Pre-Lesson #1
BICYCLE SIZING AND EQUIPMENT CHECK

Objective:
To teach the importance of proper bike sizing and maintenance in reducing accidents.

Introduction
Both the selection of the proper bicycle frame size and the proper adjustment of the seat and handlebars for the person riding the bike are imperative to safe bicycling. It is equally important that the bike be maintained in good mechanical condition. Improper adjustment and size, or faulty equipment, can severely impair the rider's ability to control the bicycle. The student must learn the importance of good maintenance and learn to recognize for himself any mechanical problems with his bicycle.

Generally, the ability to make repairs on bicycles during a regular lesson is limited. For this reason it is preferable that the materials for this lesson be distributed for use at home a week before the unit starts in school or at registration for independent programs. Stress that the checklist should be taken home and worked on by the student with an adult, then brought to the first regular lesson.

Ideally this topic is handled with material sent home. The participation of an adult needs to be emphasized. With the help of the student's parents or an adult friend the following activity is intended to enable the student to adjust his handlebars and seat to their proper height, to insure that he is riding a bicycle that is the correct size, and to acquaint him fully with the equipment on his bicycle and any repairs that should be made.

Activity:
1. Send materials on bicycle safety and equipment inspection home with each student who plans to take the class. The completed inspection sheet should be brought back to the first class.
With your parents or an adult friend work through this bicycle safety checklist. Request that an adult take an interest in how well your bike is working. They might also be able to provide some mechanical expertise or get you to a bike shop if you need parts or additional advice for a problem.

As you go through the inspection sheet discuss what might happen if each part is not kept in good repair.

* Bicycles must pass these safety criteria to be used in the bicycle safety program. Those bicycles without these features will not be useable.

### BIKE SAFETY INSPECTION CHECKLIST

<table>
<thead>
<tr>
<th>Owner's Name</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>State</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bicycle Make and Model</th>
<th>Color</th>
<th>Frame Size</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Wheel Size</th>
<th>Serial Number</th>
</tr>
</thead>
</table>

#### Size - Fit of bike to driver:

- Is the seat post height correct for the frame? (2" minimum in the frame)

#### Frame:

- All tubes in line, and free of dents, bends, and kinks?

#### Front Fork:

- Is the headset adjusted correctly, no play between fork and frame?

#### Handlebars:

- In line with front wheel and tight?
- Height of grip below driver's shoulder level?
- *Check height of handlebar stem (2" minimum in frame)?
- Grip tight and in good condition?

#### Front Wheel:

- Spokes: Good tension, none missing and tight?
- Rim: No dents, twists or kinks?
- Tire (Casing): Good tread and no side wall damage?
- Tire (Inflation): Inflated properly and valve stem straight?

#### Alignment:

- When spun, wheel is true and centered in the fork?

#### Rear Wheel:

- Spokes: Good tension, none missing and tight?
- Rim: No dents, twists or kinks?
- Tire (Casing): Good tread and no side wall damage?
- Tire (Inflation): Inflated properly and valve stem straight?
- Alignment: When spun, wheel is true and centered in the stays?
- Bearings: Wheel does not wiggle laterally and spins freely and evenly?
O.K.  

**Brakes:**
- Coaster brakes:
  - Operate within 20 degrees of horizontal? ___ ___
  - *Brakes operate effectively and smoothly? ___ ___

Hand brakes (front and rear):
- Brake lever tight? ___ ___
- Sufficient reserve when brake shoe is engaged? ___ ___
- Cable taut, no breaks in the cable, no frayed ends (pull open the brake lever and check most carefully for any fraying adjacent to the anchor ball at the end of the cable)? ___ ___
- Caliper brakes centered and tight? ___ ___
- Nuts tight on brake shoes? ___ ___
- At least 3/16-inch rubber on shoes? ___ ___
- Break shoes meet the rim squarely? ___ ___
  - *Front and rear brakes operate effectively and smoothly? ___ ___

**Pedals and Cranks:**
- *Pedals tight, intact, no binding, free spinning? ___ ___
- Crank can turn freely and evenly, no looseness or binding, not bent? ___ ___

**Chain:**
- 1/2-inch play, no excessive looseness? (non-derailleur model) ___ ___
- Chainguard secure, free of chain? (non-derailleur model) ___ ___
- Chain clean and free of rust, lubricated? ___ ___

**Derailleur:**
- Shift control operating properly? ___ ___
- Multi-speed mechanism operating properly? ___ ___

**Seat:**
- In good condition, tightly secured in a horizontal position? ___ ___

**Reflectors:**
- Front reflector? ___ ___
- Rear reflector? ___ ___
- Wheel reflectors? ___ ___

**Head Light:**
- Bright and operating satisfactory? ___ ___

**Bell or horn:**
- Working and audible? ___ ___

**Accessories:**
- *Fenders, racks, carriers, etc., securely attached? ___ ___
- No illegal or unsafe accessories? ___ ___
- No unsafe modification of bicycle? ___ ___

**Remarks:**

This bicycle has passed the safety inspection.______

Inspectors Signature:____________________