

Name _____

Test Date _____

Simple Machines

Facts to Know

There are six simple machines:

- Lever
- Wheel and axle (some have gears)
- Pulley
- Inclined plane
- Wedge
- Screw

Simple machines help make work easier. Work is done when you push or pull on something. Work takes energy.

Levers help us move things that might be too big or heavy to move without help.

Wheels and axels help us move things around. A wheel turns around on an axle. A gear is a wheel with teeth, or notches that fit together so that one gear can turn another.

Pulleys are made of wheels and ropes. They help us pull to raise and lower things.

Inclined planes are flat, but slanted areas that help move people or things up or down smoothly without lifting or climbing.

A wedge is a simple V-shaped tool that holds things tight or split things apart.

A screw is an inclined plane wrapped around a cylinder that makes moving things or holding things together easier.

Friction is a force created by objects touching or rubbing together. Friction interferes with work by slowing down the motion created by the machine. Taking care of machines by keeping them clean and oiled helps reduce friction. Reducing friction helps make work easier.

Vocabulary

friction- is a force in nature that exists between two objects that are touching or moving against one another

lever- a simple machine with a bar that is free to move around a fixed point

pulley- a simple machine that has a rope, belt, or chain that is wrapped around a grooved wheel

screw- an inclined plane wrapped around a central cylinder

wedge- an inclined plane

wheel and axle- two circular objects of different size; the larger circle is known as the wheel and the smaller circle is known as the axle



