Chapter 12: Work & Machines

Name Key

Period _____ Date _____

Worksheet: Simple Machines

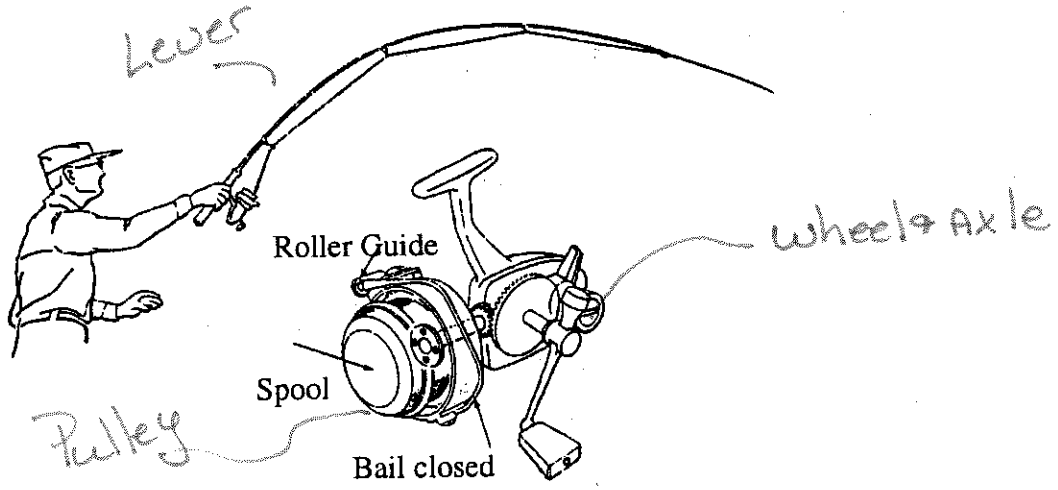
(Frameworks Code)

1. Simple machines defined:
   a. Lever – is any rigid bar free to turn about a pivot point (fulcrum).
   b. Pulley – is a grooved wheel freely rotating about an axle.
   c. Inclined plane – is a slanted surface used to raise objects.
   d. Wedge – is a double inclined plane.
   e. Screw – is a circular inclined plane.
   f. Wheel & axle – is a wheel rigidly attached to an axle.
2. Give two or more examples of each of the simple machines:

Machines	Examples	Student Examples
*Lever	Claw hammer	Bottle opener, Scissors
Pulley	Pulley on a flag pole	Pulley on Blind, Sail
Wheel & axle	Screwdriver	faucet, door Knob
*Inclined plane	Sloping driveway	Stairs, Parking Ramp
Wedge	Chisel	teeth, Scissors
Screw	Spiral Staircase	Parking Ramp, Screw

* Basic types only

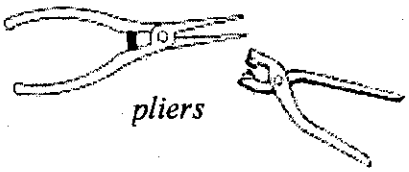
3. Label and locate by using arrows all the simple machines that you can find in the complex machine below:



(Frameworks Code)

4. Which of the simple machines is in each of the pliers?

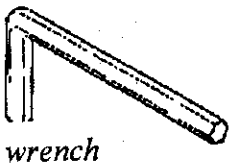
Lever



pliers

5. Which simple machine is in each of the wrenches?

Wheel & Axle

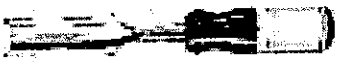


hex wrench

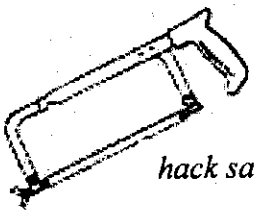
adjustable wrench

6. Which simple machine is in each of these cutting tools?

Wedge



chisel

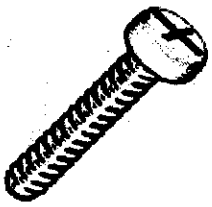


hack saw

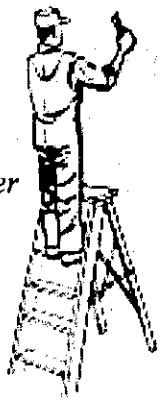
scissors

7. Which simple machine is in each of these fasteners?

Screw



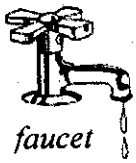
stepladder



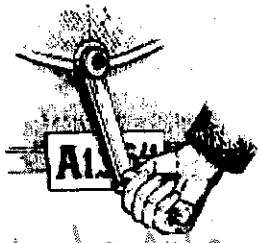
8. Which simple machine is in the stepladder? Inclined Plane

9. Which simple machine is in each of these handles?

Wheel & Axle



faucet



10. Which simple machine is in a screwdriver used to drive screws? Wheel & Axle

screwdriver

11. Which simple machine is in a screwdriver used to pry off a can lid? Wedge

12. Which simple machine is in the block of a block and tackle?

Pulley

block

13. Which simple machine is in each of the devices below?

Lever

rubber mallet

tennis racquet

paint brush