





Which tells what a simple machine is?

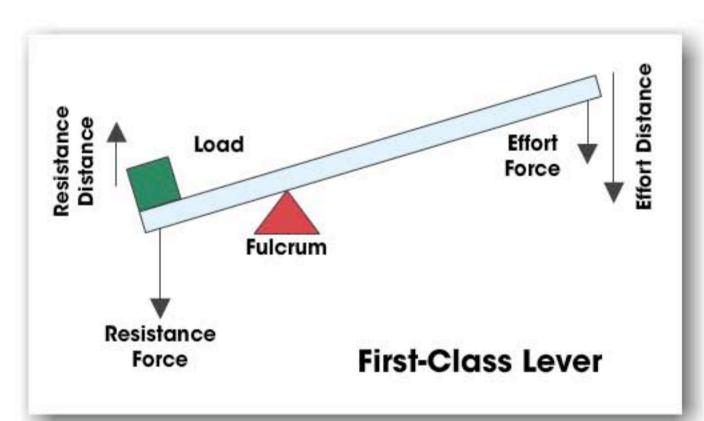
- A) A machine with no motor.
- B) A machine with no moving parts.
- C) A machine with one moving part.
- A machine with only one kind of motion.



What is the definition of the word PIVOT?

A point on the end of which something rests and turns, or rotates.

The lever was probably the first simple machine used by humans many thousands of years ago. The first person to whack something with a club was using a lever.



The image on the right shows the two parts of every lever. For every lever, a board or rod **pivots** on a point called a **fulcrum**. The force you apply is called the **effort force**. The lever changes the direction and amount of force and applies it to a load. The force the lever applies is called the **resistance force**. The distance you have to push or pull the lever is called the **effort distance**. The distance the load moves is called the **resistance distance**.

For the oars shown in the image to



First, Second, and Third-Class Levers

First-Class Lever



Third-Class Lever







Third-Class Lever

Second-Class Lever

Third-Class Lever













(label)



(label)