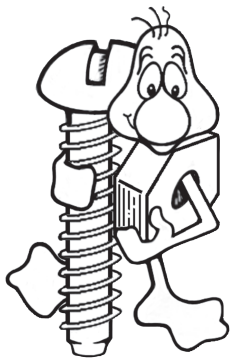
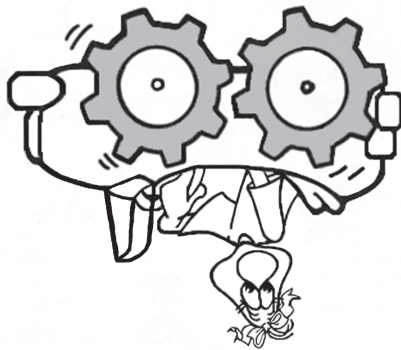
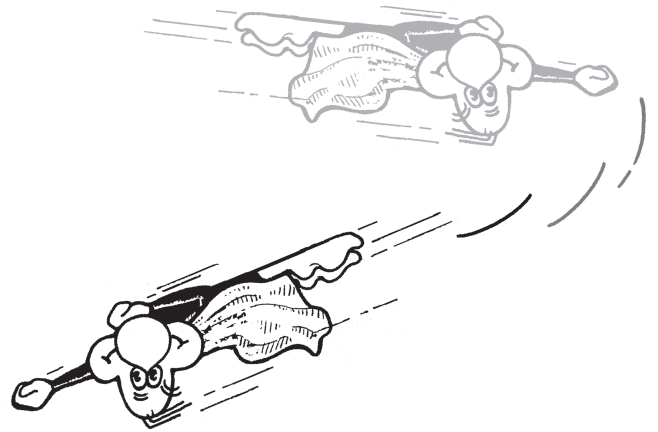


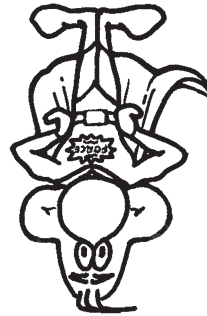
A combination of simple machines forms a complex machine.



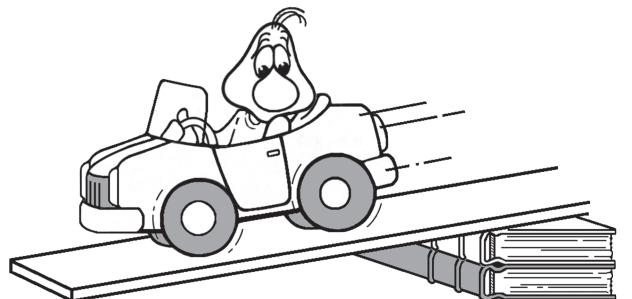
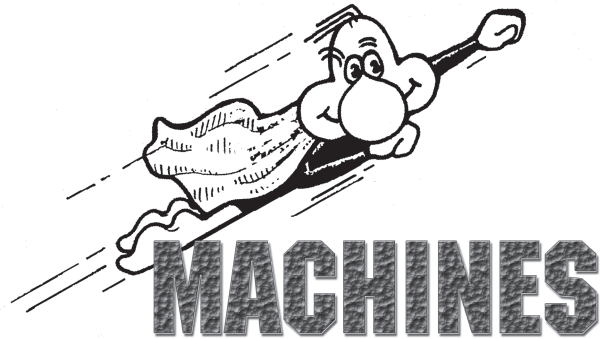
Look around to see what simple machines you can find. List examples of them here.

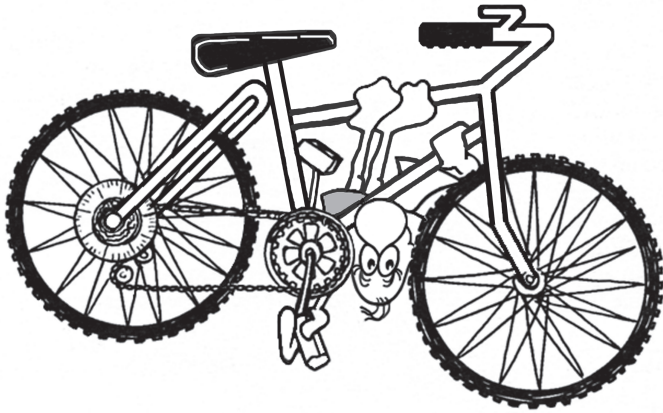


- A simple machine is a device that makes a task easier by doing one or both of these things:
 - It changes the size of the force you apply to it.
 - It changes the direction of the force applied to it.



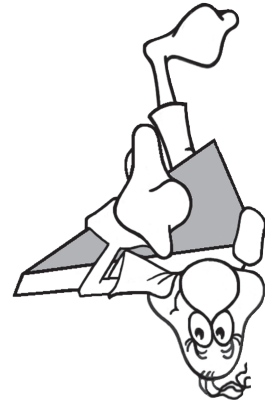
SIMPLE





How can a simple machine change the size of the force needed for a task? Let's say you need to ride your bicycle all the way down to the next block. You push the pedals a little distance. The wheels move a greater distance.

You have probably seen many examples of these around. Seesaws are one type of lever. Some window shades use pulleys to raise and lower them. **Wedges** serve as doorstops. **Inclined planes** are used in place of steps for wheelchair access. **Screws** hold eyeglass frames together. Bicycles have wheels and axles.



How does a simple machine change the direction of the force? Let's say you need to lift a stump. If you put the stump on one end of a seesaw-like lever, you can lift the stump by pushing down on the opposite end. The stump needs to go up, but you push down. The simple machine has changed the direction of the force.

There are several types of simple machines, including

- levers,
- pulleys,
- wedges,
- inclined planes,
- screws, and
- wheel and axles.

