GIRLS RIDING INTO TOMORROW

G.R.I.T.
Bike Safety

COMMUNITY. SAFETY. EQUAL OPPORTUNITY. FUN!
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BICYCLE SAFETY AND FAMILY INVOLVEMENT

Children are part of a family unit and inclusion of the family or caregivers help reinforce the correct information that is critical to bring about new behavior, like riding a bicycle. Bicycling is a form of lifelong physical activity that the whole family can do together, and it's fun!

Parents, caregivers, guardians and youth must practice safe bicycling behavior at home and in the community, not just during instructional settings. Parents and guardians should serve as “roll” models when bicycling and driving around bicyclists. Parents and guardians also have the responsibility to ensure youth follow the safety and rules of the road on all sidewalks, trails, pathways, and roadways.

Safe bicycling behavior should be the standard. This starts within the family unit with the expectation that when bicycling everyone (adults and youth) will model safe riding behavior.

Safety Tips:

- **Wear a properly fitted helmet.** Protect your brain, save your life.
- **Adjust your bicycle to fit.** When standing over your bicycle there should be 1-2 inches between you and the top tube (bar) if using a road bike and 3-4 inches if a mountain bike. The seat should be level front to back, and height adjusted to allow a slight bend at the knee when the leg is fully extended. The handlebar height should be level with the seat.
- **Check equipment for safety before each ride.** Before riding, inflate tires properly and check that your brakes work.
- **See and Be Seen.** Whether daytime, foul weather, or at night, you need to be seen by others.
  - Always wear neon, fluorescent, or other bright colors when riding day or night. Wearing white has not been shown to make you more visible.
  - Wear something that reflects light, such as reflective tape or markings, or flashing lights. All bikes need a bright white front light and a red rear light.
  - Just because you can see a driver doesn’t mean they can see you!
- **Control Your Bicycle.** Always ride with at least one hand on the handlebars. Carry books and other items in a bicycle carrier or backpack.
- **Watch for and Avoid Road Hazards.** Be on the lookout for hazards like potholes, broken glass, gravel, puddles, and dogs. All these hazards can cause a crash. If you are riding with friends and are in the lead, yell out and point to the hazard to alert the riders behind you.
Bicycle riding is fun, healthy, and a great way to be independent. But it is important to remember that a bicycle is not a toy, it’s a vehicle! Follow these rules of the road, and practice them as a family.

**RULES OF THE ROAD: QUICK GUIDE**

- **Go With the Traffic Flow.** Ride on the right in the same direction as other vehicles. Go with the flow – not against it.
- **Obey All Traffic Laws.** A bicycle is a vehicle and you’re a driver. When you ride in the street, obey all traffic signs, signals, and lane markings.
- **Yield to Traffic When Appropriate.** Almost always, drivers on a smaller road must yield (wait) for traffic on a major or larger road. If there is no stop sign or traffic signal and you are coming from a smaller roadway (out of a driveway, from a sidewalk, a bike path, etc.), you must slow down and look to see if the way is clear before proceeding. This also means yielding to pedestrians who have already entered a crosswalk.
- **Be Predictable.** Ride in a straight line, not in and out of cars. Signal your moves to others.
- **Stay Alert at All Times.** Use your eyes AND ears. Watch out for anything that could make you lose control of your bike. You need your ears to hear traffic and avoid dangerous situations; don’t wear headphones when you ride.
- **Look Before Turning.** When turning left or right, always look behind you for a break in traffic, and then signal before making the turn. Watch for left- or right-turning traffic.
- **Watch for Parked Cars.** Ride far enough out from the curb to avoid the unexpected from parked cars (like doors opening, or cars pulling out).

**Roads or Sidewalks?**
The safest place for bicycle riding is on the street, where bicycles are expected to follow the same rules of the road as motorists and ride in the same direction.

- Children less than 10 years old, however, are not mature enough to make the decisions necessary to safely ride in the street.
- Bicyclists on sidewalks cannot exceed speed higher than 10 miles per hour.
- For anyone riding on a sidewalk:
  - Watch for vehicles coming out of or turning into driveways.
  - Stop at corners of sidewalks and streets to look for cars and to make sure the drivers see you before crossing.
  - Enter a street at a corner and not between parked cars.
  - Alert pedestrians that you are near by saying, “Excuse me,” or, “Passing on your left,” or use a bell or horn.

**Bike Must-Haves**
1. Properly fitted helmet (required for everyone under 15 years of age)
2. Front white light
3. Rear red reflector and/or red taillight
4. Bell or horn

This material is created from the “Bikeology: A middle and high school bicycle safety curriculum for physical education teachers and recreation specialists” from the American Alliance for Health, Physical Education, Recreation and Dance; and the National Highway Traffic Safety Administration. As well as the State of Alaska bicycle laws provided from the Alaska State Troopers, and the municipality of Anchorage municipal Code of Ordinances pertaining to bicycles.
GETTING READY TO RIDE

RULES OF THE ROAD

When traveling in the road, bicyclists are considered vehicles and are expected to follow the same rules of the road as other vehicles. However, in some locations there may be exceptions, such as:

- Bicyclists cannot ride on sidewalks in downtown Anchorage.
- Bicyclists may ride two abreast in one lane on the road.

What are the “Rules of the Road”?
- Obey traffic signs and signals
- Signal turning and stopping
- Pass on the left
- Ride with the flow (in the same direction) as traffic

THINGS TO KEEP IN MIND...

Be Visible
It is important to always be visible while on your bicycle. Whether you are on the road, sidewalk, or separated path, you are interacting with others in other vehicles, on foot, or on bike.

It is especially important in Alaska to be visible during darkness as well. It is the law to have a bright front white light and a red taillight that can be seen for 500 feet. A rear red reflector visible for 100-600 feet may work as well (instead of a red taillight) Reflective or neon clothing are also important to wear year-round as well.

Be Predictable
Not only is it important to a bicyclists’ safety to follow predictable behavior (which means following the rules of the road), but it is also the law. Many collisions between bicyclists and other road or path users occurs when someone acts unpredictably, turning themselves into a hazard for another person. These safety tips and rules of the road will help keep you and others safe.
HELMETS

It is important to wear a helmet every time you ride your bike. A helmet reduces the risk of brain injury by absorbing the force of a crash, rather than your brain absorbing it. A crash can happen at any time regardless of the rider’s skill or length of a trip.

Most brain injuries in children occur because of falls, car crashes, and bike/sports injuries. The brain can be damaged if it bounces against the inside of the skull, sometimes making it hard for a person to do things they were able to do before the injury. The best way to prevent brain injuries it to wear a helmet!

Symptoms of a Concussion usually fall into four categories:

<table>
<thead>
<tr>
<th>Thinking and Remembering</th>
<th>Physical</th>
<th>Emotion and Mood</th>
<th>Sleep</th>
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<tbody>
<tr>
<td>Difficulty thinking clearly</td>
<td>Headache Fuzzy or blurry vision</td>
<td>Irritability</td>
<td>Sleeping more than usual</td>
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<tr>
<td>Feeling slowed down</td>
<td>Nausea or vomiting (early on) Dizziness</td>
<td>Sadness</td>
<td>Sleep less than usual</td>
</tr>
<tr>
<td>Difficulty concentrating</td>
<td>Sensitivity to noise or light Balance problems</td>
<td>More emotional</td>
<td>Trouble falling asleep</td>
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<tr>
<td>Difficulty remembering new information</td>
<td>Feeling tired, having no energy</td>
<td>Nervousness or anxiety</td>
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Some symptoms may appear right away, while other may not be noticed for days or months after the injury. If you suspect a concussion, seek medical attention.

LOCK UP YOUR BIKE

Your bicycle is your freedom. It is critical to take care of your bike and ensure that it is properly locked up and accounted for at all times. It is important to follow state law to ensure that a parked bike is not blocking the street traffic or pedestrians on sidewalks. You cannot lock a bike to:

- Fire hydrants
- Police and fire call boxes
- Electric traffic signal poles
- Poles located within bus zones or stands
- Pole located within 25 feet of an intersection
- Trees under 10 inches in diameter
ABC QUICK CHECK

A = Air

Maintaining proper air pressure in the tires makes riding more comfortable and safe. Check the front and rear tires for air pressure by squeezing them. They should be hard, not soft. If the tire is soft, pump them with air.

B = Brakes

There are three types of brake systems: coaster brakes, rim brakes, or disc brakes. To check the brakes, squeeze the brake lever to ensure a distance between the brake lever and the handlebar is a minimum of 1 inch. Apply the brakes while pushing the bike forward and backward to ensure the bike stops.

C = Chain and Crank

It is very rare to have a loose crank, but if it happens don’t use the bike until it is fixed by a professional. Check the crank by moving it towards and away from the bike frame. The chain should be completely on a gear to prevent it from falling off. Test the chain by picking up the rear wheel and pedaling forward to make sure the wheel spins freely and the chain is set on the gears.

Quick Check

Check that all the quick release levers are properly closed on the front and rear wheels, as well as the seat post. The front lever should be closed and pointing up along the fork, and the rear lever should be closed and pointing toward the front tire between the chain and seat stays. This will ensure they do not get caught on anything and potentially open.
BICYCLE HANDLING BASICS

There are a handful of important maneuvers every bicycle rider should know. Some of these skills take practice, but the more you do them, the easier they become until you're not even thinking about them before you do them. These are your 6 bicycle handling basics in order to ride safely:

1. BALANCE

Balance is the most important skill to ride a bicycle. Balancing uses your abdominals, back muscles, and gluteal muscles, and it also uses your inner ear.

2. CONTROLLED BRAKING

You will need to slow or stop while riding. The front brake stops the bike quicker, but you have to do it in a controlled way or the rider can flip forward. Usually you can use the rear brake on its own, but you will want to use the front brake in an emergency or while going downhill.

- Left Brake = Front wheel
- Right Brake = Rear wheel

3. POWER START / POWER TAKEOFF

A fast and efficient way to get a bike moving from a stopped position.

- First the rider stands and straddles the bike and places one foot on the ground, the other foot on the pedal between the 12 and 2 o’clock position.
- Second, the rider pushes down on the pedal moving it to the 6 o’clock position and pushes off the ground with the other foot at the same time.
- Third, the rider should be standing over the saddle, coast and count to three before placing the other foot on the other pedal.
- Finally, the rider sits on the saddle.
4. READY POSITION

Position of a rider to have control over the bicycle and be prepared for most maneuvers. It allows a rider to quickly control their bike over a bump or uneven terrain, and it allows for a quick turn or stop if needed. Here’s how:

- The rider stands over the saddle with their feet on the pedals with most of their weight on the rear tire, pedals are parallel to the ground, and the index and middle fingers are lightly resting on the brake levers.

5. SCANNING

The act of looking over one’s shoulder to observe if it is clear to change direction or be aware of one’s surroundings. It’s as easy as turning around while riding in both directions. It’s important to be aware of your surroundings so scanning is an essential safety skill. It may be easier to scan on one side than the other, so it’s important to practice and get better at it.

- Remain seated and glance over the shoulder—touching the chin to the shoulder—while continuing to ride in a straight line.
- Practice on both sides

6. SIGNALING

Communicating to other road users (drivers, riders, pedestrians) using the bicyclist’s hands to indicate changes in direction and speed. Riders will need to be able to ride with one hand. As a vehicle on the road, bicyclists are required by law to use a hand signal 100 feet before the turn (unless the hand is need to control the bike). The hand signal should be given continuously through the maneuver. While riding with other bicyclists it is important to verbalize signals as well.

- Left Turn hand signal: left arm out and parallel to the ground, pointing left.
- Right Turn hand signal: left arm out, parallel to the ground, elbow bent, and hand pointing up.
- Stopping hand signal: left arm out, parallel to the ground, elbow bent, and hand pointing down.

Note: Right turns can sometimes be signaled with a parallel right arm. However, it is safest to use the right brake (rear) to slow down while turning, and it may be easier for drivers to see signals on the left side of a bicyclist. Practice using your left arm to signal right turns for these reasons.
EMERGENCY BIKE HANDLING BASICS

Bicyclists may encounter emergencies while riding that they must quickly respond to. Practicing these emergency bicycle handling skills will enable riders to use them without thinking during true emergencies, which can be a car turning in front of you, a rock or hole in the roadway, car door opening in front of you, a dog running in front of you, and more. Mastering these skills and wearing a helmet are essential to keep you safe.

HAZARD AVOIDANCE
This skill allows a bicyclist to avoid a roadway hazard without swerving, perhaps into traffic. It is also known as the Rock Dodge, Serpentine, or Slalom.
- This may include avoiding a rock, pothole, railroad track, etc. It is important to turn or avoid hitting it with your front wheel.
- You can practice this move by weaving between cones to practice tight turns.

INSTANT TURN
This skill allows a bicyclist to make a very quick turn when there is neither time nor room for a normal turn. This can be a hard skill to learn, so practice is important.
- First, the rider will turn the wheel in the opposite direction they will want to turn. This will cause the rider and the bike to automatically lean in the direction the rider wants to turn (this is a bit counterintuitive).
- Then, the rider will quickly turn the wheel in the direction that they want to go. This will be the direction that your body and bike are already leaning.

QUICK STOP / EMERGENCY STOP
This skill allows a bicyclist to stop very quickly in a short distance. Usually we brake with the right brake, causing the rear tire to stop and skid, which takes more time to stop. To stop quickly and over shorter distance, the bicyclist should:
- Apply equal pressure to both brakes, while at the same time moving your body back past the saddle and low over the rear tire. This position lowers the rider’s center of gravity and puts more weight on the rear wheel, helping keep the rider from flying over the handlebars.
- The rider should decrease the pressure on the rear brake if the rear wheel begins to skid. Or, the rider should decrease the pressure on the front brake if the rear wheel begins to lift off the ground.
ADVANCED BIKE HANDLING BASICS

BUNNY HOP
an advanced skill that strengthens the rider’s ability to avoid an obstacle by jumping over the obstacle while on the bike.

CADANCE / PEDAL RPM
The number of times during one minute that a pedal stroke is completed. It is the rate of pedaling measured in revolutions per minute (RPM).

COURSE RIDE / VELO RIDE
A designated riding course with bicycle skill stations set up along the course.

FIGURE 8 / TURN AND YIELD
An advanced skill that strengthens the rider’s ability to turn in different directions and yield while maintaining balance, control, speed, and distance.

SNAIL RACE / SLOW RACE / WOBBLE RIDE
An advance skill that strengthens the rider’s ability to ride at a slow speed. Riders start the race together, and the last one across the finish line wins—no weaving or touching the ground is allowed. The purpose of this race is to reward slow speed that requires balance skills.

WATER BOTTLE PICK UP
An advanced skill that strengthens the rider’s ability to take a hand off the handlebar while maintaining balance, control, speed, and distance.
RULES OF THE ROAD FOR BICYCLING

A BICYCLE IS A VEHICLE IN THE ROADWAY

Oftentimes, we find that there are not separate facilities for bicyclists, like bike lanes or multi-use paths. In order to ensure bicyclists’ safety, the best place for them to ride are in roadways. Any time you ride a bicycle on the road, the bicyclist is considered a motor vehicle (and you are considered the driver of a vehicle). As a vehicle, you must follow the rules of the road, which are state and local laws. As a vehicle, you have the same rights and the same responsibilities as motorists.

It’s important to remember that in a crash, the bicyclist is more likely to be injured than the motorist. As a bicyclist it’s important to always be alert, deliberate, and cautious.

A bicyclist is not allowed to ride on the sidewalk in Anchorage’s downtown business district. This is an example where riding in the road is necessary and large/fast streets should be avoided, unless the bicyclist truly does not feel comfortable. When a bicyclist dismounts and walks, they are considered a pedestrian and must follow the rules of a pedestrian.

HERE ARE SOME TIPS TO FOLLOW WHILE RIDING IN THE ROAD

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<th>Proper Lane Positioning</th>
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<td>Lane positioning is a very important element of safe riding. When you are in the proper part of the lane you tend to be predictable to other bicyclists and motor vehicles. Proper lane positioning helps to set a rider up for proceeding through intersections and changing lanes.</td>
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Alaska laws indicate that a bicyclist should ride as far to the right as is safe or practicable, often the right 1/3rd of the lane. A common error among cyclists is to ride too far to the right where they may hit a curb or don’t have enough room to maneuver around a hazard. A bicyclist positioned too far to the right is less visible to motorists.
Communicate Your Moves
Use verbal and nonverbal communication to inform all road users of your intentions. Hand signaling is essential to communicate with other road users what a bicyclist’s movements will be. Remember to use your hand signals while turning, stopping, slowing, and changing lanes. You should verbally and visually communicate your intentions. Bicyclists should be deliberate and courteous. Some examples include: using a hand signal to stop, saying “passing on the left,” pointing to a pothole to warn another bicyclist about a hazard.

Make Eye Contact
Bicyclists should try to make eye contact with motorists and other bicyclists. Remember, just because you can see a driver doesn’t mean they can see you!

Take the Lane
Two bicyclists may ride side-by-side at only two abreast in a roadway if that does not block traffic. The safest way to do this is to ride in a group of four people, 2x2, creating the same size of a car in the driving lane. This is called “taking the lane” and may be done with experienced and confident bicyclists.

RIGHT-OF-WAY: Who goes first at an intersection?

Yielding is slowing down or stopping to let another person go first. There are general rules about when you must yield the right-of-way. Some examples include: at an intersection without signs or signals, you should yield the right-of-way to any vehicle approaching from the right; at an intersection with stop signs at all corners, you must yield the right-of-way to the first vehicle to come to a complete stop.

All vehicles must follow right-of-way rules to safely cross intersections. Right-of Way helps you decide who goes first at an intersection:

Right-of-Way Guide
- **Base Rule:** *First to Stop = First to Go*
  - The first vehicle to an intersection goes through the intersection first.
- If the base rule doesn’t apply: **Furthest Right Goes First**.
- When two vehicles get to the intersection at the same time, the vehicle on the right goes first (it has the right-of-way).
- **When in Doubt, Bail Out.**
  - This trumps all rules.
  - Even if you have the right-of-way, if for any reason you feel uncomfortable or that your safety is threatened, let the other traffic go ahead. Your safety always comes first!
- If neither the base rule nor the furthest right rule apply: **Straight Traffic Goes First**.
- When two vehicles are directly across from each other and one is turning left, the one that is going straight goes first.
RULES OF THE ROAD

These are traffic laws, regulations, and commonsense riding behavior designed to increase the safety of bicyclists riding in the roadway. While riding a bicycle on a road, here are some Rules of the Road:

- **Obey traffic signs and lights.** This means when there is a stop sign or red light, a bicyclist must come to a complete stop and should place one foot on the ground. The bicyclist should not proceed until they looked left-right-left for traffic and it is safe to go. This applies for all traffic signs, including U-Turns and more.

- **Ride in the same direction as traffic.** As a vehicle, a bicyclist should ride to the right side of the road in the same direction as traffic. It is safer than facing traffic because you can act like a vehicle and your actions are more predictable.

- **Always hand-signal turns, slowing, stops, or lane changing.** You must signal your intention because bicycles do not have brake lights. This is especially important if you are riding in a group of bicyclists.

- **Give pedestrians the right-of-way.** This is the same law that applies to motor vehicles.

- **Pull over if you hear a siren from an emergency vehicle.** When you hear a police, fire, or emergency vehicle, you must pull over to the side of the road on the right to allow the emergency vehicle to pass.

- **Be sure to scan your surroundings.** Using the scanning skill allows bicyclists to check their surroundings and ensure their safety. It is critical to know what is going on around you, in all directions. The skill of scanning is also used to change lanes.

- **Maintain a controlled speed, and follow speed limits.** Vehicles should obey posted speed limits because they are the speed at which a driver can control a vehicle on a particular road and allow for safe stopping. A bicyclist should always maintain a controlled speed that they can also safely stop at.

- **Wear bright clothing and use bike lights.** Riding a bike in the dark can be very dangerous, especially in roadways as drivers may not be able to see bicyclists. Bicycles are required to have a white headlight and a red rear light, as well as reflectors.
TRAIL ETIQUETTE RULES

Multi-Use Paths are paths for varying users, such as bicyclists, pedestrians, joggers, skiers, etc. We have a lot of these in Anchorage and they're great to ride on, but be sure to adhere to these guidelines:

- Always ride to the right, allowing others to pass on the left.
- Pass only on the left and move back to the right when it is safe.
- Call out “on your left” or “passing” while passing someone.
- Use communication skills for signaling, including verbal and visual (pointing) or by bell/horn, giving people time to react.
- Always yield to other users who are slower: equestrians (horseback riders), pedestrians, then bicyclists
- Always yield to riders/walker/hikers coming uphill.
- Use safe cycling skills, including constant scanning.
- When stopped, move off the trail so others can pass.
- Be respectful of the trail and other users.
- When riding at night, use lights in front and rear of the bike.
- Only use a small portion of the trail if riding in a group, so other may safely pass.
- Always be predictable and courteous.
VOCABULARY

- **2-2-2-2 Rule**: a classroom management and bicycle safety strategy that encourages students to keep:
  - 2 wheels on the ground
  - 2 feet on the pedals
  - 2 hands on the handlebars
  - 2 fingers on the brake levers.

- **ABC Quick Check**: steps to inspect the basic functioning of a bicycle that should be performed before each ride:
  - A = Air
  - B = Brakes
  - C = Chain/Crank
  - Quick = Quick Release
  - Check = Check it over

- **Bicycle Driver**: in all states, bicycles are considered vehicles or bicyclists are the driver of a vehicle. Both bicyclists and motorists (in cars) have the same rights and the same responsibilities to follow the same rules-of-the-road when in traffic.

- **Bicycle Trainer**: a piece of equipment that makes it possible to ride a bike while it remains stationary.

- **Bicycling Etiquette**: General rules of conduct by bicyclists that prevent potential injury.

- **Brake**: bike part that stops a bicycle, including rim brakes, disk brakes, or coaster brakes.

- **Brake levers**: bike part attached to the handlebars, squeezed by the hands to activate the brakes.

- **Bunny Hop**: an advanced skill that strengthens the rider’s ability to avoid an obstacle by jumping over the obstacle while on the bike.

- **Cadence/Pedal RPM**: the number of times during one minute that a pedal stroke is completed. It is the rate of pedaling measured in revolutions per minute (RPM).

- **Cassette**: group of stacked gears on the rear wheel of a bike.

- **Chain**: bike part that moves the bike by transferring power from the pedals to the drive-wheel.
- **Chain stay**: tube on the rear of the bike frame running from the bottom bracket and parallel to the chain.
- **Chainring**: one of the front gear(s), attached to the crank.
- **Cog**: the tooth on the rim of a gear wheel.
- **Course Ride/Velo Ride**: a designated riding course with bicycle skill stations set up along the course.
- **Crank**: device for transmitting rotary motion, consisting of a handle or arm attached at right angles to the shaft.
- **Cyclometer**: monitoring device that measures speed, distance, time, and cadence while riding a bicycle.
- **Derailleur**: an assembly of levers that moves the chain.
- **Down tube**: tube on a bike frame running from the head tube to the bottom bracket.
- **Exercise Intensity**: the amount of energy that is expended when exercising.
- **Figure 8/Turn and Yield**: an advanced skill that strengthens the rider’s ability to turn in different directions and yield while maintaining balance, control, speed, and distance.
- **Fork**: connects the bike’s frame to its front wheel and handlebars, allowing steering by virtue of its head tube.
- **Handlebars**: a lever attached to the head tube of the fork, allowing steering. It also provides a point of attachment for controls and accessories.
- **Handlebar Stem**: a bracket attaching the handlebars to the head tube of fork.
- **Hazard Avoidance**: this skill allows a bicyclist to avoid a roadway hazard without swerving, perhaps into traffic. It is also known as the Rock Dodge, Serpentine, or Slalom.
- **Head Tube**: the bearings that form the interface between the frame and fork head tube.
- **Heart Rate**: number of heartbeats per unit of time, usually beats per minute (bpm). Heart rates can vary as a body’s need to absorb oxygen and excrete carbon dioxide changes, such as during exercise. Bicyclists monitor their heart rate to gain maximum efficiency from training.
- **Heart Rate Monitor**: a monitoring device that measures intensity of heartbeats. Heart rate monitors usually have a chest strap transmitter and a wrist receiver. Strapless heart rate monitors allow the bicyclist to touch two sensors on a wristwatch display for a few seconds to view their heart rate.
- **Helmet**: personal protective safety equipment worn on a bicyclist’s head to protect the brain from impact.
- **Instant Turn**: this skill allows a bicyclist to make a very quick turn when there is neither time nor room for a normal turn.
- **Intersection**: a road junction where two or more roads (driveways, sidewalks) either meet or cross. It may or may not be controlled by traffic lights/signs. Most bicycle crashes occur at intersections.
- **Lane Position/Roadway Position**: the physical location of the bicyclists on the roadway or in the lane. Most state laws indicate that a bicyclist should ride as far to the right as is safe or practicable. A common error among cyclists is to ride too far to the right where they may hit a curb or don’t have enough room to maneuver around a hazard. A bicyclist positioned too far to the right is less visible to motorists.

- **Multi-Use Paths**: paths for varying users, such as bicyclists, pedestrians, joggers, skiers, etc.

- **Pedals**: bike part where bicyclist’s feet rest or pushed in a forward motion to propel the bike.

- **Power Start/Power Takeoff**: a fast and efficient way to get a bike moving from a stopped position. Rider stands and straddles the bike and places one foot on the ground, the other foot on the pedal between the 12 and 2 o’clock position. The rider pushes down on the pedal moving it to the 6 o’clock position and pushes off the ground with the other foot at the same time. The rider should be standing over the saddle, coast and count to three before placing the other foot on the other pedal and sitting on the saddle.

- **Quick Release**: a lever for releasing the wheels, and a lever to adjust the seat.

- **Quick Stop / Emergency Stop**: this skill allows a bicyclist to stop very quickly in a short distance. The bicyclist applies both brakes while move their body back and low over the rear tire. The position lowers the rider’s center of gravity and puts more weight on the rear wheel, helping keep the rider from flying over the handlebars.

- **Rim Tape**: piece of rubber, cloth, or plastic take that protects the tube from puncture, especially from sharp objects like spoke nipples.

- **Ready Position**: position of a rider to have control over the bicycle and be prepared for most maneuvers. The rider stands over the saddle with their feet on the pedals with most of their weight on the rear tire, pedals are parallel to the ground, and the index and middle fingers are lightly resting on the brake levers.

- **Rules-of-the-Road**: traffic laws, regulations, and commonsense riding behavior designed to increase the safety of bicyclists riding in the roadway. Some examples include: riding in the same direction as traffic, obeying all traffic signs and signals.

- **Saddle**: bike seat.

- **Scanning**: The act of looking over one’s shoulder to observe if it is clear to change direction or be aware of one’s surroundings.

- **Seat post**: post that supports the saddle, which slides into the frame’s seat tube and is used to adjust riding height.

- **Seat Tube**: bike part that runs along the bike frame from the seat to the bottom bracket.

- **Seat Stay**: connects the top of the seat tube to the rear dropout.

- **Signaling**: communicating using the bicyclist’s hands to indicate changes in direction and speed.
- **Snail Race/Slow Race/Wobble Ride**: an advance skill that strengthens the rider’s ability to ride at a slow speed. Riders start the race together, and the last one across the finish line wins—no weaving or touching the ground is allowed. The purpose of this race is to reward slow speed that requires balance skills.
- **Spokes**: bike parts that connect the wheel rim to hub. Most bikes have 36 spokes.
- **Sustained Riding**: bicycling at an intensity that allows the body’s need for oxygen to be continually met.
- **Tire Bead**: the hard edge on the actual tire that fits into the rim of the wheel.
- **Top Tube**: bike part connecting the head tube to the seat tube.
- **Track stand**: a rider attempts to balance on the bike with both feet on the pedals in a stationary position. The goal is to keep the wheels from moving forward or backward.
- **Valve Stem**: a port for adding or releasing air from the tires inner tube. Two common types of valves are Presta and Schrader valves.
- **Verbal and Nonverbal Communication**: types of communication by bicyclists to other bicyclists, pedestrians, and motor vehicle drivers to share information. Some examples include: using a hand signal to stop, saying “passing on the left,” pointing to a pothole to warn another bicyclist about a hazard.
- **Water Bottle Pickup**: an advanced skill that strengthens the rider’s ability to take a hand off the handlebar while maintaining balance, control, speed, and distance.
- **Yielding**: slowing down or stopping to let another person go first. There are general rules about when you must yield the right-of-way.