

Reading Homework 25.09-02.10.26

The Power of Friction

When you ride your bike, you probably don't think much about the forces that help you move. One important force is **friction**. Friction happens when two surfaces rub against each other. It can slow things down or help them stop. For example, the friction between your bike tyres and the road prevents you from slipping and helps you to brake safely.

Sometimes friction is useful, like when you need grip to walk or hold a pencil. Other times, it can be a problem. Friction between moving parts in a machine can cause them to heat up or wear out. To reduce friction, people often use oil or grease, which makes the surfaces smoother.

Friction also produces heat. When you rub your hands together on a cold day, the warmth you feel is caused by friction. Scientists and engineers carefully design materials to control friction - too much can waste energy, but too little can be dangerous. Finding the right balance keeps cars safe, engines efficient, and even spacecraft working properly!

Questions

1. What do people use to reduce friction between moving parts in a machine?
2. What does the word *efficient* mean in the final paragraph?
3. Why do you think the author used examples like bikes and hands to explain friction?