Simple Machines

- Lever
- Inclined Plane
- Wedge
- Pulley
- Wheel and Axle
- Screw
Machines are tools that make tasks easier.
All machines are built using one or more simple machines.
Simple machines have very few parts.

There are six types of simple machines:

- pulley
- lever
- wheel and axle
- inclined plane
- wedge
- screw
A pulley is one type of simple machine.

A pulley uses a wheel and a rope to move heavy objects.
Here are some examples of pulleys:

- Elevator
- Well
- Crane
- Theatre Curtains
Can you think of other examples of pulleys?

• Did you say either of these:

A pulley that raises and lowers blinds.

The pulley that raises and lowers the flag on a flagpole.
A lever is a type of simple machine.

- A lever uses force to lift something.
Here are some examples of levers.

bottle opener

seesaw

toilet flusher
Can you think of other examples of levers?

- Did you say either or these?

  crowbar

  scissors
A **wheel and axle** is a type of simple machine.

- The axle is the rod that holds the wheels together.
Here are some examples of wheel and axles.

- rolling pin
- Ferris wheel
- pencil sharpener
Can you think of other examples of wheel and axels?

Did you say any of these?

bicycle

skates

wagon
The **inclined plane** is a simple machine.

- An inclined plane is a slanted surface that can be used to raise or lower things.
- An inclined plane does **NOT** move.
These are some examples of inclined planes.

wheelchair ramp

boat ramp

hatchet
Can you think of other examples of inclined planes?

• Did you say any of these?

- dump truck
- ladder
- roller coaster
A wedge is a type of simple machine.

- A wedge is two inclined planes that are back to back.
- The difference between an inclined plane is that it does its work by staying still, while a wedge moves.
- Wedges hold things together or split things apart.
These are some examples of wedges.

A fork and a knife

screwdriver

golf club
Can you think of other examples of wedges?

• Did you say any of these?

nail
teeth
ship
A **screw** is a type of simple machine.

- A screw is an inclined plane that is wrapped around a cylinder with a flat head on one end.

- This head is used to turn or drive the screw into something.
These are some examples of a screw.

swivel stool

bottle lids

corkscrew
Can you think of other examples of screws?

• Did you say any of these?

door lock

light bulb

clamp
As you can see, our world is made up of many simple machines. You can find examples any place you look.

Simple machines solve the problem of how to do work faster and easier.