At midway regroup, establish the line again with Pedal Power Position. Practice starting again, this time stop at the far end and turn around. Push that pedal!**
8. Demonstrate the proper way to stop a bicycle.
   a. Identify the front (left lever) and rear (right lever) brake.
      • The front brake is much more powerful than the rear brake.
      • Using the front brake is good because it is powerful.
      • Using the front brake can be dangerous. If you have a powerful brake and light weight bike, you could flip the bike. To demonstrate straddle a bike and lock the front brake, pushing the bike forward.
   b. Model the steps to stopping safely (on or off bike).
      • Ease on both brakes, move your weight back and low.
      • When the bike is stopped, step down from the saddle by standing on a pedal.
      • Bikes are started and stopped by standing on one pedal.
   c. Demonstrate a stop using both brakes. Shift weight back and step down on a pedal.

9. Establish Pedal Power position amongst the students.

10. Students stop midway using both brakes and shifting weight back.
    • Start with a slow stop the first time!

11. After stopping midway. Establish Pedal Power and try stopping slightly faster at the end.

12. With time remaining play “Red Light Green Light.”
    a. Students may only move forward during “green light.”
    b. When the instructor says “red light” and displays the stop sign, everyone stops.
    c. After each stop establish Pedal Power Position.
    d. If a student does not stop they are sent back to restart.
    e. Winner is the first to reach the end of the course. Begin again with everyone at start.

13. When the siren sounds, direct students to the sign-board for next station. “Heads-up” and keep a “Bubble” around your bike.
**ACTIVITY:** STATION ROTATION

**OBSTACLE COURSE**

Main Objectives:

i. Ride over obstacles with the front wheel aligned perpendicular.

ii. Brace yourself when going over a bump.

iii. Practice dismounting for a crosswalk.

Students enter the course individually to navigate a railroad track, bumps, a narrow passage, teeter-totters and a dismounted walk through the cross-walk.

Procedure: 6-8 minutes.

1. Welcome students to the “Obstacle Course” and line them up side by side at the beginning/end.

2. The goal is to complete the course.

   Explain the course by doing a walk-through, stopping at each feature.

   - **Start gate:** enter when the person in front of you is over the second obstacle (bubble).
   
   - **Railroad tracks:** cross the tracks like a “T”, straight on with your front wheel.
   
   - **Bumps:** brace for impact by firmly holding the handlebars.
   
   - **Narrow passage:** be aware of the width of your handlebars.

3. Review the key objectives; **line-up the front wheel straight onto the plank.**

   - **Crosswalk:** dismount and walk in crosswalks (step down on a pedal).

4. Begin sending students one-at-a-time into the obstacle course. Wait until the second obstacle is clear before sending the next student.
5. After a few students are on the course, go down the line and remind students to go when the person ahead of them is past the second obstacle.

6. Move to the center of the course, monitoring both the teeter-totter and the start gate.

   CHEER FOR:
   • Lining up the front wheel on the railroad track and teeter-totter
   • Walking the crosswalk and proper dismount
   • Bracing for bumps
   “The teeter-totter is a great place to pour on the encouragement, or reaffirm a wise decision to avoid the obstacle. Standing alongside hesitant students can provide a needed boost of confidence.”

7. Modifications to the course could include:
   • Stacking rubber bases for larger bumps
   • Shrinking the narrow passage between traffic tube-bollards
   • Using a rubber base to elevate the teeter-totter

8. When the siren sounds, direct students to the sign-board for next station. “Heads-up” and keep a “Bubble” around your bike.
ACTIVITY: STATION ROTATION
CYCLING CIRCLES

Main Objectives:
i. Maintain both “Heads-Up” and “Bubble” while riding.
ii. Merge with other traffic at intersections.
iii. Yield at the Yield sign, yield means you wait until the way is clear.

Procedure: 6-8 minutes.

1. Welcome students to “Cycling Circles” and line them up side by side to view the course.

2. The goal of this station is to ride smoothly with traffic (with small groups it is possible to get everyone riding on the course at the same time).

3. Walk-through the course explaining the following features:
   a. start gate: leave a space (bubble) between bikes
      - return to the start line after completing a loop.
   b. 2 unsigned intersections where the circles overlap or “Merge.”
      • Students must “zipper merge”. Taking turns between lines like a zipper.
      • Communicate (vocal, hand gesture) with other cyclists when entering a merge.
   c. Slalom (weaving) spur leaves and reenters the course.
      • Yield sign means you go only when the way is clear.
   d. If you ride well, many people can ride on course without stopping.

4. Remind students: Keep your head-up, and a bubble of space between each bike.

5. Start the station by allowing students to enter individually.

6. After establishing the movement of the line, move to additionally monitor merging and yielding.

CHEER FOR:
• sufficient bubble between bikes and heads-up
• correct merging and communication
• proper yielding

7. If the course becomes clogged, slow down the entrance of new riders at the start/finish.

8. When the siren sounds, direct students to the sign-board for next station. “Heads-up” and keep a “Bubble” around your bike.
**ACTIVITY:** STATION ROTATION  
**RULES OF THE ROAD**

Main Objectives:

i. Ride on the right side of the road.

ii. Obey stop, yield, and crosswalk signs. Wait your turn.

iii. Signal before turning onto another road.

A street course with an outer loop and center boulevard. The middle road ends in a 3-way stop on one side and a yield intersection on the opposite end. All students simultaneously ride freely while obeying traffic laws.

Procedure: 6-8 minutes.

1. Welcome students to the “Rules of the Road” station. Gather students side-by-side at the start.

2. The goal of this station is to ride freely while obeying three basic traffic laws.
   
   i. **Ride on the right side of the road.**
   
   ii. **Obey the Stop, Yield, and Crosswalk traffic signs.**
   
   iii. **Signal before turning onto another road.**

3. Overview the course highlighting the following features:
   
   a. Fence marking driveway entrance to the street course: **look left-right-left before entering the course (heads-up)**
   
   b. Locate the outer loop and central “main-drag” road: designate out-of-bounds space
   
   c. Dashed center line: **stay to the right at all times, do not share lanes (bubble)**
   
   d. Traffic sign and corresponding line indicating a stop, yield, or crosswalk:

4. Review the three laws: **ride on the right, obey the signs, and signal before turning.**

5. Allow students to enter the course through the fences after checking left-right-left. Direct them left and right to ensure traffic flow on both sides of the road.

6. After starting the first few students, move to monitor those now on course. Cheer for:
   
   • riding within the lane on the right side of the road
   
   • obeying traffic signs, waiting their turn
   
   • using hand-signals before turning onto another road at the intersections

7. When the siren sounds, direct students to the sign-board for next station. “Heads-up” and keep a “Bubble” around your bike.
1. Welcome to the “Mechanics LAB”. Gather students with bikes around the demonstration bicycle.

2. At this station we Learn About Bikes (LAB). The topic is removing a wheel with “quick-release.”

3. Why would you remove a wheel from a bicycle? To fix a flat, fit a bike on a rack or in a car, etc.

4. Point to the quick-release. Some wheels attach by quick-release (QR), while others use nuts/bolts.
   - Look at your bike, does it use quick-release or nuts and bolts?

5. Watch as I remove the front wheel:
   - Disable the brakes, each type of brakes has a different release.
   - Open the QR lever. Hold the opposite end, and turn “lefty-loosey.”
     - Count and remember the number of turns.
   - After 5-7 turns, take the wheel straight out of the fork.

6. Like many things in life, it is harder to put things back together once they are apart.

Watch as I replace the front wheel:
   - Replace the wheel into the fort “drop-outs”. Make sure it is all the way in.
   - Holding the opposite end, turn the QR lever “righty-tighty.”
     - Count and turn the lever the same amount of rotations
   - Close the QR lever, making sure it is “not easy”, adjust tension as needed.
     - even for most adults, close the lever as tightly as possible.
   - Reconnect the brake. Spin the wheel. Squeeze the brake levers to check.

7. Show students the model quick-release levers. Demonstrate open and closing the lever.
   - Do not turn “lefty-loosey,” the model will fall apart into pieces.
   - Practicing opening and closing the lever. “Quick, not easy!”
   - If the lever is too tight or loose, raise your hand.
   - After a minute, ask students to return the models to the bag.

8. When the siren sounds, direct students to the sign-board for next station. “Heads-up” and keep a “Bubble” around your bike.
**ACTIVITY: LESSON CONCLUSION**

Main Objectives: Conclude the bike rodeo on a high note, organize returning bikes and helmets.

Highlight key points of the rodeo and benefits of biking. Instruct students how to leave the borrowed materials and look to their teachers for further instructions.

Procedure: 5 minutes.

1. Gather all groups back at the original meeting point.

2. Ask the students to give a thumbs-up if they accomplished the goal at each station.
   - Red Light Green Light: Correctly start and stop.
   - Obstacle Course: Line-up the front wheel when riding over an obstacle.
   - Cycling Circles: Ride with “heads-up” and a “bubble” around their bike.
   - Rules of the Road: Obey basic traffic laws.

3. Review the benefits of biking:
   *I think bikes are great because you get exercise, keep the air clean, and avoid traffic jams. Best of all, they can be fun to ride. Did you have fun today at the Safe Routes to Schools Bike Rodeo?*

   Consider leading a group cheer.

   Examples:
   - Three cheers for bikes: I say “hip-hip”, you say “hooray!”
   - I say “bike” you say “ride!” Vary the volume, speed and timbre.

4. Thank you and please listen for instructions.
   - We are done riding the bikes, please dismount and walk your bike.
   - If you borrowed a bike or helmet please return them to the rodeo trailer.
   - If you have your own bike and helmet, please walk with your teacher to the bike racks.

5. Distribute copies of the “Letter Home” to each class through the PE teacher or office assistant.

This curriculum was created by James Sievert and edited by Wendi Kallins.

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