

Signs, Signals and Safety





Time: 25-30 minutes

Studies have demonstrated that skill-building activities are the most effective way to promote retention of bicycling safety skills. Lesson objectives set the stage for building safety skills, which are emphasized through learners' participation in class activities. This curriculum does not cover every possible scenario that a child may encounter as a bicyclist but instead addresses the basic skills needed to be a safe bicyclist. Instructors should use their discretion to break up material to accommodate their daily schedules. The Skill-Building Activity is an essential component to this curriculum and all lessons should be complemented with the reinforcement of safe bicycling behavior. More time can be spent on practicing skills if children are already familiar with the core material.

Lesson Objectives

The objective of this introductory lesson is to teach kids basic signs and signals associated with traffic and to learn safe behaviors when riding a kid vehicle such as a scooter, tricycle or bicycle. It is important to emphasize that children at this age should not practice in traffic, however, they are gaining the knowledge to one day become independent pedestrians and bicyclists. Having these skills can enable them to develop and maintain healthy behaviors and be safe bicyclists, pedestrians, and drivers in adulthood.

The children will be able to:

- · Identify safety symbols and colors used in everyday life.
- · Identify vehicles and traffic according to size.
- · Recognize and understand basic traffic signs.
- Use hand signals for right, left, and stop.
- Recall good behaviors to use when riding a bike.

Why This Lesson is Important

Practicing safe behaviors and interpreting transportation related signs and signals is a step in the evolution of independence and autonomy, especially through developed decision-making skills. This lesson gives kids a better understanding of their everyday environment and community. This lesson covers fundamental parts of traffic safety: signs, signals and safe behaviors.

Applicable Standards of Learning



Essential Standards

- PE.K.PR.4.3: Use safe practices when engaging in physical education activities.
- K.PCH.2.1: Recognize the meanings of traffic signs and signals.
- K.PCH.2.4: Identify appropriate responses to signs, sounds, and labels.
- PE.K.HF.3.2: Identify opportunities for increased physical activity.
- K.C&G.1.2: Explain why citizens obey rules in the classroom, school, home, and neighborhood.

- PE.1.PR.4.3: Use safe practices when engaging in physical education activities.
- 1.C&G.1.1: Explain why rules are needed in the home, school and community.
- 1.NPA.3.2: Recall fitness and recreation activities that can be used during out- of- school hours.
- EEn.2.5.5: Explain how human activities affect air quality.

Common Core

- CCSS.ELA-Literacy.L.K.6: Use words and phrases acquired through conversations, reading and being read to, and responding to texts.
- CCSS.Math.Content.K.CC.B.5: Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration
- CCSS.Math.Content.K.OA.A.2: Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
- CCSS.ELA-Literacy.L.1.6: Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., because).
- CCSS.Math.Content.1.OA.A.1: Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions

Guidance

- RED.C.2.1: Identify situations from your daily life in terms of problems and solution strategies.
- EEE.SE.1.2: Illustrate personal responsibility in a variety of settings and situations.
- P.SE.1.2: Use self determination to build independence.



Signs, Signals and Safety

Materials

- Flipchart
- Vocabulary Cards
- Vehicle Cards
- · Signs and Signals Cards
- · Color Cards for Red Light / Green Light! activity
- Parent/Caregiver Tip Sheet
- Traffic Jam! Worksheet
- · Child Assessment Worksheet
- Child Assessment Instructor Question and Answer Key

Vocabulary

(See word list and definitions at the end of this lesson)

- Traffic
- Vehicles

Preparation

Create color cards for the Red Light / Green Light! activity in advance. Three paper plates colored red, yellow, and green work well for this activity.

Part 1 – Discussion and Demonstration

► Time: 10-15 minutes

- 1. What is Traffic?
- 2. Understand Traffic Signals
- 3. Understand Traffic Signs
- 4. Follow the Rules.

Introduction

The instructor will...

- · Describe what traffic and vehicles are.
- · Show traffic signs and describe what each means.
- · Describe safe bicycling behaviors.
- Discuss basic rules to observe when riding a bike.

Today, we are going to learn about basic safety, signs and symbols. Knowing and understanding these will help keep you safe when you are outside. Then we are going to talk about some basic rules to follow. You should always use your eyes and ears when you are outside and be alert for traffic sounds such as horns, sirens, or train whistles.





1. What is Traffic?

Let's talk about vehicles. All of these things are vehicles because they move people and things.

[Instructor shows Vehicles vocabulary card]

All of these vehicles have wheels.

[Instructor shows Traffic vocabulary card]

Let's brainstorm what is meant by traffic.

[Instructor has kids name different kinds of traffic (e.g. cars, trucks, buses, motorcycles, trains, semi-trucks etc.) and writes them down on a flipchart]

Traffic is what we call vehicles when they are moving in a group.

Display the **Traffic Jam! Worksheet**, found in the Materials section. Ask children to name each vehicle, describe the sound it makes, and count the wheels. Ask children to name the vehicles in order from largest to smallest.

2. Understand Traffic Signals

First let's talk about the colors red, yellow, and green. Can anyone tell me where you see these colors outside?

Red, yellow, and green are found on a traffic signal! A traffic signal tells directs drivers what to do when they approach by using colored lights. If a driver does not understand what to do when they see a color on the traffic signal, they could crash into another vehicle.

Let's go over what each color means.

- RED is a warning color. It means stop.
- YELLOW means to look and listen for danger. Prepare to stop.
- GREEN means go when it is safe.

Remember these colors, because we are going to play a game later.

[Instructor repeats what each color means and shows them on the Traffic Signal card.] When you are at a red signal, you wait for the light to change to green before you can go.

Often, next to a traffic signal you will see another signal. Walkers and others on the sidewalk obey this signal so they know when it is safe to cross the street. Young bicyclists may also use this signal.

[Instructor shows Pedestrian Signal card.]

If a person on the sidewalk does not understand or obey this signal, there could be a crash.

What do you think the RED hand means? That's right, RED is a warning color. It means to STOP. The other symbol is a walking man and it is WHITE. When the signal changes from RED hand to the WHITE symbol, you can go when it is safe. Always wait for an adult when crossing the street.

3. Understand Traffic Signs

Raise your hand if you have seen a traffic sign before. Why do we have traffic signs?

[Instructor shows Stop Sign Card.]

Can anyone tell me what this sign is? Great! It looks like everyone in this class has seen a stop sign.

What color is a stop sign? That's right, a stop sign is RED. Remember, just like a red traffic signal, a stop sign means to STOP. When you are at a stop sign, you can go once it is clear to do so.

Raise your hand if you have seen one of these before.

[Instructor shows Railroad Crossing Sign.]

Tell me if you know what this sign means.





The railroad crossing sign means that this is a location where trains cross the road. Railroad tracks can often be uneven so it may be dangerous to ride over them on a kid vehicle such as a scooter, tricycle, or bicycle. Some railroad crossings have a gate that closes. You should never go around a closed railroad gate. Listen very carefully and look before crossing railroad tracks to be sure that no trains are coming.



4. Follow the Rules

Now that we've talked about traffic, signals, and signs, let's talk about some basic rules that you need to follow when you ride a kid vehicle such as a scooter, tricycle, or bike. What is a rule? Why do we follow rules?

What is something that you should always wear on your head? That's right, you should always wear a helmet when you ride. Here are some other basic rules to remember:

- Always ask an adult before you ride. Have the adult help you put on your helmet and look over your bicycle to make sure its parts are all working.
- Wear bright colors when riding so others can see you.
- Look and Listen for traffic. Pay attention when you ride.
- Ride on the sidewalk. Small kids vehicles belong on the sidewalk or on a greenway, not in the street with cars. Older kids and adults may ride in the street when they can follow the same rules that other vehicles do.
- **Don't carry things in your hands**. Your hands should be free of objects when you ride. If you have objects to carry, put them in a backpack.
- Stop at the edge. Treat all roadways and driveways as edges like you would if you were walking on the sidewalk. You always stop at the edge of a road or a driveway whether you are walking or cycling.

If you follow these rules you are learning how to be a good bike driver. Remember, you should always ask an adult before you ride a kid vehicle.

Part 2 – Skills Practice

► Time: 15 minutes

It is highly recommended that Instructors have children practice skills that will help them operate a kid vehicle such as a scooter, tricycle or bicycle. Understanding what traffic signals mean and recognizing risky behaviors will help keep them safe. These skills will be the foundation for reacting to signs and signals and riding a bike using safe behaviors later on.

Traffic Light Game

Designate one child as the "traffic light." This child plays the part of the traffic light and displays red, yellow, or green color cards. The other kids line up about 20 feet away from "it." Facing away from the other kids, the traffic light displays a green color card to the other kids and shouts "Green light!" The other kids move toward the traffic light. The traffic light then shows the red card and shouts "Red light!" to stop the play and turns around quickly. Any of the kids who are caught moving must go back to the start line. Play continues until someone reaches and tags the traffic light. That person then becomes the traffic light. The trick to winning this game is to move smoothly so that you can freeze instantly until you are within reach of the traffic light.

Variations:

• Start with the child calling out the color and eventually switch to a silent game where the children trying to tag the traffic light must recognize the color and react to it.



- The traffic light may show the yellow card, which means that the players can continue to move but must move slowly.
- When playing with children of different ages, you may want to designate two start lines, the closer one being for the smaller kids.



Safe or Unsafe

Describe the following and have kids tell you whether the child in the scenario is being safe or unsafe. Ask why is it safe? If it is unsafe, what could the child have done to be safe?

- Kristy stops at the edge of a street and waits for her grandfather to tell her when it is safe to cross.
- Lauren wants to play with her toys while she's at the park with her mom, so she puts them in a plastic grocery bag to carry on her handlebars.
- Kumar puts his helmet on but forgets to ask his parents before he goes to the garage to get his tricycle.
- Ed wants to ride his scooter with his dad to the library, so he takes his ear buds out and puts his music player in his pocket.
- Madeline puts on a bright yellow shirt before riding her bike to the store with her older brother.

Review (optional)

► Time: 5 minutes

The instructor will...

- · Go over the terms "traffic" and "vehicles"
- · Review what the different colors on the traffic light and pedestrian signal mean.
- · Review what a stop sign means.
- Reiterate basic safety rules for riding a kid vehicle.

Traffic is a term for moving vehicles. You should always use your eyes to look for traffic and your ears to listen for sounds such as horns and engines. There are many different types of vehicles—buses, bicycles, cars, trucks, and trains. All of these vehicles have wheels that make them move to get to where they are going.

In order for vehicles to share the roadway, the drivers have to know what the different colors on a traffic signal mean. Red means stop; Yellow means look and listen for danger, prepare to stop; and Green means go when it is safe.

Another signal is for people who are on the sidewalk. The Red hand means to stop. The white symbol of a walking man means that it is OK to go when it is clear.

People who drive vehicles also have to obey signs. The red stop sign means that you have to stop first and then go when it is clear.

There are also several basic rules to follow when you are going to ride a kid's vehicle such as a scooter, tricycle, or bicycle:

- · Always ask an adult before you ride.
- Wear bright colors when riding so others can see you.
- · Look and Listen for traffic.
- Ride on the sidewalk. Older kids and adults can ride in the street when they understand and follow all of the rules of the roadway.
- Don't carry things in your hands, put them in a backpack.
- Stop at the edge of roadways and driveways.



These optional activities are included to extend the lesson into other areas of learning. Most activities presented may be completed within a 20-minute time period, or may be assigned as homework opportunities.

Mathematics/Science

Discuss and complete the *Traffic Jam* worksheet.

A traffic jam is a condition when too many cars are crowded on a roadway.

Raise your hand if you have ever been in a "traffic jam."

Close your eyes and imagine a traffic jam. There are often bumper to bumper cars and trucks along a wide stretch of roadway. Traffic jams are polluting, inconvenient and sometimes can be unsafe. They often require a long wait in a car. This situation could (or does) occur in front of school if too many parents come to pick up their children at the same time.

After children complete the *Traffic Jam* worksheet using grade-level appropriate mathematics, discuss how the children helped solve the traffic jam.

Several children decided to bike to school, and several children decided to take the bus, so there were fewer cars and vans on the road. Are there other ways that the children can solve the traffic jam? (Carpooling and walking.)

Have children write down the environmental benefits of fewer cars on the road. Have them share their ideas in class.

When there is less traffic, there is less pollution, reduced greenhouse gas emissions and cleaner air to breathe. There is also less need to build more roads and have less runoff from roadways polluting our water. When there are fewer cars there are fewer traffic jams, so less gasoline and oil is used.

Social Studies

Brainstorming Traffic Rules

In this exercise, you will explain traffic rules and why we have them. Encourage children to offer rules that they know and obey.

Ask children to answer the question, "What is a rule?" Then ask them why they think there are rules (in school, at home, in the community, etc.)

Ask children if they can think of good reasons for having traffic rules. Record all responses on flip chart paper and title it, "Reasons Why We Have Traffic Rules."

[Display the chart paper to serve as a reminder for the children.]

Explain to the children that they are going to have a brainstorming session. The brainstorming session allows the children to give ideas for different transportation rules that they know. Explain that they are expected to take turns and raise their hands to speak. Decide the amount of time needed for the brainstorming session. Record their responses on a flip chart.



Rules that kids may brainstorm:

- · Obey all traffic signs and lights.
- · Fasten your seat belt.
- Before crossing a road, look left, right, then left again.
- · Listen and follow directions from the bus driver.
- Keep both hands on the handlebars when riding a bike.
- · Stop at the edge of driveways.
- Stop when you hear vehicles with sirens.
- · Stay seated on the bus.



Vocabulary Card



Vehicles

Cars, trucks, buses, bicycles and motorcycles are vehicles. They are used to move people and things from one place to another.

Vocabulary Card



Traffic

Cars, buses, trucks and other vehicles also have to get places like we do. A group of moving vehicles is called traffic.



Name			

Traffic Jam! Worksheet

Oh no! There's a traffic jam in front of the school! Help clear the traffic jam by counting all of the different vehicles on the street.

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How many vehicles of each type are in the traffic jam at the school?

Cars:	 Motorcycles:
Trucks	 Bicycles:
Buses:	

Some kids decided that they would change the way they travel to school.

Katie, Jim, Jack and Tina ride their bikes to school instead of riding in cars. Circle 4 cars.

Bill and Rachel take the school bus instead. Circle 2 buses.

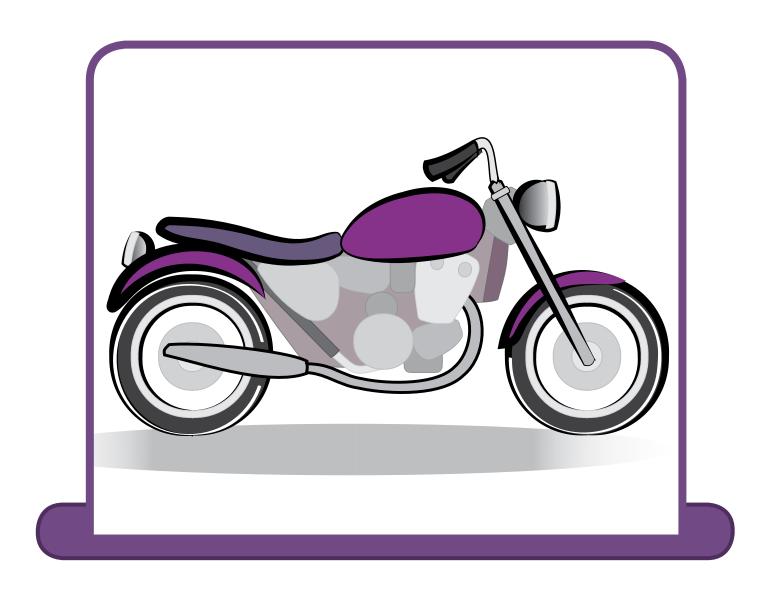
Now that kids have made different choices, is there still a traffic jam at the school?



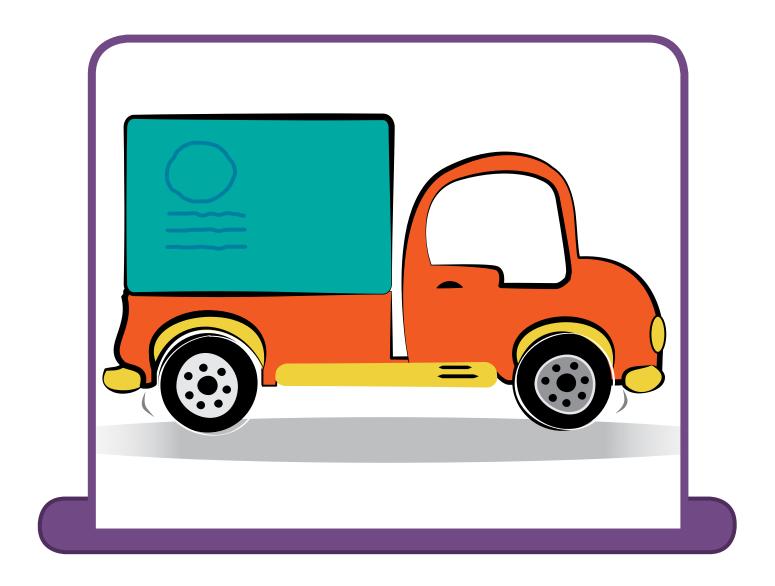
School Bus



Train



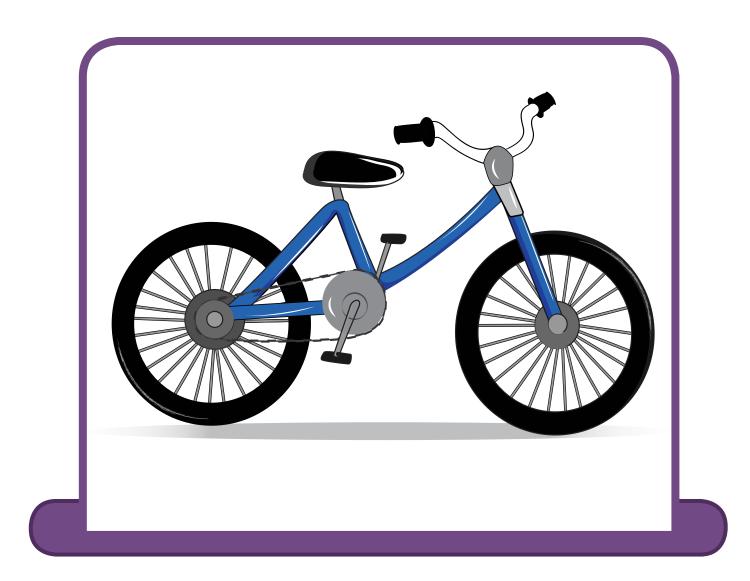
Motorcycle



Truck

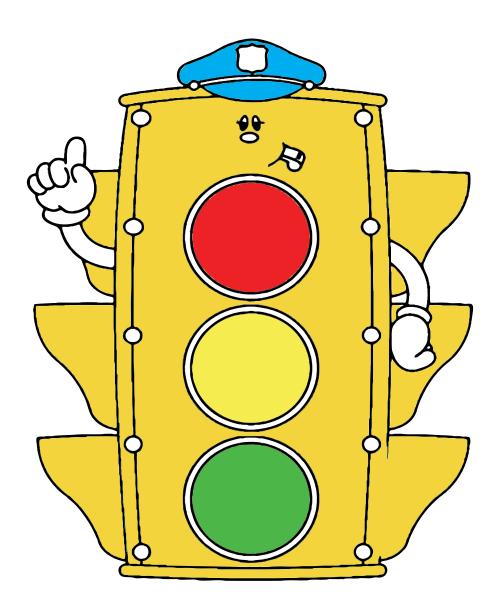


Car



Bicycle

Signs & Signals



Traffic Signal

Signs & Signals





Pedestrian Signal



Stop Sign



Railroad Crossing



Parent/Caregiver Tip Sheet

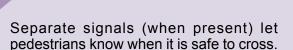
Signs, Signals and Safety

This week in school your child learned about basic signs, signals and good traffic safety behaviors:

- 1. TRAFFIC is moving vehicles, like cars and trucks in the roadway.
- 2. TRAFFIC SIGNALS tell vehicles what to do.
 - RED is a warning color. It means stop.
 - YELLOW means to look and listen for danger. Prepare to stop.
 - GREEN means go when it is safe.
- 3. Always stop at a STOP SIGN and wait until it is clear to go.
- 4. Trains cross roads at RAILROAD CROSSINGS. Be extra alert and use your eyes and ears at train tracks. Never go around a closed railroad gate.
- 5. FOLLOW BASIC RULES when riding a kid vehicle:
 - Always ask an adult before riding. Have them help you put on your helmet and look over your bicycle to make sure its parts are all working.
 - Wear bright colors so others can see you.
 - Look and listen for traffic. Pay attention when you ride.
 - Ride on the sidewalk. Small kids' vehicles belong on the sidewalk or on a greenway, not in the street with cars. Older kids and adults may ride in the street when they can follow the same rules that other vehicles do.
 - Don't carry things in your hands. Put objects in a basket J. ROW or backpack.
 - Stop at the edge. Treat all roadways and driveways as edges like you would if you were walking on the sidewalk. You always stop at the edge of a road or a driveway whether you are walking or cycling.

Remember:

Although kids may not yet have the skills to ride a kid vehicle such as a bicycle without parental assistance, they should begin to learn basic traffic safety behaviors at this age. Help them learn traffic signs signals by identifying them with your child and explaining what they mean. Set a good example and reinforce good traffic safety behavior.



The RED hand tells you to wait on the curb.

The WHITE walking symbol tells you it is safe to cross when it is clear. Some signals are push button operated.

Young children who are too young to bike in the roadway should also obey this signal.

Set a good example for your child by crossing when the WHITE walking symbol appears.



PRACTICE AT HOME!

Signs, Signals and Safety

Children ages 5-6 are very curious about their environment. As they learn about their communities, they should also be made aware of the dangers of traffic. Teaching traffic safety to your child can prepare them for big adventures such as walking to the school bus or riding a bike for the first time. Young children readily model the attitudes and behaviors of their parents, so make following traffic safety rules a routine.

Your child should learn enough about traffic safety to know what is safe and what is not safe outside. Young children should feel confident when they are outside with friends, walking home from school or on a bike ride:

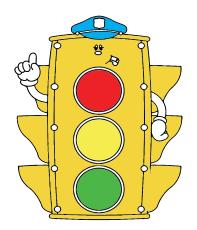
- IN THE CAR, encourage your child to point out signs and signals as they see them. Have them
 describe their shape, color and explain what they mean. This will help them stay alert and aware of
 their surroundings.
- ON A SURPRISE WALK to the park, library, friend's house or other destination, assess your child's ability to understand traffic signs and signals. This can allow you to view your child's ability to demonstrate traffic safety knowledge when not part of a routine outing.
- WHEN RIDING A KID VEHICLE such as a scooter, tricycle or bicycle, pretend that you don't know what a traffic sign or light means. Stop and ask your child, "What do I do?" and wait for your child to explain. This can help your child become more confident with knowledge of traffic signs and signals.

To help your child understand their community and help with orientation, have your child point out common places such as restaurants, stores, public art installations, fire/police stations, and parks. Also have your child point out "community helpers" that they see along the way.

Have your child identify each of the signs and what the colors mean on the lighted signals:











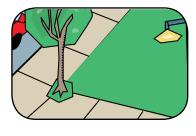
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Child Assessment

1. Mark the bubble under a place where you should always stop and check for cars when riding your bike.







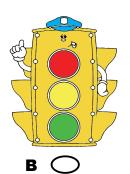
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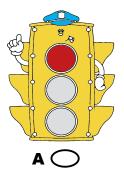
2. Mark the bubble under the picture that shows a sign that tells you to look and listen for a train.



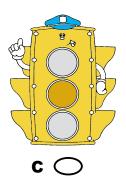




3. Mark the bubble under the picture that shows a traffic signal that means "go.







4. Mark the bubble under the picture that shows a child following the rules while riding a bicycle.







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Instructor's Question and Answer Key



Administer the child assessment worksheet.

Questions:

- 1. Mark the bubble under the picture that shows you something that you should be cautious of when you ride your bike.
- 2. Mark the bubble under the picture that shows a sign that tells you to look and listen for a train.
- 3. Mark the bubble under the picture that shows a traffic signal that means "go."
- 4. Mark the bubble under the picture that shows child following the rules while riding a bicycle.

Answers:

- 1. B
- 2. A
- 3. B
- 4. A