



STREET SMART



PALO ALTO

A Student's Guide to Smart Biking



The great thing
about biking
when you're a kid
is all the *places* you
can go.

Biking is about
fun, freedom &
friends.



And now more than ever, biking is one of the best things we can do for ourselves, our community and the planet.



Remember to
physically distance
distance when riding

--

Leave at least 6 feet
between yourself,
other riders,
pedestrians &
outdoor diners,
unless you are
wearing a mask.



As long as you ride 6 feet from others you don't need to wear a mask,

BUT carry one in case the street or trail gets crowded, or if outdoor diners are sitting close to where you are riding.



Knowing how to get
around safely and
well on your bike can
be your
ticket to freedom.

Here's what you need
to know about riding
the streets...

These Slides Address the Following:

Part 1: Riding Basics: Where and How

Part 2: Staying Safe: Stopping and Rules of the Road

Part 3: Riding in Groups: With Friends & Family

Part 4: Stuff you Need: Helmets and Lights

Part 5: Biking All Year Long

1. Riding Basics: Where and How



Where to Ride

Bicyclists should ride
in a straight,
predictable line
in the same direction
as car traffic...

Where to Ride

BICYCLE



VEHICLE

...because under traffic law,
bicyclists have the same rights
and responsibilities as motor vehicles.



Where to Ride

Ride in the bike lane when there is one and be mindful of obstacles like parked cars, trash cans or debris that might block your lane.



"SHARROW"

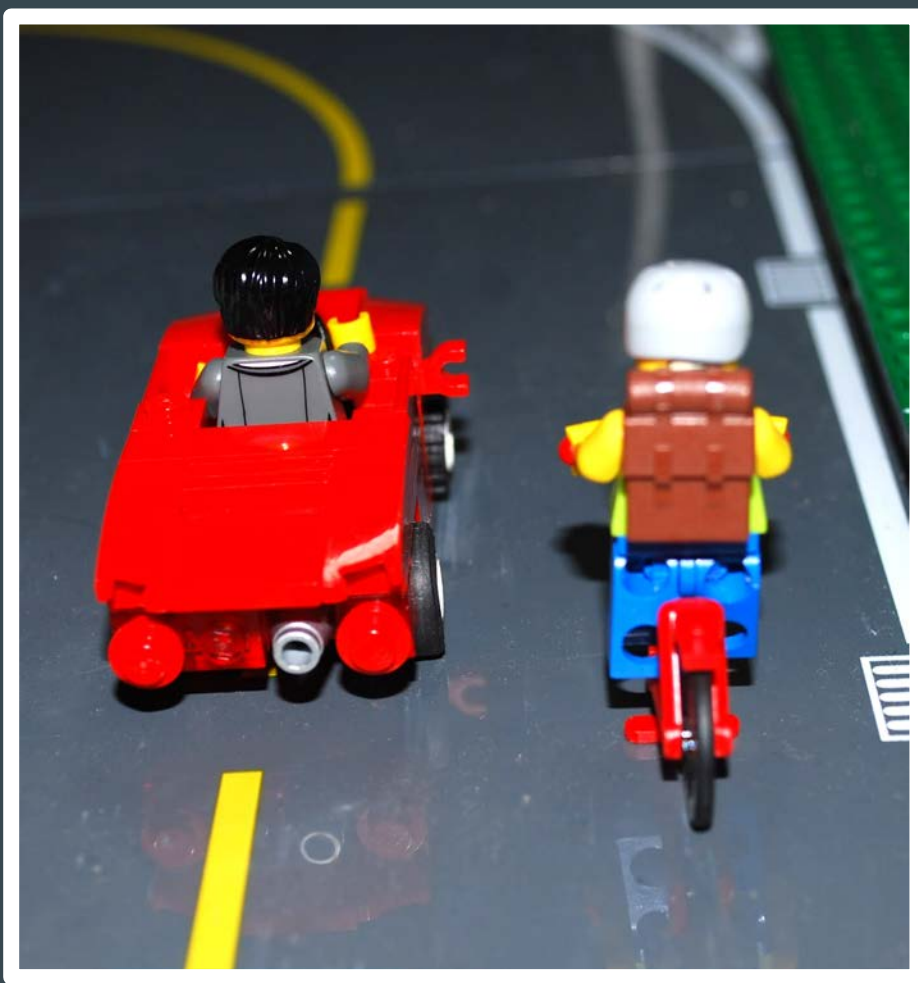
Where to Ride

When you see this symbol, a "sharrow," it means a lane is meant to be shared by vehicles *and* bicyclists. The arrow points to where on the road bicyclists should be riding.



Where to Ride

When there is no bike lane and no sharrow, ride at least an arms length from parked cars (up to 6-8 feet) so that if a parked car's door suddenly opened, it wouldn't hit you.



Where to Ride

Faster traffic should pass slower traffic, when it's safe, **ON THE LEFT.**

When there are two lanes, slower traffic should only be in the left lane if about to make a left turn.



Hot Tip!

Keep a close eye on windows and mirrors of parked cars, since movement inside means the driver may be about to move or open the car door.



Where to Ride

If possible, ride on streets that don't get much car traffic, and try to use off-street bike paths when available.



Where to Ride

For 'Walk & Roll to School' maps, go to the Palo Alto Safe Routes to School website.

www.cityofpaloalto.org/saferoutes

The "Walk and Roll to Palo Alto Libraries" maps suggest good routes across town.



How to Ride

Predictability is super important on streets.

Everyone should be able to tell what others are likely to do next.

That's why following the rules of the road is crucial.



How to Ride

Ride in as straight a line as possible as you follow the road.

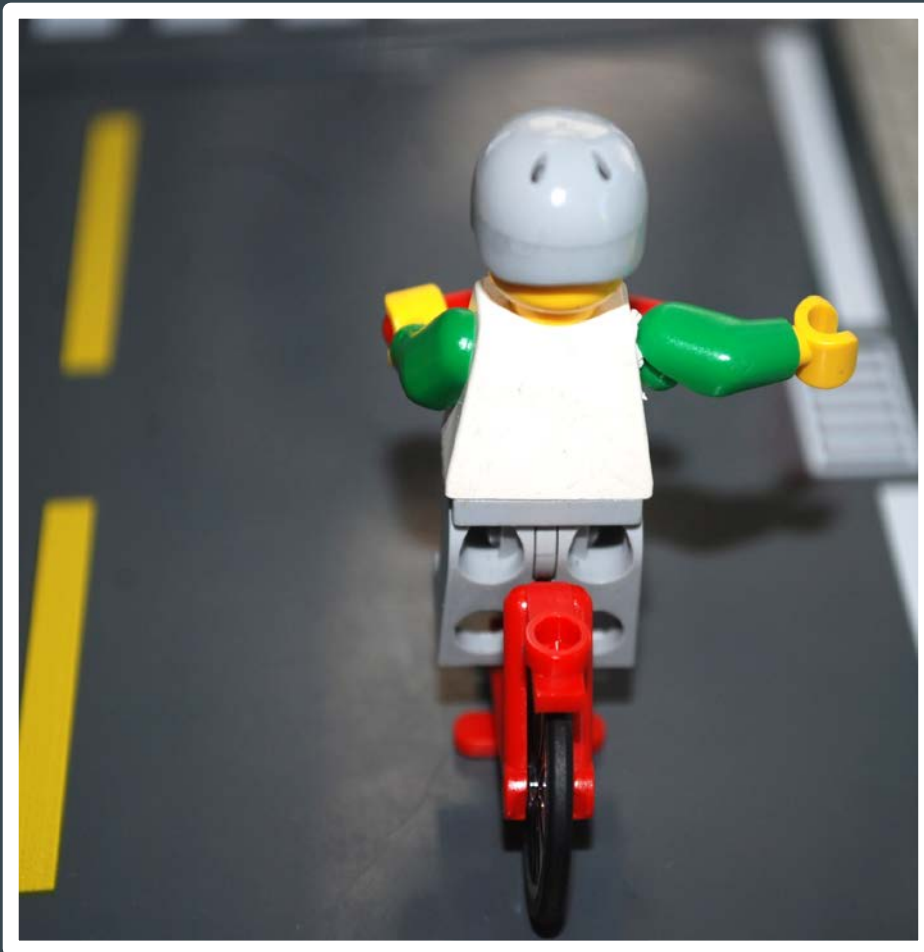
Unless you SIGNAL or are in a turning lane, others expect you to keep going straight.



How to Ride

DON'T weave in and out of parked cars.

It surprises drivers and other bikers when someone suddenly pops out from behind a parked car.



How to Ride

Bikes don't have turn signals like cars.

HAND SIGNALS
are how bikers let
others on the road
know they plan to
change lanes or turn.



How to Ride

Before you signal
to change lanes or
turn,

**LOOK over your left
shoulder**

to scan for traffic

Then

**LOOK over your left
shoulder** one more

time before you
merge

MIRROR



Hot Tip!

One of the best safety devices for bikes is the **BICYCLE REAR-VIEW MIRROR.**



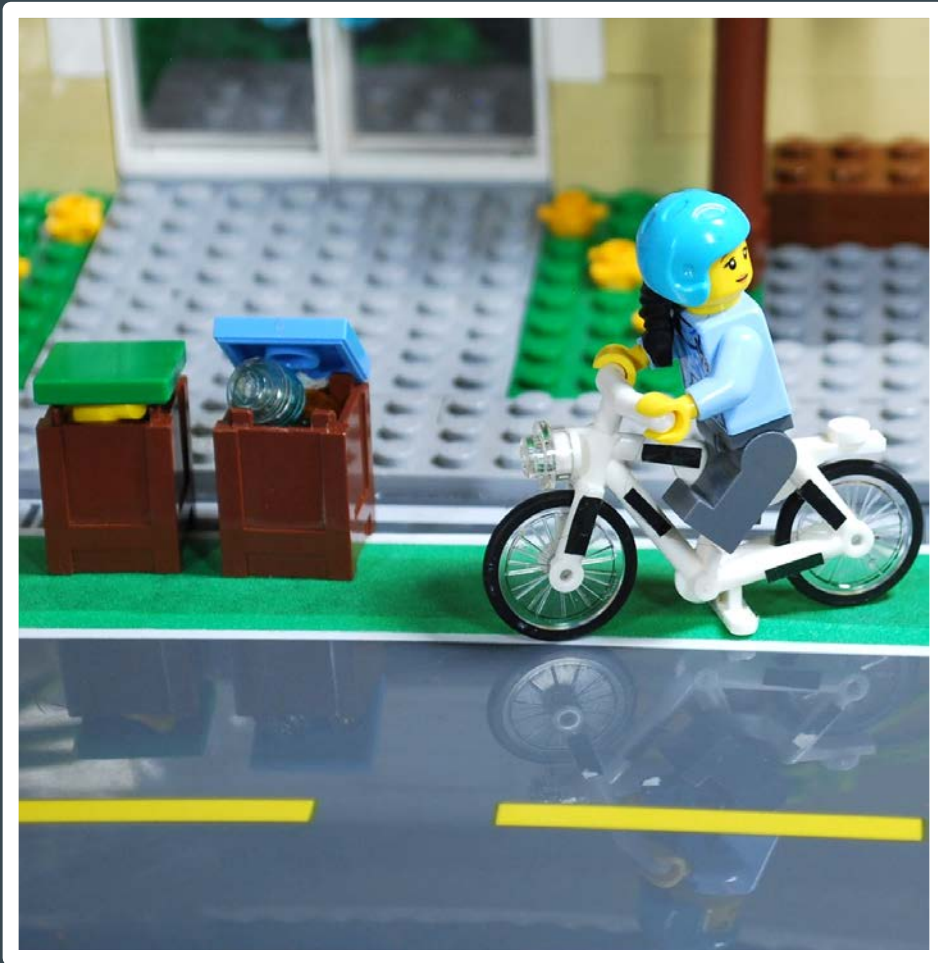
How to Ride

Knowing how fast someone is coming from behind and if they've seen you lets you know if you need to get the driver's attention or even pull over for safety.



How to Ride

Best of all, a rear-view mirror lets you track who's coming up from behind *without having to look away from the road ahead nearly as often.*



How to Ride

But even with a mirror, make sure you **ALSO ALWAYS TURN AROUND** to double-check the way is clear before changing lanes or turning.



How to Ride

When you turn around to look behind, it's easy to accidentally SWERVE.

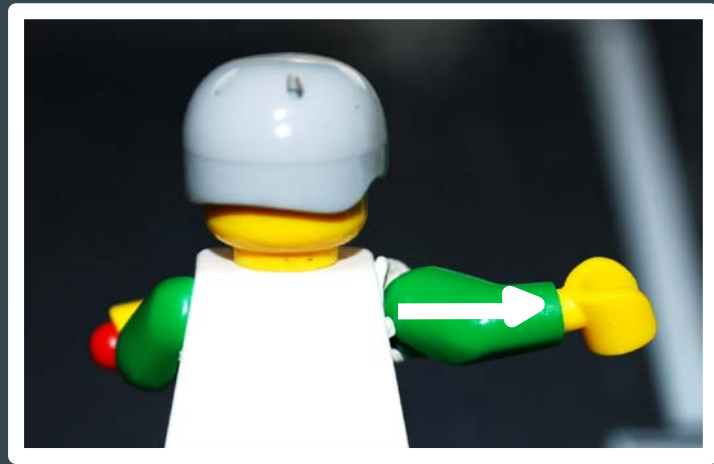
So PRACTICE off the street until you can look behind without swerving.



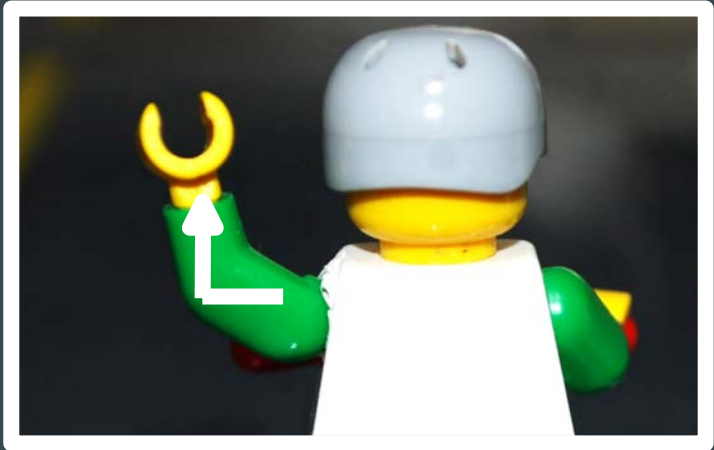
How to Ride

To signal a
LEFT TURN:

Point with your LEFT
arm straight out to
the left



OR



How to Ride

To signal a
RIGHT TURN:

Point with your
RIGHT arm straight
out to the right.

OR

Raise your LEFT hand
with a bent elbow

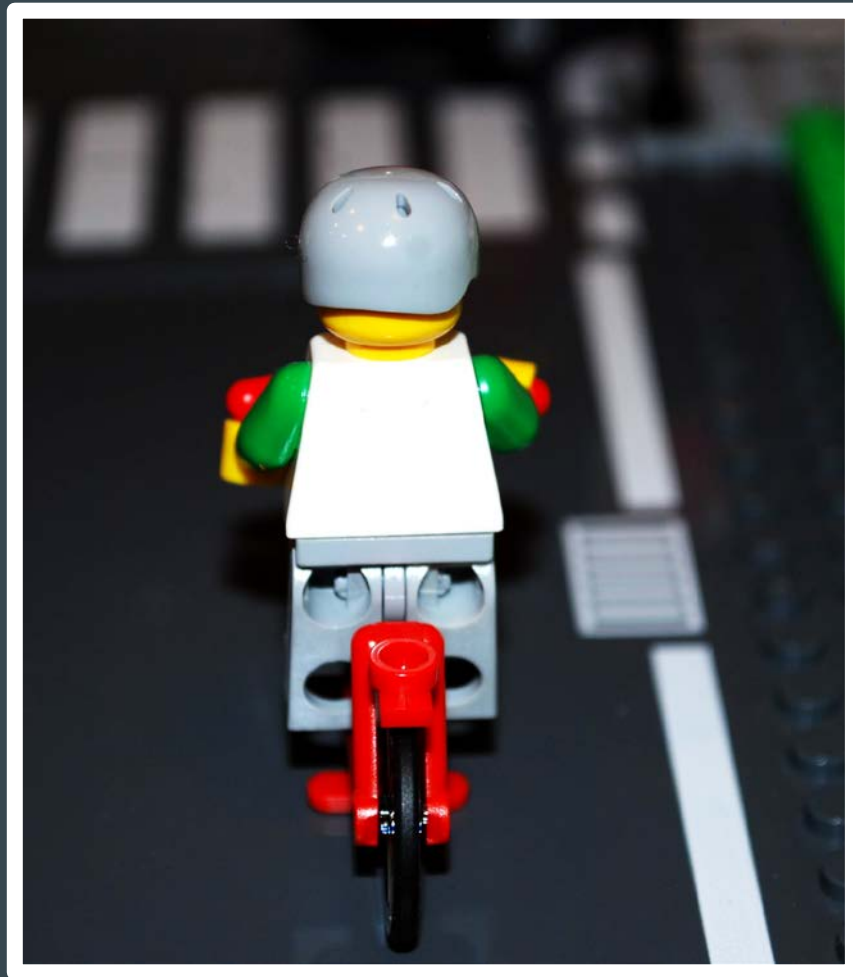


How to Ride

To signal a **STOP**:

Bend your left arm down with your open palm to the back.

(No need to signal 'stop' at a stop sign, only when others aren't expecting you to stop.)



How to Ride

Remember, NOT
signalling
tells drivers, other
bicyclists, and
pedestrians you PLAN
TO KEEP RIDING
STRAIGHT.



How to Ride

Sometimes drivers
(and bicyclists)
FORGET to signal.

WATCH OUT for cars
& other bicyclists who
may have forgotten
to signal.



Did you know?

The fine for forgetting to signal before turning or changing lanes is \$238 in California. (Plus, for drivers, \$1,000+ in higher insurance costs.)

2. Staying Safe: Stopping & Rules of the Road



Staying Safe

Most crashes can be avoided if you pay close attention to your surroundings.



Staying Safe

One of the most important senses you need when biking is HEARING.

Legally, one earbud is allowed, however avoid wearing **ANYTHING** that blocks your ability to hear.



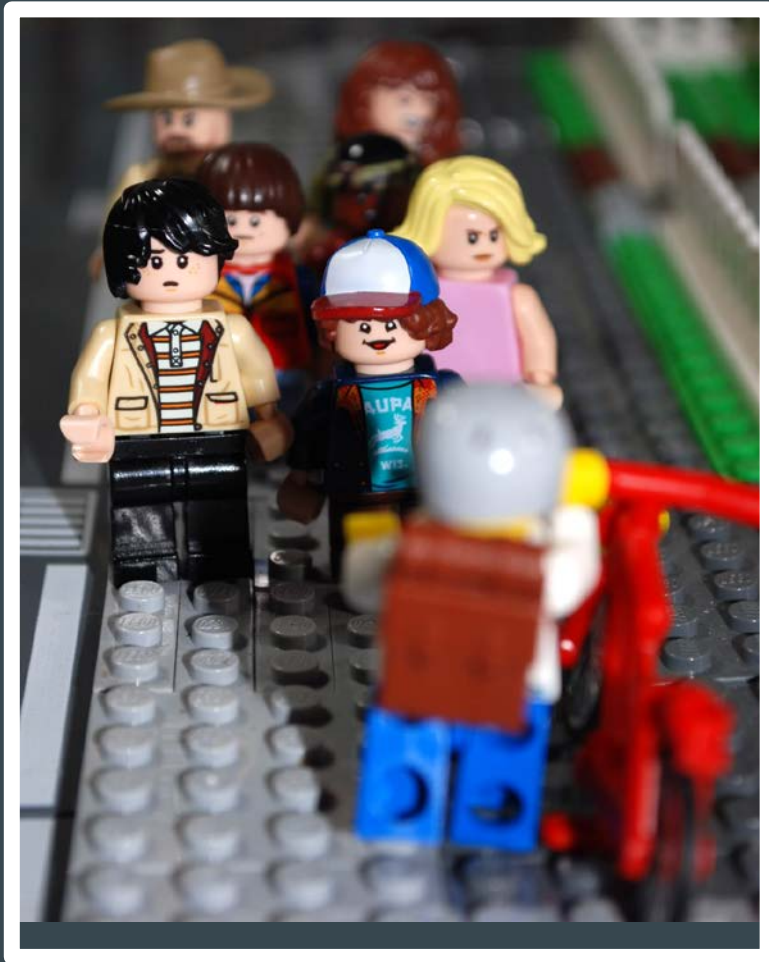
Staying Safe

Be really careful when you ride out of a driveway. **LOOK LEFT, RIGHT & LEFT AGAIN** to make sure the sidewalk and roadway are clear.



Staying Safe

Cars parked on the street are hard to see around, so 'inch out' slowly until you can see around them to make sure the way is clear.



Staying Safe

If the sidewalk is crowded...

or you are downtown
on

- Cal. Ave. or
- University Ave.

...you will need to
WALK YOUR BIKE.



Staying Safe

Riding on sidewalks
IS NOT ALLOWED in
the Cal. Ave. or
University Ave.
business districts.



Staying Safe

If for safety reasons you *need* to ride on a sidewalk then ride no faster than if you were walking. Get off your bike if you need to pass by walkers.

Staying Safe



If you are on the
sidewalk
**WATCH
FOR CARS**
that might be pulling
out of or into
driveways

BLIND SPOTS



Staying Safe

Drivers have
BLIND SPOTS
where the frame of
their car
blocks their view.

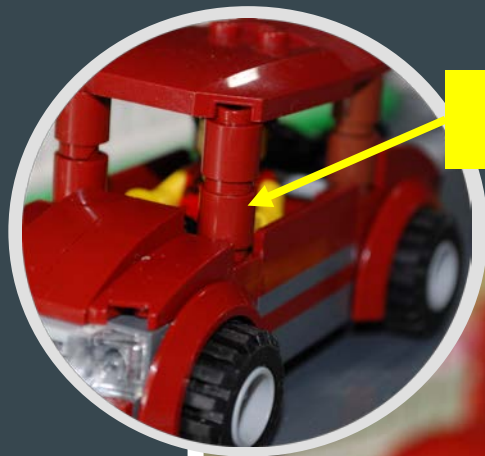
Don't assume a car
YOU CAN SEE has
SEEN YOU.



BLIND SPOT

Staying Safe

Drivers can't check their blind spots well **UNTIL THEY STOP MOVING**, so a car that doesn't make a complete stop can easily miss seeing a biker or walker.



BLIND SPOT



Staying Safe

#1 Rule:

**ALWAYS
MAKE EYE
CONTACT**

...with drivers before
you ride out in front
of them.

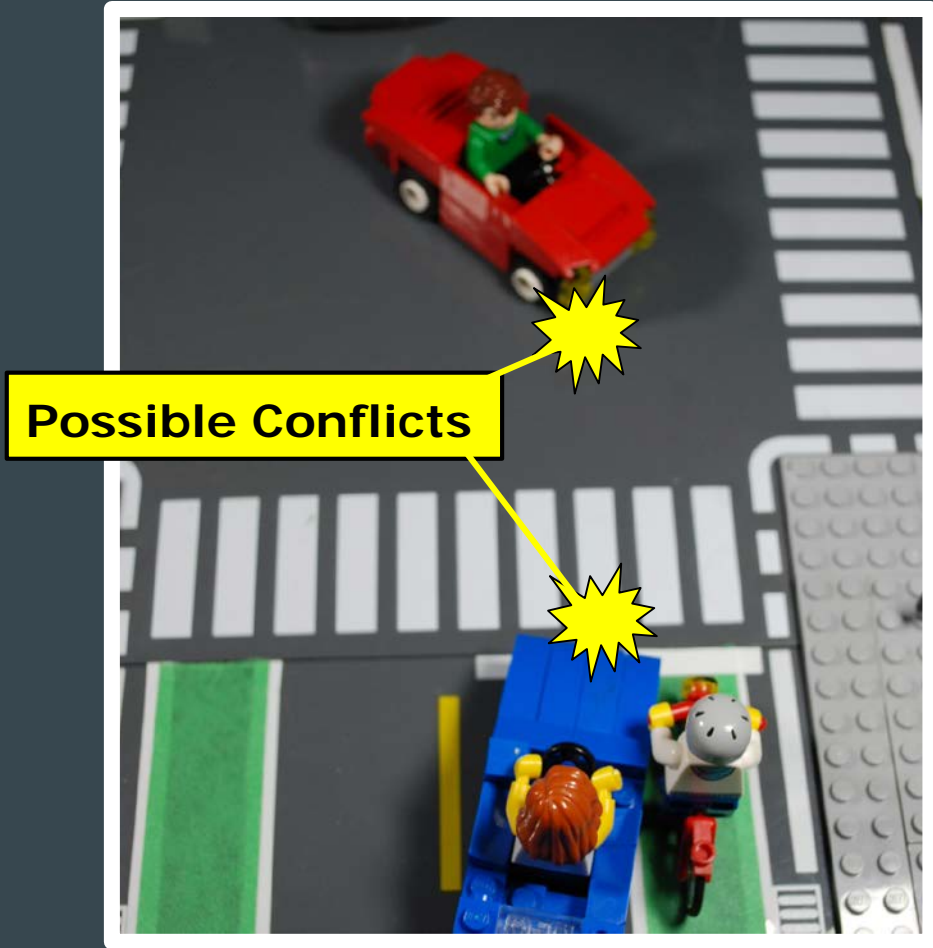


Avoiding Collisions

Sometimes in a bike lane traffic next to you will slow *way* down, and you find yourself in the awkward position of passing drivers *on their right...*

Avoiding Collisions

Ride EXTRA carefully when traffic slows down or when approaching an intersection from the bike lane. *Drivers don't expect anyone to pass on their right and may unexpectedly turn into your lane.*





Stopping on a Bike

Traffic law
REQUIRES
BICYCLISTS TO
COME TO A
COMPLETE STOP
at stop signs, like
cars.



STOP LINE!

Did you know?

Not stopping
completely
AT THE STOP LINE
(*before the
crosswalk*)
can cost you a
\$238 fine *and* result
in a collision



Stopping on a Bike

Even if NO cars or pedestrians are around, bicyclists *still* need to stop at every stop sign...



Balancing in place

Stopping on a Bike

...but, if no cars are around, bicyclists sometimes stop by **BALANCING IN PLACE** instead of putting their foot on the ground. It's called a 'track stand.'

Stopping on a Bike



Most cyclists don't know how to do a track stand.

If you don't know how to do one, put your foot on the ground to indicate that you are stopping at a stop sign.



Stopping on a Bike

Riders who are really good at track stands can balance upright in place indefinitely.



Stopping on a Bike

No one *likes* to stop at stop signs, least of all bicyclists because it loses momentum.

But because that's the law, we have to follow it.

My leg
muscles are
SO much
stronger!

My balance is
SO much
better!



Stopping on a Bike

Instead of focusing on being ANNOYED at having to stop, focus on the OPPORTUNITY stopping brings to practice your balance and workout your muscles.

Hot Tip!



As you slow down to stop, **SHIFT DOWN** to a gear that makes it easier to pedal.



Rules of the Road

**AT INTERSECTIONS &
CROSSWALKS**

**PEDESTRIANS HAVE
THE RIGHT-OF-WAY,**
which means *the right to
go first*. But don't
assume that because you
have the right-of-way
someone will let you go
first. Always make eye
contact before crossing



Rules of the Road

A pedestrian is anyone walking, running, in a wheelchair, or on a NON-electric scooter or skateboard.

**These are 'like
vehicles' also...**

Rules of the Road



E-scooters...

Electric scooters and
electric skateboards
can not be ridden
without a valid
driver's license.



...and E-skateboards

Hot Tip!

Anytime a bicyclist wants to cross the street using the crosswalk, they need to get off & WALK their bike.

This is especially important when trying to cross a busy street.





Did you know?

A bicyclist or driver who **DOESN'T LET A PEDESTRIAN GO BEFORE THEM** at an intersection or crosswalk can be fined \$238.

1. Vehicles get to go according to who arrived **FIRST**

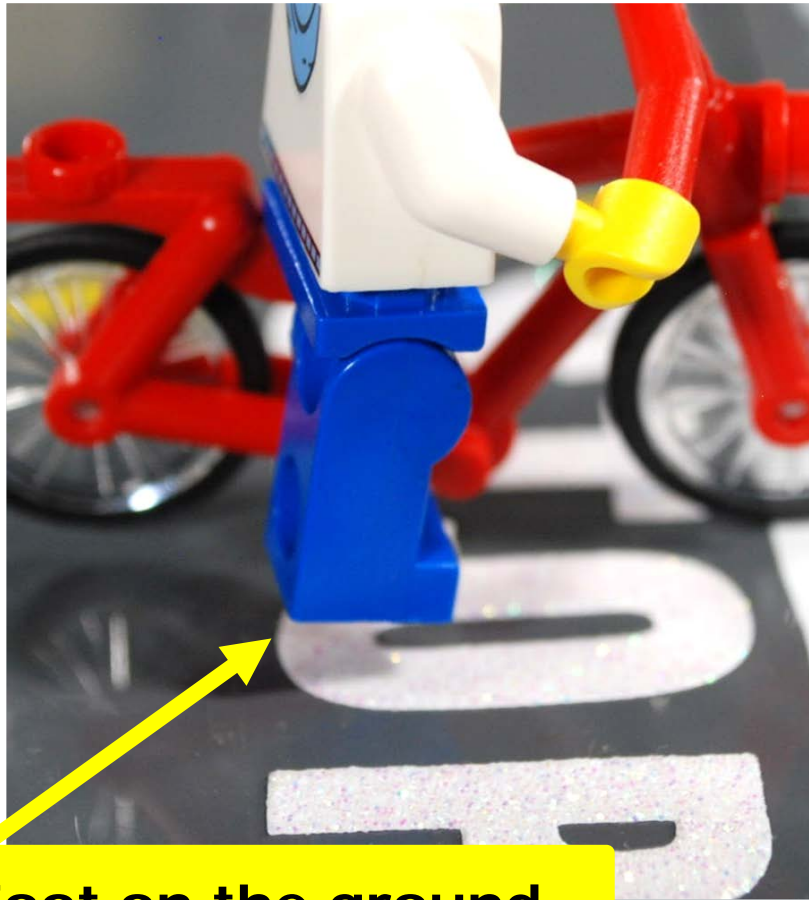
Rules of the Road



At a **4-WAY STOP**
(once pedestrians
have crossed)
cyclists & drivers
get to go in the order
of who stopped fully
at the **STOP LINE**
FIRST.

Hot Tip!

When other bicyclists & drivers are at the intersection with you, **putting a foot down** when your front tire reaches the STOP line helps everyone know when you've 'arrived' at the intersection.



Foot on the ground



Hot Tip!

Drivers will often want to let cyclists go first at intersections, regardless who has right-of-way.

Practice letting drivers go ahead if they have right of way. Everyone will be safer!



Rules of the Road

Not all intersections are **4-WAY STOPS**.

Look **UNDER** the **STOP SIGN** to see how many directions of traffic have to stop, *especially* at Traffic Circles.

Rules of the Road



At this **Traffic Circle** only *two* directions of traffic have to stop. The bicyclist must wait for the car to pass before entering.

Roundabouts follow similar rules, except all traffic must **YIELD** to traffic in the circle.

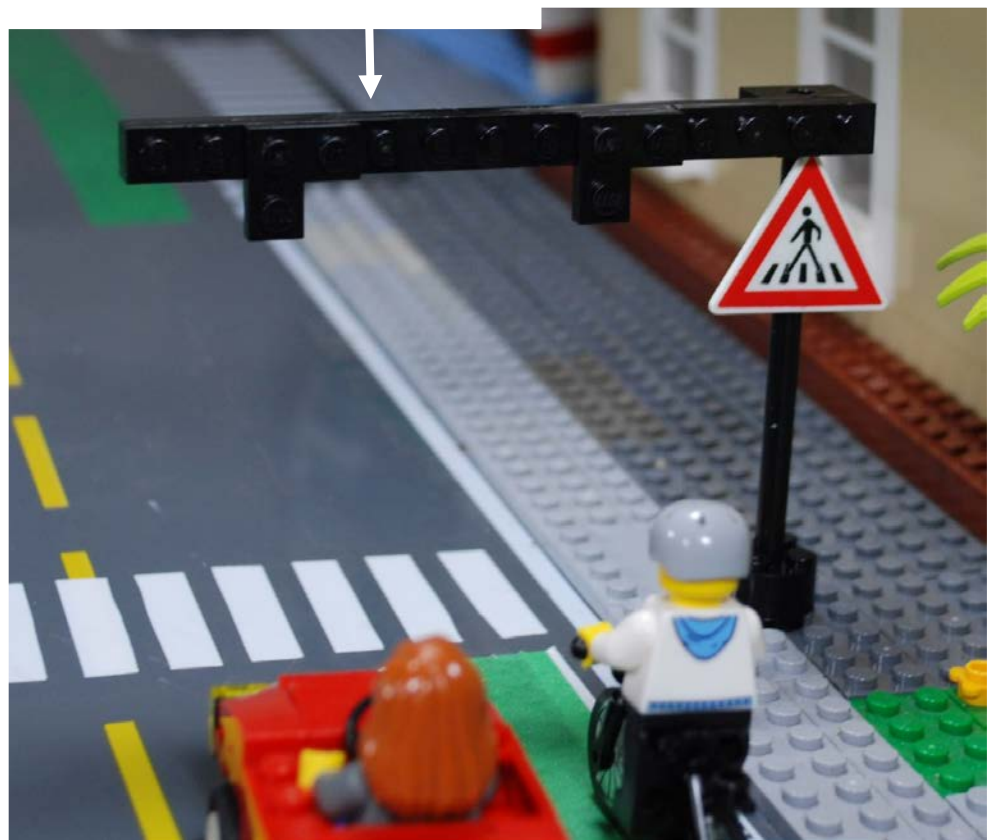
Rules of the Road



Once cross traffic is clear, the bicyclist can enter the traffic circle or roundabout.

Ride **in the middle** of the travel lane so no one tries to squeeze by and pass you unsafely.

Pedestrian Beacon



Rules of the Road

Pedestrian beacons help pedestrians cross busy streets. **They only come on when a pedestrian pushes the crosswalk button.**

Yellow Lights means PREPARE to stop



Rules of the Road

When a pedestrian pushes the pedestrian beacon button, the light flashes yellow, then solid yellow, then solid red. Yellow means PREPARE to stop.

Solid Red Lights means STOP



Rules of the Road

When the pedestrian beacon is solid red traffic must stop for pedestrians to cross.

**Flashing Red Lights means STOP,
CHECK if crosswalk is clear, GO if so**



Rules of the Road

When the pedestrian beacon starts flashing red it means traffic must stop, check for any pedestrians still crossing, then proceed only if the crosswalk is clear.

3. Riding in Groups:

Fun With Friends &
Family

Riding in Groups

When riding in a group on a lane shared with cars, you may need to ride single file so cars can still pass you safely on your left.





Riding in Groups

Riding side-by-side should only happen when no cars are trying to pass from behind. (A rear-view mirror helps you track this.)



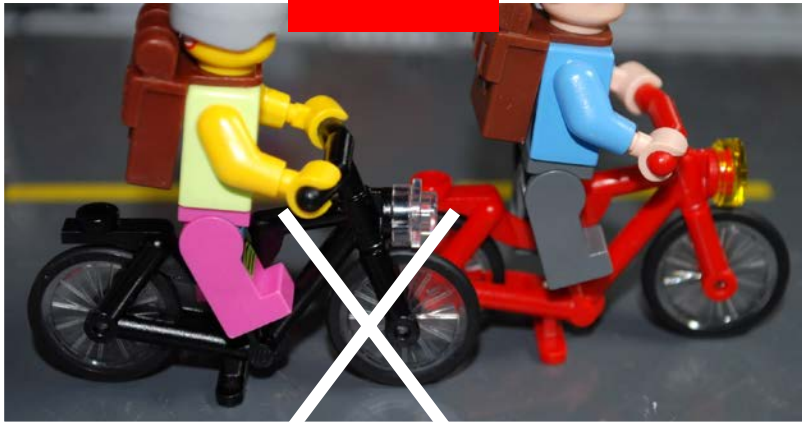
Riding in Groups

If you find yourself in a large group try to ride with no more than 1 cyclist, or the width of a car, next to you.

YES



NO



Riding in Groups

LEAVE SPACE
between riders and
DON'T OVERLAP
WHEELS

with the rider ahead.
If they move over to
dodge an obstacle
you'll both go down.



Passing on
your left!

Riding in Groups

To pass a slower biker on the street (or a pedestrian on a path) call out ***"PASSING ON YOUR LEFT"*** before you ride by them on their left side.



Riding in Groups

No matter how tempting, **NEVER SPEED UP** when another bicyclist is passing. For safety, they need to be able to get around you quickly.



Riding in Groups

If you see a hazard in the road ahead (like a pothole, rock, bump, glass, etc.), call it out and point down to it to warn the cyclists behind you as you go around it.



Riding in Groups

Each biker in a group is responsible for making a complete stop at every stop sign, and following the rules of the road...



Riding in Groups

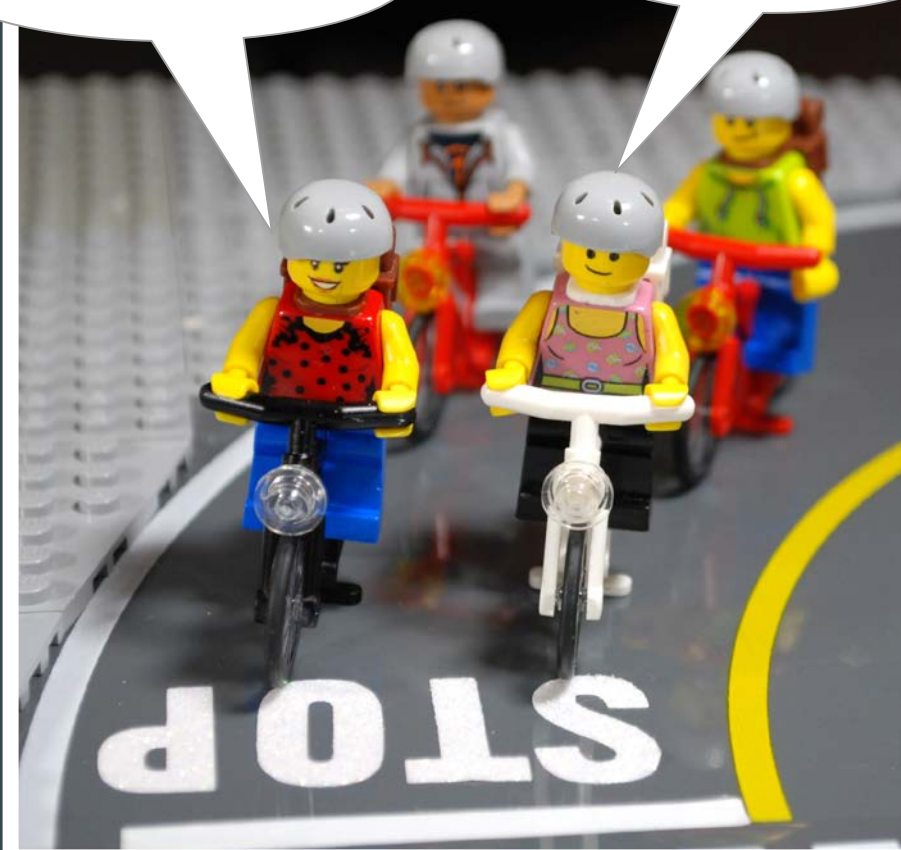
...BUT, up to two bicyclists can STOP next to each other at a stop sign *if* they are **RIDING TOGETHER/GOING THE SAME WAY.**

STOPPING!

BRAKING!

Riding in Groups

When riding in a group it helps to call out "*Stopping*" or "*Braking*" as you slow down, so that bikers behind you can react more quickly.





Riding in Groups

You have the right to use the full lane and drivers can only pass when they have 3 feet of clearance.

BUT, If 5+ cars are behind a bicyclist, by law the biker has to pull over to let the cars pass.

4. Stuff You Need: Helmets & Lights



Helmet

Helmet protect your brain in case of a fall or crash. Without a helmet your risk of head injury or concussion in a crash is much higher.



Did you know?

Inventors created a helmet to look like LEGO minifigure hair. Someday, LEGO fans may get to wear their favorite LEGO hair as a helmet!

Helmet

Meanwhile, a helmet was also invented that decreases your concussion risk in a bike accident by nearly 98%! And unlike LEGO hair helmets, ARE already available.





Helmets

Under California law, youth under 18 have to wear a well-fitting, **BUCKLED HELMET** when riding wheels like bikes, scooters and skateboards.

FITS
SNUG
&
LEVEL



Helmet

A well-fitting helmet should feel snug but not tight and sit level on the head...

To fit a helmet, remember the **"2-2-2 Rule"**.

SITS
JUST
ABOVE
EYES



Helmet

... not more than
2 fingers
should fit between
your eyebrow
ridge & the
helmet...

STRAPS
MAKE "V"
JUST
BELOW
EAR



Helmets

...the straps
should make
2 V's
that meet just
below your
earlobes...

Helmets

...and

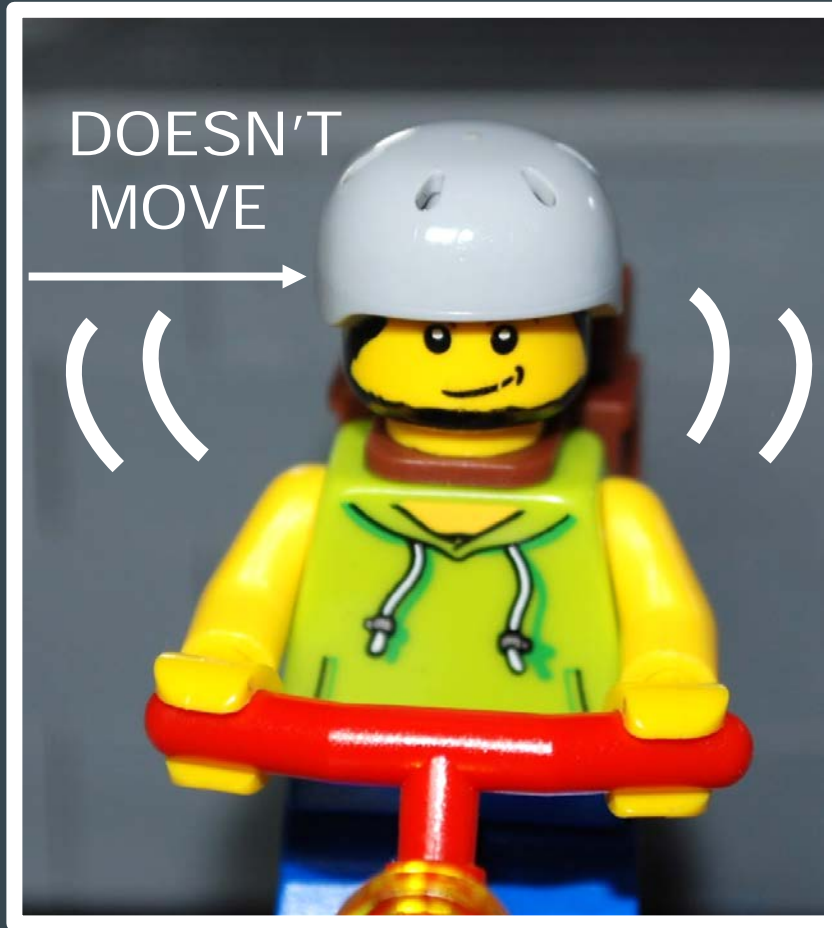
2 fingers

should fit between
your chin and the
helmet's chinstrap.



Helmet

When you shake
your head the
helmet shouldn't
move.



Helmets

The protective material in helmets breaks down over time so they need to be replaced every 3-5 years for growing students. If you are ever involved in a bike crash replace your helmet, even if it seems wearable.





Helmets

Wear a helmet.
Buckle it.
Protect your brain.

Also it's the law.

Please don't make
anyone have to
remind you.



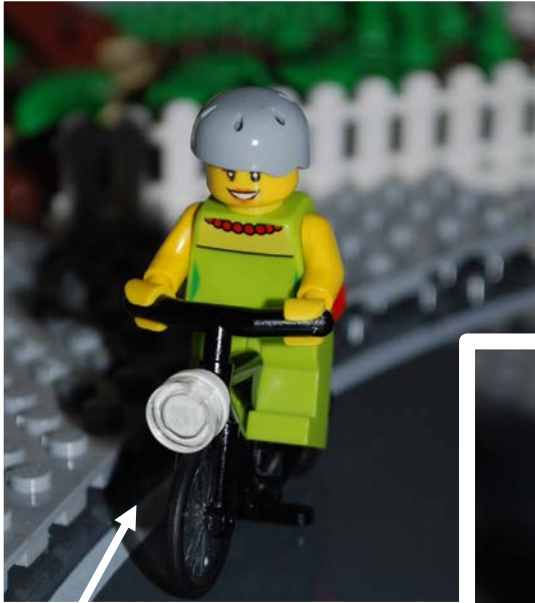
Did you know?

On a bicycle,
**YOU ARE SAFER IF
YOU CAN BE SEEN,**
so wear bright or
light colors, even
when riding during
the day, but
especially at night,
when possible.

Lights

When riding at night
bikes are required by
law to have a
**WHITE LIGHT IN
FRONT.**

A
RED TAIL LIGHT is
also essential to
keeping you safe.



White Light-Front



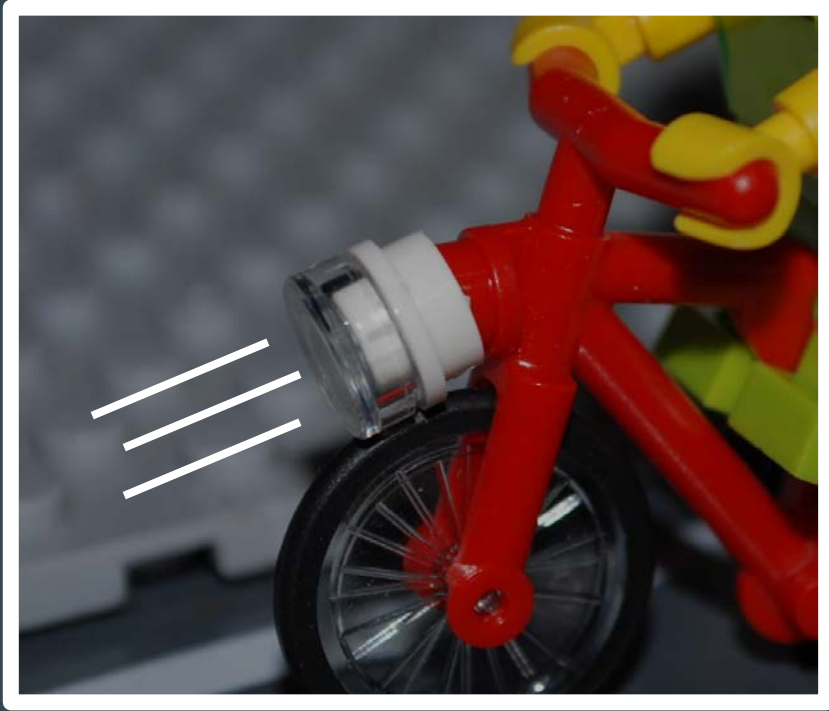
Red Light-Back

Lights



Even a flashlight or phone light strapped **securely** to your handlebar will work as a white light on the front.

Lights



At night,
aim your front light
slightly **DOWN**
so you can see the
road and so you don't
blind oncoming
drivers.



Lights

During the day, use your lights in rain, fog, during the winter months when the sun reduces visibility or to be more visible.

Lights

During Daytime use
Brightest Setting

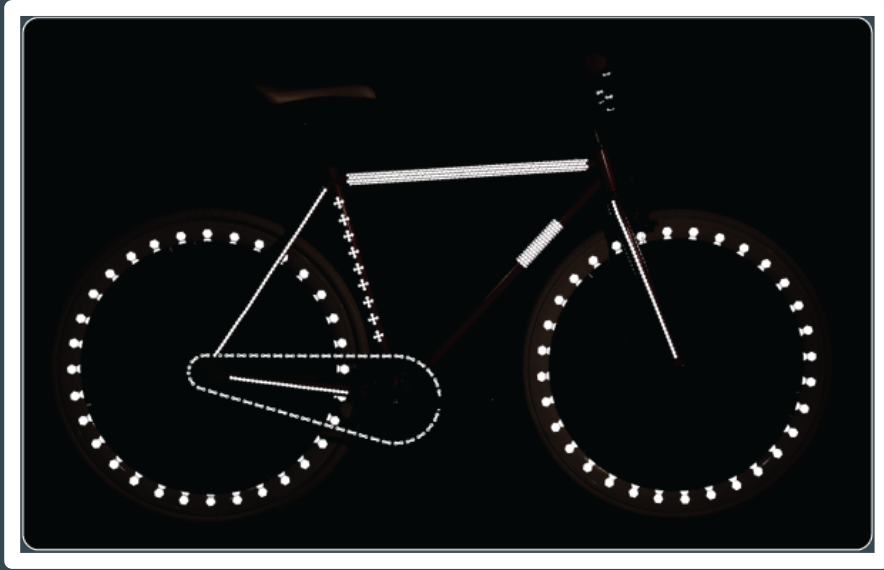


At Night use
Dimmer Setting



The **BRIGHT** setting on lights is great for **DAYTIME**, but the **DIMMER** setting is better at **NIGHT**, so you don't blind drivers.

Lights



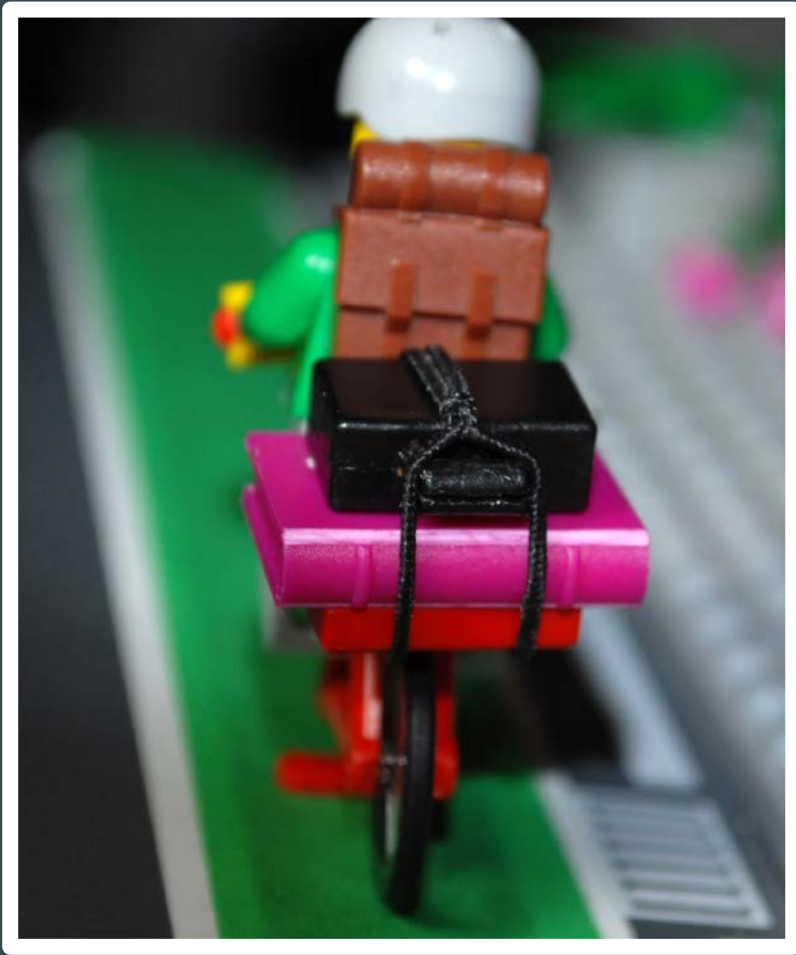
You can add stick-on reflectors to your bike and helmet to be seen better by cars at night.

Reflective bike tires and clothing help too.



Useful Accessories

Use baskets and racks and special bags called “panniers” to securely carry musical instruments, sports equipment or anything you might need.



Useful Accessories

Secure large items,
as needed, with
bungee cords.

Useful Accessories

Make sure nothing
dangles where it can
get caught in the
wheels or chain



Dangling Cord!

Useful Accessories

Don't carry items on
your handlebars or in
your hands.

You need both hands
to steer and brake!



Useful Accessories



Always lock your bicycle when leaving it. Lock the frame and at least one tire to rack. U-locks are recommended. Practice using your lock before riding.

5. Riding Year-Round



Riding Year-Round

BEFORE each ride,
do a quick safety
check, called the:

**"A.B.C.
QUICK
CHECK"**



Riding Year-Round

A is for AIR

Squeeze the tires to make sure they aren't low or flat.

Add air if they are, or ask an adult to help.



(PSI stands for "pounds per square inch")

Riding Year-Round

Check the side of your tire for how much air it needs, every tire is different. The maximum helps you roll fastest. Riding below the minimum can get you a "pinch flat".

Riding Year-Round

B is for BRAKES

Squeeze the brakes to make sure they stop the bike.

Don't ride if they don't, or if you have to squeeze the brake too tightly to make it stop.



Riding Year-Round

C is for CHAIN

If you are having trouble shifting or turning the chain it may need to be cleaned/oiled. Ask an adult for help with this.





Quick Release Lever

Riding Year-Round

QUICK is for
“Quick Release”

IF your bike's tires
(or seat) have 'quick
release' levers, make
sure they are tight.

Tighten if loose.

Riding Year-Round



CHECK is for “Check Your Overall Bike ”

Start riding your bike slowly to check for loose or broken parts, or make sure you have your lock, a water bottle, rain gear, sunscreen etc., if needed

Riding Year-Round

Also **CHECK** to make sure you have sunglasses, water, rainwear, etc. and start your ride slowly to make sure there are no issues.

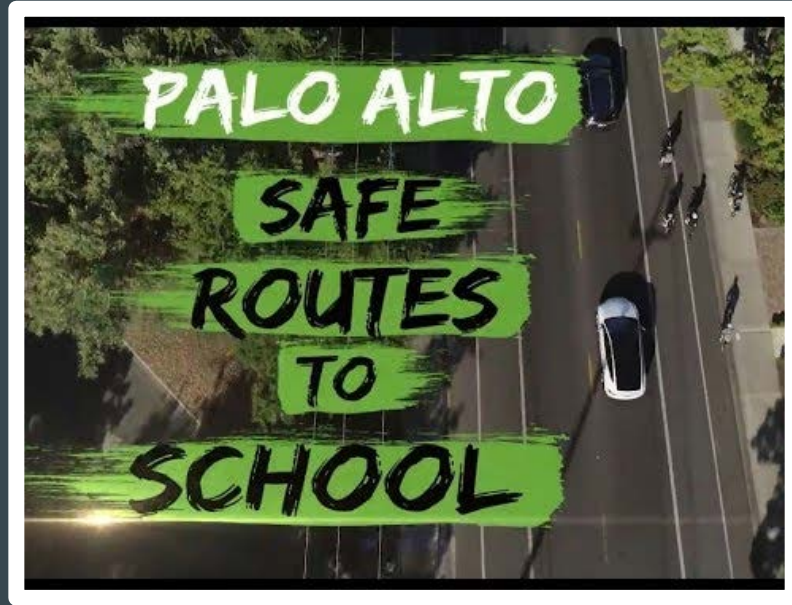


Thanks for learning,



Have fun on your bike!

Special thanks to Sonia Elkes for creating this presentation content.



For more updates, check out Palo Alto's Safe Routes to School website at cityofpaloalto.org/saferoutes