



Name: Form:

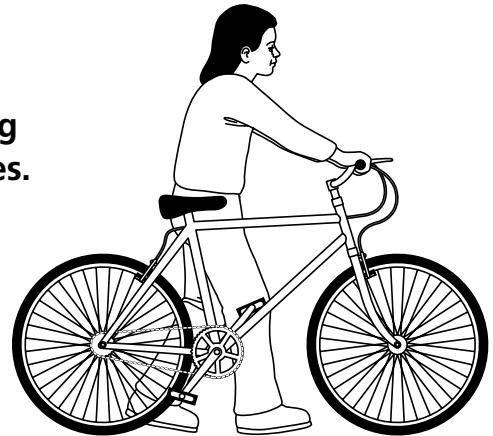
See pages 18 and 19 of *Friction*

Rolling friction

The amount of friction that occurs when something rolls over a surface is far smaller than when it slides.

Q1. (i) Look at the picture. It shows a person pushing a bicycle with the brakes off. What kind of friction is occurring?





(ii) When the person puts the brakes on and pushes the bike again what kind of friction will occur?



Q2. When you use rollers instead of dragging something, do you need less than: (a) a tenth as much force; (b) a hundredth as much force; (c) a thousandth as much force?



Q3. What is the simplest roller made from?



Q4. Name two monuments which may have been made by moving stone slabs on rollers. Give the country where each monument is found.

1 

2 

Q5. How could you use a brick, a forcemeter, string and rollers to show how friction is reduced by rolling?









