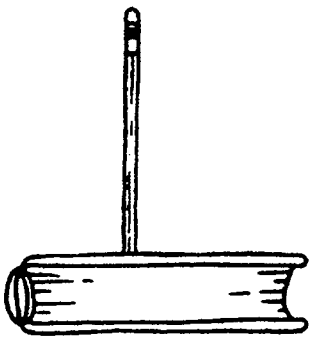
Center of Gravity

For this experiment, you will need:

- one blunt (not sharpened) pencil
- one thick (2-3 cm) hard-cover book (text book works well)
- one piece of plasticine (about the size of a large marshmallow)

For this experiment, you need to do the following:

- Place the book on a flat, level surface (table or floor, not your desk).
- Stand the pencil upright on the book (see diagram). You might have to work at this a bit, but you can do it.
- Once you become a pro at standing the pencil on the book, take some plasticine (about the size of a large marshmallow) and put it on the eraser end of the pencil.
- Now try and stand the pencil upright on the book.



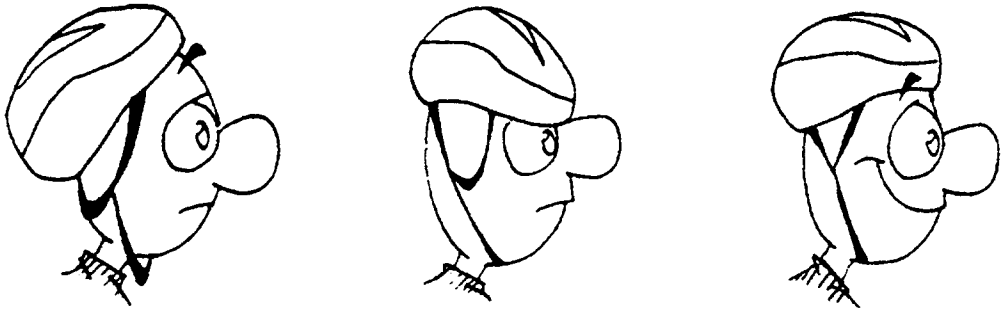
Answer the following questions:

1. When the plasticine is on the end of the pencil, is it easier or more difficult to stand the pencil upright? Why do you think so?

2. When the pencil with the plasticine on the end falls off the book, which end of the pencil hits the surface below the book (table or floor) first?

3. When we drive our bikes, we are like the pencil with the plasticine on the end, a little unstable. If we crash, what part of our body will likely hit the ground first? What should you do to protect this area of your body?

Wearing A Helmet



Wear It Properly!

The helmet is properly worn squarely on top of the head, covering the top of the forehead and sitting about one - two cm above the eyebrows. Use the foam pads supplied with the helmet to allow it to sit properly on the head. It should have a snug fit.

Adjust the straps through the buckles so that they form a "Y" with the joint just below each earlobe. The chin strap must fit well under the chin, up against the throat, and be snug. Your index finger should be able to fit between the chin and chin strap allowing the helmet-wearer to open his/her mouth comfortably.

With the helmet on and the chin strap fastened, the helmet should not be able to be rolled backward or forward excessively, nor should it be possible to remove it from the head altogether. Excessive forward or backward movement can be eliminated by adjusting the side buckles below the ears. Move the buckles forward to remove excessive rearward movement and rearward to remove excessive forward movement. Once the buckles have been properly adjusted, it may be necessary to readjust the chin strap.

- Look after your helmet. Don't bash it around. Bicycle helmets are designed to absorb only a single, hard blow.
- Check your helmet frequently for damage. If a crack is found, buy a new one. A helmet should always be replaced after a crash. The helmet may look o.k., but the foam lining loses most of its value after being compressed by an impact or several blows at once. It may not protect you in another crash.
- Replace a helmet every five years. The plastic on a helmet deteriorates from exposure to ultraviolet light (the sun and fluorescent light). Store your helmet where it will not be exposed to ultraviolet light.
- Wear your helmet whenever you drive your bike. Your helmet cannot protect you if it is not on your head.
- Make sure the helmet you choose has one of the following stickers on it. These ensure that your helmet meets certain safety standards and will protect you in a crash.

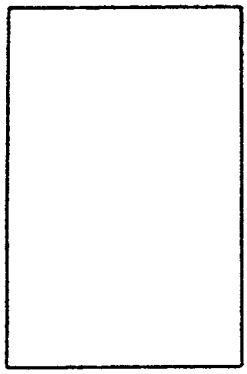
CSA®

SNELL MEMORIAL FOUNDATION

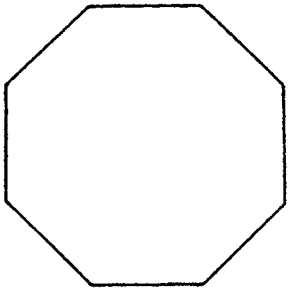
This Helmet meets ANSI Z90.4 Standard (Currently being phased out)

Signs and Signals

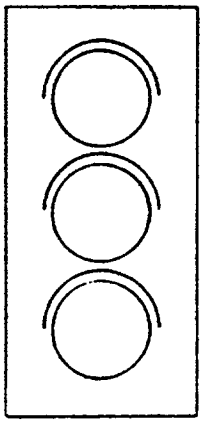
Properly complete each sign and traffic signal below and then color them with the correct colours.



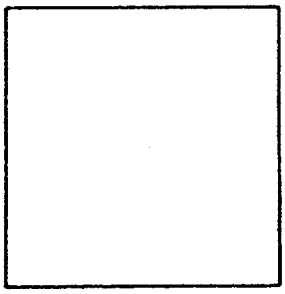
pedestrian crosswalk



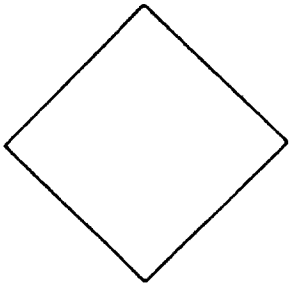
stop



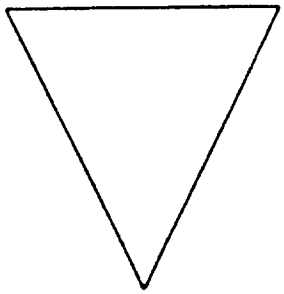
warning: light will turn



do not enter

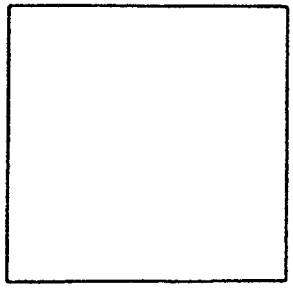


railroad crossing



yield

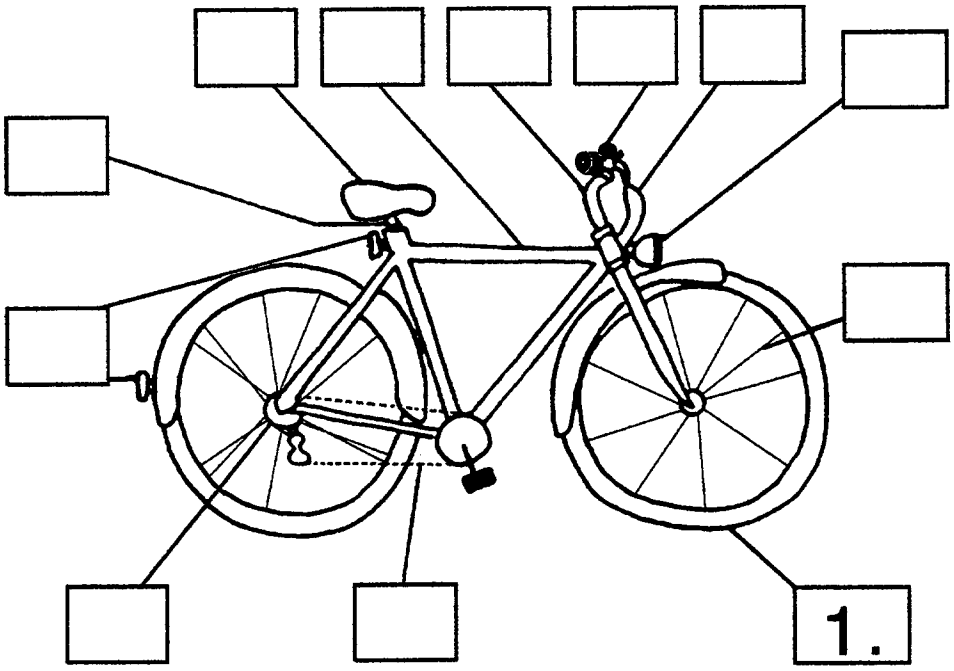
one way street



no left turn

Bicycle Safety Checklist

Read the safety checklist at the bottom of the page. Write the number of each safety check in the box that indicates the location of the bike parts to be checked. The first one is done for you.



1. Check tire pressure.
2. Make sure the wheels are tight.
3. Make sure the seat is tight.
4. Make sure the bell works
5. Check if the reflector is clean.
6. You should be able to straddle the top tube with your feet flat on the ground.
7. Check for broken spokes.
8. Make sure the handlebars are tight.
9. Make sure chain is tight and oiled.
10. Make sure the headlight works.
11. Make sure the brakes work.
12. Check that the seat height is correct and adjust here.