

Name _____



Forces and Simple Machines

Simple machines, like levers and pulleys, make it easier for us to do work by using force. These machines follow the principles of Newton's laws to help us lift heavy objects, move things, and even open doors.

Example: Consider a seesaw at the playground. When you push down on one end, it goes up because you're applying a force. This is similar to Newton's Third Law, where your push causes the other end to rise.

Real-world application: Using a crowbar to lift a heavy rock is another example. When you apply force to the crowbar, it acts as a lever, making it easier to lift the rock by changing the direction and magnitude of the force.

Questions

1. How do simple machines make work easier?
2. Explain how a seesaw at the playground relates to Newton's Third Law.
3. How can a crowbar help lift a heavy object, and which simple machine does it act as?
4. Can you name another simple machine, and describe its function?
5. Think of a situation where you might use a simple machine in your daily life.