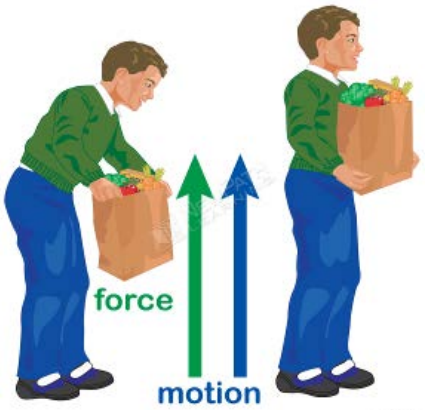
WORK AND MACHINES

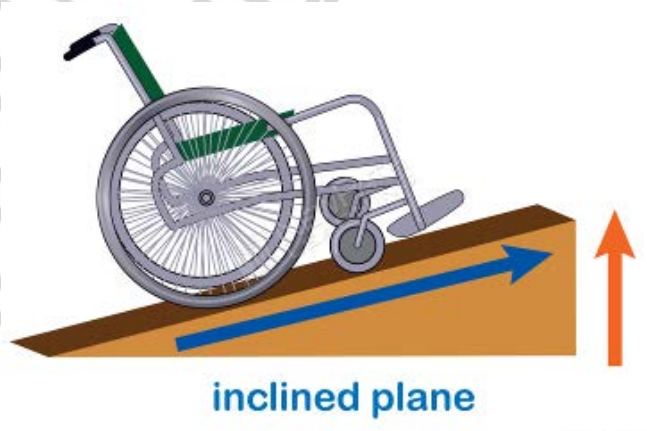
Work is when you use force upon an object causing the object to move. The amount of work you do has to do with how much force you need to use and how far you move an object. You would do more work lifting a heavy desk than you would lifting a pencil.



If you do not pull, NO work is being done object needs to move.

Simple machines ease the amount of work nt kinds of **simple machines**.

An **inclined plane** is a simple machine that connects a higher area to a lower area. An inclined plane allows you to move an object up or down by rolling or sliding it without lifting the object directly. A ramp is an example of an **inclined plane**.



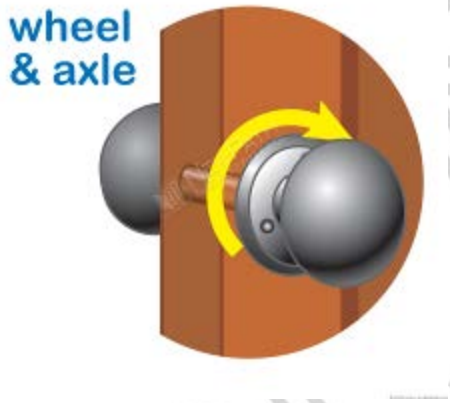
A **wedge** is a simple machine made of wood or metal that has a pointed edge and two slanted sides. A **wedge** is actually two inclined planes put together. A **wedge** is often used to split wood, to cut things, or to hold things together.

Lesson *ge used*

A **screw** is ar **ews** are mainly used t

A **lever** is a simple machine that is a stiff bar, which rests and moves on a fixed point. You can push down on one side to raise an object on the other side. **See saw** is an example of a lever.

A **wheel and axle** is a simple machine made up of a pole and a wheel that revolves, or turns, around on the pole to move something. A door knob is an example of a wheel and axle, where the knob moves the lock so you can open the door.



Lesson checkpoint: What is an example of a wheel and axle?

A **pulley** is ar In a pulley, you pull a rop e object you want to lift is ey you can use your own object up with the rope

There are two e load and moves with the load as the rope is pulled. A **moveable pulley** is attached to a non-moving structure above the load.