

Worksheet: Machine Vocabulary

(Frameworks Code)

Determine whether the italicized term makes each statement true or false. If the statement is true, write the word "true" in the blank. If the statement is false, write in the blank the term that makes the statement true.

- _____ 1. A device that makes work easier or more effective is called a *machine*.
- _____ 2. There are *four* basic kinds of simple machines.
- _____ 3. The number of times a machine multiplies the force exerted on the machine is the *output force* of the machine.
- _____ 4. A bar that is free to move about a fixed point is a *fulcrum*.
- _____ 5. A grooved wheel with a rope or chain running through the groove is a *pulley*.
- _____ 6. A system of wheels with teeth is called an *axle*.
- _____ 7. A sloping surface used to raise objects is a *wedge*.
- _____ 8. A screw is an *inclined plane* wrapped in a spiral around a cylinder.
- _____ 9. A wheel and axle is a simple machine consisting of *two wheels* of different diameters that rotate together about a common axis.
- _____ 10. An inclined plane with two sloping sides is a *screw*.
- _____ 11. The mechanical advantage of a fixed pulley is always *two*.
- _____ 12. The mechanical advantage of a block and tackle is equal to the *number of sections* of the rope that support the object.
- _____ 13. A machine made up of two or more simple machines is an *ideal* machine.
- _____ 14. Usually the efficiency of a real machine is always *greater* than 100%.
- _____ 15. To do *work*, a force must be applied in the direction of the object's motion.
- _____ 16. The unit for measuring work is a *newton*.
- _____ 17. The force exerted by the machine is the *output force*.
- _____ 18. *Mechanical advantage* compares the work output to the work input.
- _____ 19. The *input arm* is the distance between the fulcrum and the object being moved.
- _____ 20. The type of mechanical advantage that does not account for friction is *ideal* mechanical advantage.
- _____ 21. The distance that the person using a machine must move the machine is the *output distance*.
- _____ 22. A *first class* lever has the fulcrum in the center.
- _____ 23. A *fixed* pulley is attached to the object being moved.